United Kingdom
Debt Management
Office

DMO Annual Review 2022-23

19 September 2023

Contents

Foreword by the DMO Chief Executive

2022-23 was the 25th operational year for the DMO, and again we successfully delivered our gilt financing remit with sales of £169.5 billion - a total which took cumulative gilt proceeds over our first quarter of a century to almost £3 trillion via 1,150 market operations.

It was another year of considerable challenge for the DMO, during which our financing requirement fluctuated significantly. 2022-23 also saw the gilt market navigate a period of unprecedented stress and volatility in the autumn of 2022, which led to intervention by the Bank of England to help stabilise the market.

In addition to the programme of gilt sales, the DMO's cash management activities resulted in trading turnover of £6.9 trillion during 2022-23 (out of a total of £7.3 trillion from all cash management activities).

Gilt and cash management operations, local authority lending via the PWLB lending facility, and investment of public sector funds via the Commissioners for the Reduction of the National Debt (CRND) were again successfully delivered.

The original gilt financing remit for 2022-23 was announced on 23 March 2022 with planned gilt sales of £124.7 billion (including planned green gilt sales of medium and long conventional gilts totalling £10.0 billion). These sales were to be delivered by 43 gilt auctions and five syndications.

Following publication of the outturn of the 2021-22 financing requirement, planned gilt sales for 2022-23 were increased by £6.8 billion to £131.5 billion on 26 April 2022, with the number of planned gilt auctions rising by four to 47.

However, a much larger increase in planned gilt sales was announced on 23 September 2022 at the fiscal event accompanying the publication of the government's growth plan. Planned gilt sales rose by £62.4 billion, taking the planned total in 2022-23 to £193.9 billion, with 13 additional auctions (taking the total to 60) and one additional long conventional syndication being scheduled.

A significant reversal of the previous sharp increase in financing was announced on 17 November 2022 alongside the publication of the Office of Budget Responsibility's Economic and Fiscal Outlook. Planned gilt sales fell by £24.4 billion to £169.5 billion, with five auctions being cancelled, reducing the total to 59.

The outturn for gilt sales in 2022-23 was £169.5 billion, just £3 million below the remit plan. The outturn included green gilt sales of £9.8 billion.

Auctions remained the DMO's primary means of selling gilts, amounting to £144.1 billion (including £15.3 billion of proceeds from the Post Auction Option Facility), and represented 85% of overall sales. The average cover ratio at gilt auctions in 2022-23 was 2.39, in line with 2.41, in 2021-22.

Auctions were supplemented by six syndicated offerings (four of conventional gilts, of which one was a green gilt issue, and two of index-linked gilts) which raised £24.0 billion (14% of total gilt sales). One gilt tender was held during 2022-23, raising £1.4 billion (1% of total gilt sales).

Treasury bills also played an important role in debt financing. In the original remit for 2022-23 net sales of Treasury bills for debt management purposes of £23.2 billion were planned; this amount rose by £7.0 billion in the April 2022 remit revision, taking the planned net increase in the financial year to £30.2 billion. Planned net sales of Treasury bills for debt management purposes rose by a further £7.0 billion at the September 2022 fiscal event, but this increase was reversed at the November 2022 remit revision.

There was sustained strong demand for Treasury bills in the year. As with gilts, Treasury bills continued to attract significant overseas investor interest, with around 34% of the outstanding amount of Treasury bills at 31 December 2022 being held by this group.

In 2022-23, the DMO also continued to perform strongly in carrying out its cash management function, meeting the financial obligations of the UK government on every business day. This was achieved despite the ongoing challenging market backdrop.

The PWLB lending facility has continued to fulfil its statutory function. At 31 March 2023, the loan assets outstanding to the PWLB were £96.2 billion. 494 new loans totalling £7.9 billion were advanced during the financial year.

The DMO again successfully provided a cost-effective service to its clients through the fund management operations of the CRND. The market value of these funds was £82.9 billion at 31 March 2023. The DMO's financing remit for 2023-24 was published on 15 March 2023 when planned gilt sales of £241.1 billion were announced (including planned green gilt sales of £10.0 billion). The DMO's financing remit for 2023-24 was then revised on 25 April 2023, following publication of the outturn of the 2022-23 financing requirement. Planned gilt sales were reduced by £3.3 billion to £237.8 billion.

Once again, I would like to express my sincere thanks to DMO employees for their great contribution to the DMO's achievements in 2022-23. I am also very grateful to all our market counterparties for their expertise and continued support throughout the year. These contributions made possible the success of the DMO in meeting the challenges of 2022-23.

Sir Robert Stheeman

Chief Executive

19 September 2023

Chapter 1: The Economy and Financial Markets

Macroeconomic developments

Global inflation was highly elevated for much of the 2022-23 financial year driven largely by energy and food prices. Russia's illegal invasion of Ukraine exacerbated existing inflationary pressures and multi-decade high inflation levels were reached in many countries. While rates of headline inflation declined following a fall in commodity prices, easing supply-chain pressures and aggressive monetary policy tightening by many central banks around the world, tight labour markets in a number of economies ensured that underlying price pressures proved to be persistent. Higher interest rates exposed some banking sector vulnerabilities, most notably in the US, and rising borrowing and debt servicing costs posed challenges for households, businesses and governments. Global growth therefore remained subdued, particularly in advanced economies, following the tentative recovery from the height of pandemic-related disruption.

In the UK, real GDP was subdued throughout the 2022-23 financial year as widespread staff shortages and supply-chain issues combined with the cost-of-living crisis, rising interest rates and periods of political and financial market instability. GDP growth on a quarter-on-quarter (q-o-q) basis was respectively 0.1%, -0.2%, 0.1% and 0.1% in the four quarters of the financial year.

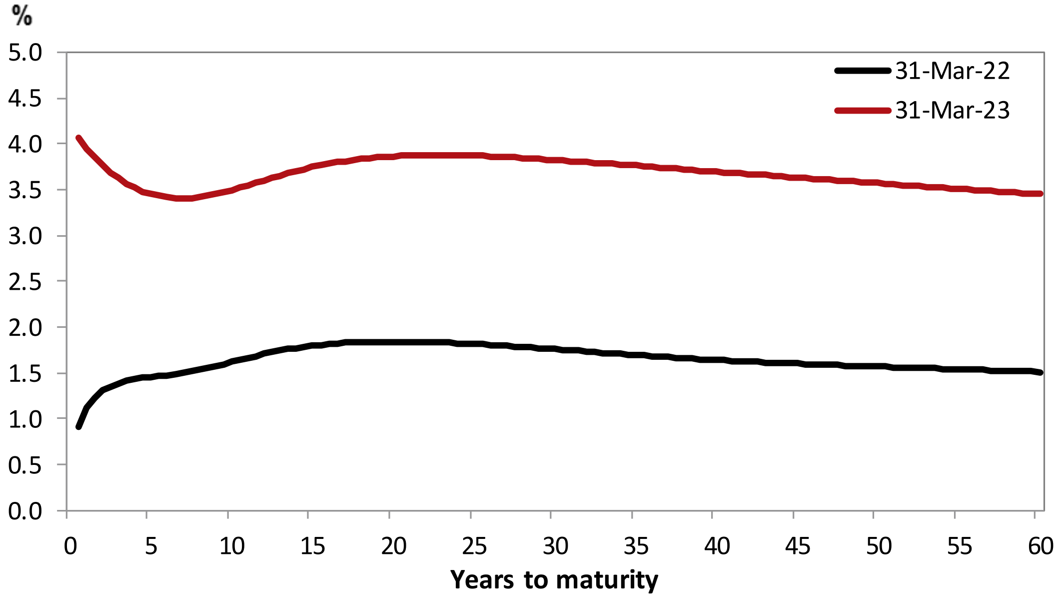
With respect to domestic inflation, at the start of the financial year the UK Consumer Prices Index (CPI) was at a 30-year high level of 7.0% year-on-year (y-o-y), driven by a wide-range of price rises in categories including transport costs, clothing & footwear and food & drink and most notably in household energy. Further rises in household energy costs and food & drink prices drove annual CPI growth to a record high of 11.1% in October 2022. At the financial year-end the rate had eased marginally to 10.1%, helped by falling transport costs, but remained significantly above the Bank of England's target rate of 2.0%. Annual growth in the Retail Prices Index (RPI) measure of inflation, which is used to set the cash flows on index-linked gilts, increased to 14.2% in October, having started the period at a multi-decade high rate (of 9.9%), before easing somewhat to 13.5% in March 2023.

Gilt market developments

Nominal par gilt yields[1]

Nominal par gilt yields increased significantly along the curve in 2022-23. 5-year par yields increased by 200 basis points (bp) to 3.45%, 10-year par yields increased by 188bp to 3.50%, 30-year par yields increased by 207bp to 3.83% and 50-year par yields increased by 200bp to 3.57%. See Chart 1.

Chart 1: Nominal par gilt yield curves 2022-23



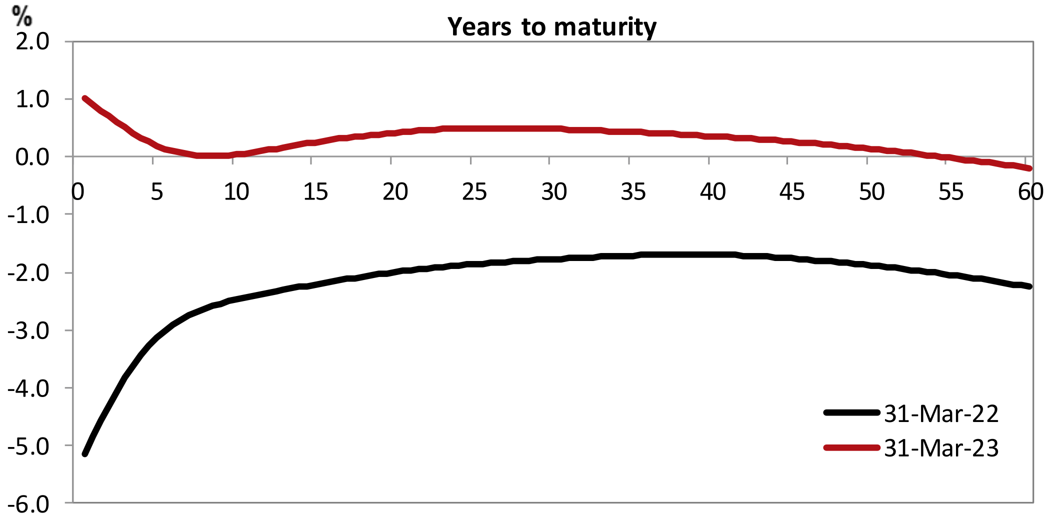
Source: DMO

Real par yields

Real par yields also increased significantly across the curve, particularly at short maturities. More specifically, real par yields rose by 334bp at the 5-year point to 0.20%, with the 50-year real par yield increasing by 202bp to 0.14%. At the 10-year and 30-year points real par yields increased by 251bp to 0.04% and by 225bp to 0.48%, respectively. By the end of financial year 2022-23, real par yields were above zero out to the 54-year point on the curve. See Chart 2.

[1] A par yield curve is a graphical representation of the yields of a range of bonds with different maturities, priced at par. On the par yield curve, the coupon rate on each bond will equal the yield-to-maturity of that bond. The changes referred to here are obtained by comparing yields at 31 March 2022 and 31 March 2023.

Chart 2: Real par gilt yield curves 2022-23

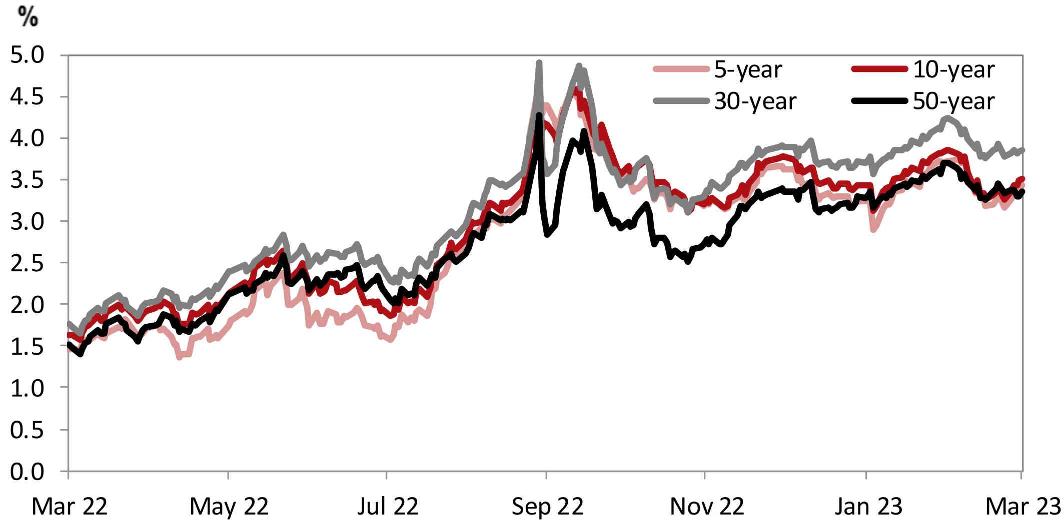


Source: DMO

Nominal yields

Chart 3 shows the path of conventional benchmark gilt yields at 5-, 10-, 30- and 50-year maturities in 2022-23. Gilt yields increased significantly over the course of the financial year, as elevated global inflationary pressures saw central banks continue to tighten monetary policy. Nominal gilt yields rose materially over the autumn, before declining from these peaks in the second half of 2022-23. Over the financial year, the yield on the 5-year benchmark gilt increased by 198bp to 3.44%, that on the 10-year by 187bp to 3.50%, that on the 30-year by 210bp to 3.86% and that on the 50-year by 184bp to 3.35%.

Chart 3: Nominal gilt yields 2022-23

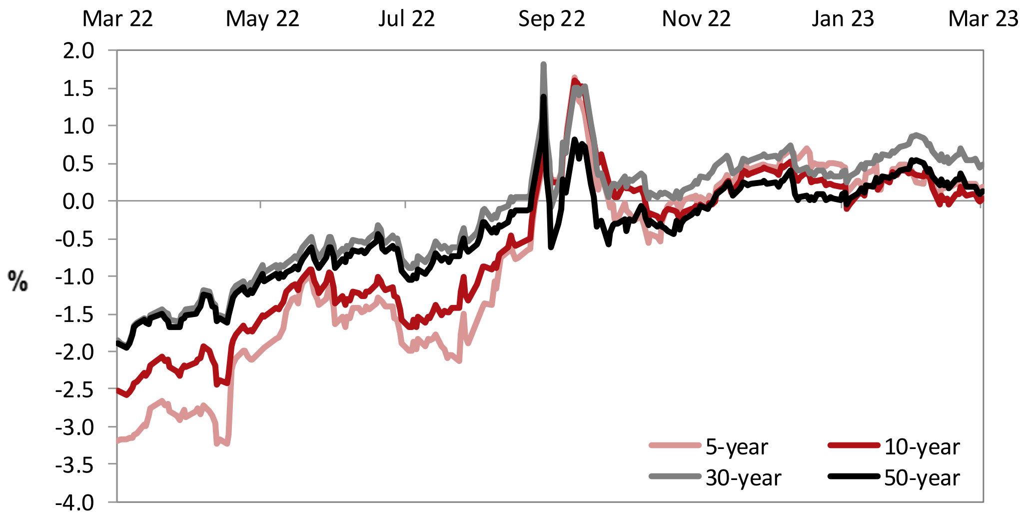


Source: DMO

Real gilt yields

Chart 4 shows the real yields on selected benchmark index-linked gilt maturities in 2022-23. Real yields trended materially upward over the course of the financial year, finishing 2022-23 in positive territory, after experiencing a period of elevated volatility in the Autumn months. The real yield on the 5-year benchmark rose by 338bp to 0.20%, while that on the 10-year rose by 257bp to 0.04%. Among longer maturities, the real yield on the 30-year benchmark rose by 234bp to 0.49% and that on the 50-year by 202bp to 0.13%.

Chart 4: Real gilt yields 2022-23

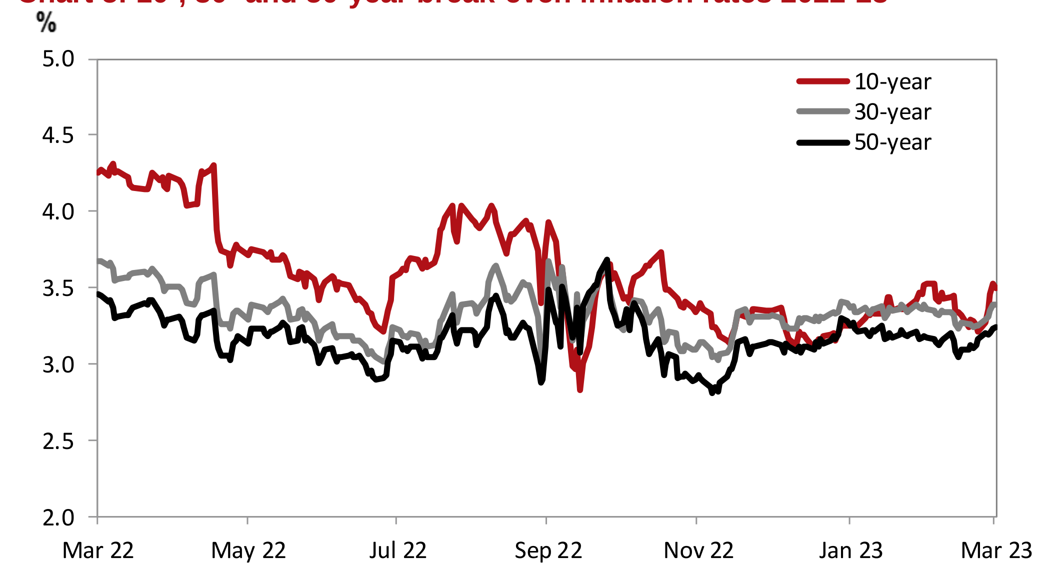


Source: DMO

Break-even inflation rates

Break-even inflation rates (BEIRs) declined modestly over the first six months of 2022-23, and remained broadly unchanged over the second half. 10-year BEIRs fell the most, by 77bp to 3.49%, while 30-year and 50-year BEIRs declined more modestly by 29bp (to 3.38%) and 22bp (to 3.24%) respectively. Index-linked gilts modestly underperformed their conventional gilt counterparts over the course of the financial year. See Chart 5.

Chart 5: 10-, 30- and 50-year break-even inflation rates 2022-23

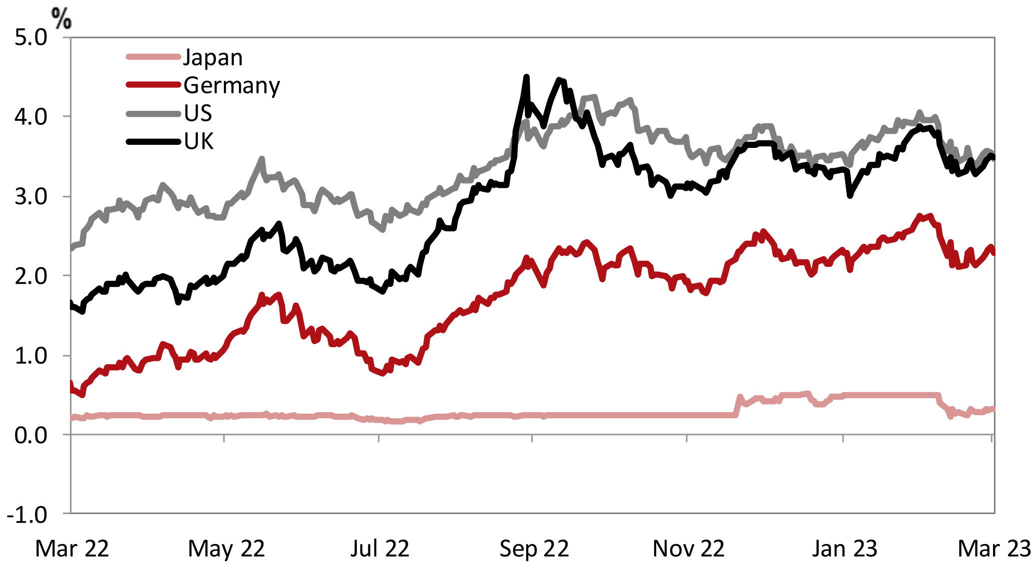


Source: Bloomberg/DMO

International comparisons

Yields on 10-year UK, US and German government bonds rose notably over the course of financial year in response to global monetary policy tightening, whereas those on Japanese government bonds remained range bound. In the UK 10-year yields rose by 188bp, by 113bp in the US and by 174bp in Germany, whereas corresponding yields in Japan rose by only 12bp. See Chart 6.

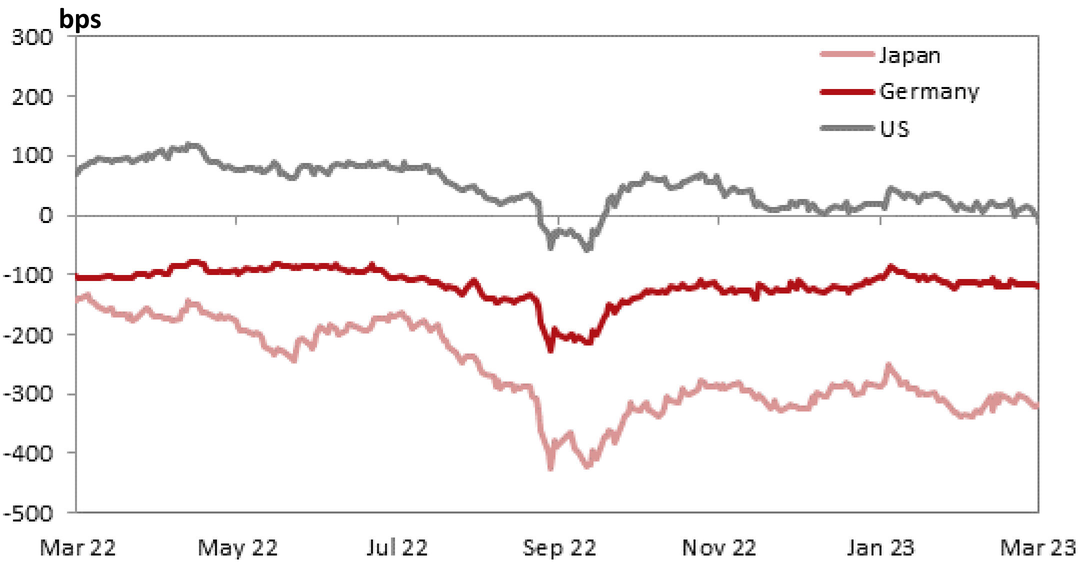
Chart 6: Selected international 10-year benchmark yields 2022-23



Source: Bloomberg

10-year gilts moderately underperformed comparable maturity US Treasuries with the spread declining by 75bp to finish 2022-23 slightly negative at -2bp. Gilts marginally underperformed comparable German government bonds, with the spread between 10-year gilts and German bonds falling by 14bp to -120bp, while the spread versus 10-year Japanese bonds fell considerably by 176bp to -316bp. See Chart 7.

Chart 7: Selected international 10-year benchmark bond yield spreads to 10-year gilts



Source: DMO

Gilt market turnover

Aggregate gilt market turnover in 2022-23, as reported by the Gilt-edged Market Makers (GEMMs)[2] fell by £917 billion (9.6%) compared with the previous financial year. Turnover fell in short conventional gilts by 7.7% to £2.22 trillion, in medium conventional gilts by 13.4% to £3.37 trillion, in long conventional gilts by 10.7% to £1.72 trillion and in index-linked gilts by 0.4% to £1.38 trillion. Developments in gilt market turnover are shown in Table 1 and Chart 8.

Table 1: Aggregate gilt market turnover (cash terms) by GEMMs 2000-01 to 2022-23 (£ billion)[3]

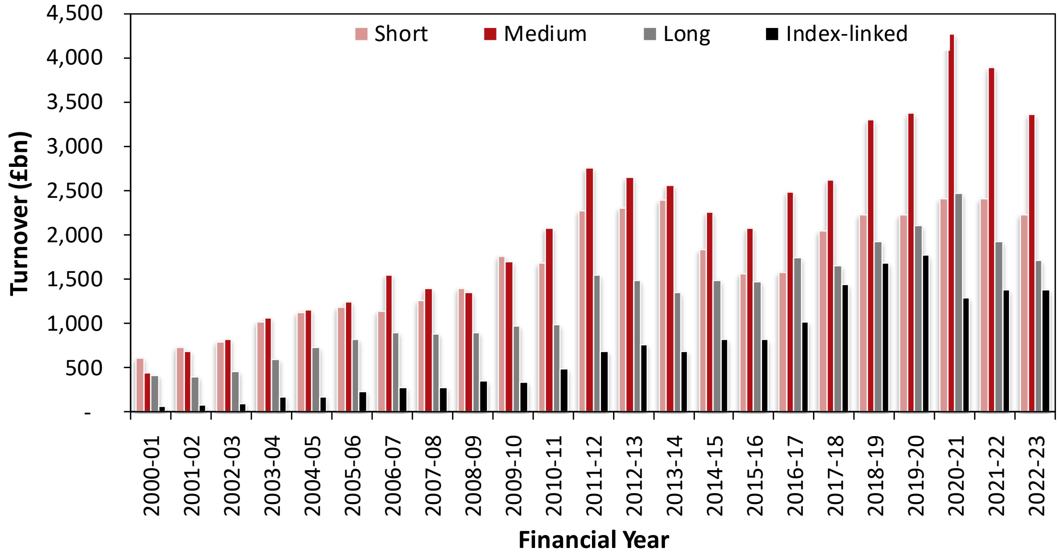
	Short	Medium	Long	Index-linked	Total
2000-01	608	446	412	65	**1,531**
2001-02	733	692	396	86	**1,907**
2002-03	784	822	460	103	**2,168**
2003-04	1,016	1,071	599	172	**2,858**
2004-05	1,120	1,161	738	176	**3,195**
2005-06	1,186	1,252	825	236	**3,500**
2006-07	1,139	1,548	893	276	**3,856**
2007-08	1,262	1,399	877	271	**3,808**
2008-09	1,389	1,358	894	346	**3,988**
2009-10	1,754	1,702	976	336	**4,769**
2010-11	1,691	2,073	991	485	**5,240**
2011-12	2,280	2,753	1,541	689	**7,263**
2012-13	2,308	2,659	1,488	757	**7,213**
2013-14	2,391	2,555	1,356	690	**6,992**
2014-15	2,145	2,506	1,646	898	**7,196**
2015-16	1,805	2,313	1,615	880	**6,613**
2016-17	1,717	2,670	1,822	1,078	**7,288**
2017-18	2,201	2,817	1,773	1,493	**8,284**
2018-19	2,244	3,321	1,936	1,690	**9,191**
2019-20	2,231	3,375	2,114	1,771	**9,491**
2020-21	2,417	4,275	2,476	1,290	**10,457**
2021-22	2,409	3,885	1,920	1,387	**9,600**
2022-23	2,223	3,365	1,715	1,381	**8,683**

Source: GEMMs

[2] The current list of GEMMs and their web addresses are available on the DMO website via https://www.dmo.gov.uk/responsibilities/gilt-market/market-participants/

[3] These data cover only those transactions conducted by GEMMs, and are therefore not wholly comprehensive in terms of turnover in the entire gilt market. Nevertheless, they should represent a significant proportion of total transaction volume.

Chart 8: GEMM gilt market turnover (cash terms)



Source: GEMMs

Monetary policy background

Inflation reached multi-decade high levels in many countries during 2022-23. In response, central banks generally raised interest rates aggressively in the period from historic low levels and many began the process of quantitative tightening.

The Bank of England's Monetary Policy Committee (MPC) raised Bank Rate at each of the eight policy meetings in the financial year, taking the rate from 0.75% to 4.25%, the highest level since October 2008. Having taken the decision to cease reinvesting the proceeds from maturing gilts from the Asset Purchase Facility (APF) in February 2022, the committee decided to accelerate the process of balance sheet normalisation by actively selling bonds from October. The announced intention was to reduce the stock of gilt purchases, financed by the issuance of central bank reserves, by £80 billion, via a combination of active sales and redemptions, to a total of £758 billion by the end of September 2023.

The ECB raised the interest rate on the main refinancing operations in July 2022 from the historic low of 0.0% to 0.5%. Further policy tightening throughout the year resulted in the rate reaching 3.5% at the financial year-end, the highest level since October 2008. The ECB tapered net purchases under the asset purchase programme (APP) from a rate of €40 billion in April 2022 to €20 billion in June 2022. There were only reinvestments of redemptions between July and February 2023 and, from March, the decision was taken to only partially reinvest redemptions.

In the US, after a period of two years with the Federal Funds Rate (FFR) target range at 0% to 0.25%, the Federal Reserve started to increase interest rates in March 2022 raising the target range by 25bps. Tightening continued throughout the financial year 2022-23 and, following the March 2023 policy meeting, the target range had reached 4.75% to 5%. The committee also continued to reduce the size of the Federal Reserve's balance sheet by limiting reinvestments. As a result of these actions, holdings were reduced by $200 billion to around $8.7 trillion by the end of March 2023.

Chapter 2: Government Debt Management

DMO financing remit for 2022-23

The DMO's initial gilt financing remit for 2022-23 was announced at the Spring Statement on 23 March 2022, with planned gilt sales of £124.7 billion. It was planned that these sales would be delivered via 43 gilt auctions and five syndications. It was announced that green gilt sales of £10.0 billion were planned for 2022-23, with sales focusing on re-openings of the existing two green gilts.

The structure of the original gilt financing remit for 2022-23 is summarised in Table 2.

Table 2: Original remit structure for 2022-23

(£ billion Proportions in brackets)	Auction	Syndication	Gilt tender	Unallocated	Total
Short	37.1	-	-	-	37.1 (29.8%)
Medium[1]	26.5	-	-	-	26.5 (21.2%)
Long[2]	22.5	13.0	-	-	35.5 (28.5%)
Index-linked	10.6	8.0	-	-	18.6 (14.9%)
Unallocated	-	-	-	7.0	7.0 (5.6%)
Total	**96.7 (77.6%)**	**21.0 (16.8%)**	**- -**	**7.0 (5.6%)**	**124.7**

Figures may not sum due to rounding.

Source: DMO

[1]Including planned green gilt sales.
[2]Including planned green gilt sales.

In addition, net Treasury bill issuance for debt management purposes of £23.2 billion was announced for 2022-23.

On 26 April 2022 a moderate (£6.8 billion) increase in planned gilt sales was announced alongside the publication of a higher than expected outturn for the Central Government Net Cash Requirement (excluding NRAM ltd, Bradford & Bingley and Network Rail) (CGNCR ex NRAM, B&B and NR) in 2021-22.

Planned gilt sales rose from £124.7 billion to £131.5 billion, with three additional planned conventional gilt auctions (one extra short, medium and long auction) being added and one additional index-linked auction being scheduled, taking the planned total of gilt auctions in 2022-23 to 47.

There were no changes to the planned syndication programme in 2022-23 alongside the 26 April 2022 announcement. The size of the unallocated portion of gilt issuance (£7.0 billion) and planned green gilt issuance (£10.0 billion) were also both unchanged.

Additional net sales of Treasury bills for debt management purposes of £7.0 billion was announced, taking planned net sales in 2023-23 to £30.2 billion.

The structure of the gilt financing remit for 2022-23 at the first in-year revision is summarised in Table 3.

Table 3: Revised remit structure for 2022-23 (April 2022)

(£ billion Proportions in brackets)	Auction	Syndication	Gilt tender	Unallocated	Total
Short	39.4	-	-	-	39.4 (30.0%)
Medium[1]	28.1	-	-	-	28.1 (21.4%)
Long[2]	24.3	13.0	-	-	37.3 (28.4%)
Index-linked	11.7	8.0	-	-	19.7 (15.0%)
Unallocated	-	-	-	7.0	7.0 (5.3%)
Total	**103.5 (78.7%)**	**21.0 (16.0%)**	**- -**	**7.0 (5.3%)**	**131.5**

Figures may not sum due to rounding.

Source: DMO
[1]Including planned green gilt sales.
[2]Including planned green gilt sales.

The gilt financing remit for 2022-23 was subsequently increased by £62.4 billion to £193.9 billion on 23 September 2022, following the publication of the Government's Growth Plan.

The rise in gilt sales was principally managed by an increase of £57.9 billion in planned gilt sales via auctions, to £161.4 billion. 13 additional gilt auctions were planned for the remainder of the financial year; seven short conventional, five medium conventional and one long conventional, taking the planned total number of auctions in 2022-23 to 64[4]. One additional long conventional gilt syndication was announced, taking planned sales by syndication in 2022-23 to £25.5 billion.

[4] Four additional auctions were announced in August, as a result of a £4.5 billion transfer from the unallocated portion of issuance to the gilt auctions programme, and to manage auction sizes in Q3 2022-23.

The then prevailing balance of the unallocated portion of issuance of £0.6 billion[5] was increased by £5.0 billion, to £5.6 billion.
In addition, net sales of Treasury bills for debt management purposes was increased by £10.0 billion, taking the planned increase in 2022-23 to £40.2 billion.

The structure of the gilt financing remit for 2022-23 at the September 2022 revision is summarised in Table 4.

Table 4: Revised remit structure for 2022-23 (September 2022)

(£ billion Proportions in brackets)	Auction	Syndication	Gilt tender	Unallocated	Total
Short	72.1	-	1.4	-	73.5 (37.9%)
Medium[1]	46.6	-	-	-	46.6 (24.0%)
Long[2]	29.0	18.0	-	-	47.0 (24.2%)
Index-linked	13.7	7.5	-	-	21.2 (10.9%)
Unallocated	-	-	-	5.6	5.6 (2.9%)
Total	**161.4 (83.2%)**	**25.5 (13.1%)**	**1.4 (0.7%)**	**5.6 (2.9%)**	**193.9**

Figures may not sum due to rounding.

Source: DMO
[1]Including planned green gilt sales.
[2]Including planned green gilt sales.

The 2022-23 gilt financing remit was then subsequently reduced by £24.4 billion to £169.5 billion at the Autumn Statement on 17 November 2022, following the publication of the Office for Budget Responsibility's (OBR's) Economic and Fiscal Outlook (EFO).

The reduction in gilt sales was principally managed by a decrease of £19.1 billion in planned gilt sales via auctions, to £142.3 billion. Five gilt auctions (two short conventional and one each of medium and long conventional, and one index-linked) were cancelled, taking the planned total number of auctions in 2022-23 to 59.

Planned gilt sales via syndication were reduced by £2.7 billion to £22.8 billion, while the planned number of syndications in 2022-23 remained unchanged at six.

The size of the unallocated portion of gilt issuance was reduced by £2.6 billion, to £3.0 billion. Net sales of Treasury bills for debt management purposes were reduced by £7.0 billion, implying a next stock increased of £33.2 of such bills in 2022-23.

[5] The original unallocated portion of issuance had been £7.0 billion. In advance of the September 2022 remit revision, the unallocated portion had been drawn down by £6.4 billion.

The structure of the gilt financing remit for 2022-23 at the November 2022 revision is summarised in Table 5.

Table 5: Revised remit structure for 2022-23 (November 2022)

(£ billion Proportions in brackets)	Auction	Syndication	Gilt tender	Unallocated	Total
Short	65.1	-	1.4	-	66.5 (39.2%)
Medium[1]	43.2	-	-	-	43.2 (25.5%)
Long[2]	23.5	16.3	-	-	39.8 (23.5%)
Index-linked	10.5	6.5	-	-	17.0 (10.0%)
Unallocated	-	-	-	3.0	3.0 (1.8%)
Total	**142.3 (84.0%)**	**22.8 (13.5%)**	**1.4 (0.8%)**	**3.0 (1.8%)**	**169.5**

Figures may not sum due to rounding.

Source: DMO

[1]Including planned green gilt sales.
[2]Including planned green gilt sales.

The outturn for gilt sales in 2022-23 was £169.5 billion (just £3 million below the remit plan). The details are shown in Table 6. Green gilt issuance amounted to £9.9 billion (cash).

Table 6: Gilt sales outturn 2022-23

(£ million)	Conventional gilts			Index-linked gilts	Total
	Short	Medium	Long		
Auction proceeds	58,895	39,327	20,341	10,340	128,812
PAOF proceeds	4,987	6,152	3,449	699	15,287
Auction and PAOF proceeds	**63,882**	**45,389**	**23,789**	**11,040**	**144,100**
Syndication sales*	-	-	17,298	6,680	23,978
Gilt tender sales	1,419	-	-	-	1,419
Total gilt sales	**65,301**	**45,389**	**41,087**	**17,720**	**169,497**
Number of auctions held	18	16	15	10	59
Syndications held	-	-	4	2	6
Gilt tenders held	1	-	-	-	1
Total planned gilt sales	**-**	**-**	**-**	**-**	**169,500**

Figures may not sum due to rounding.

*Long sales via syndication include one green gilt syndication which raised £2,352 million.

Source DMO

Pace of financing in 2022-23

The pace of financing over the first six months of 2022-23 was broadly consistent with the DMO's even-flow approach to issuance. As shown in Table 7, gilt sales averaged around £10.5 billion per month over the first half of the financial year. The pace of monthly gilt sales over the second half of 2022-23 increased materially, in response to the substantial increase in the financing remit in September (though the remit was subsequently reduced in November). Monthly gilt sales in the final six months of the year averaged around £17.7 billion, with 63% of the final remit target raised over this period.

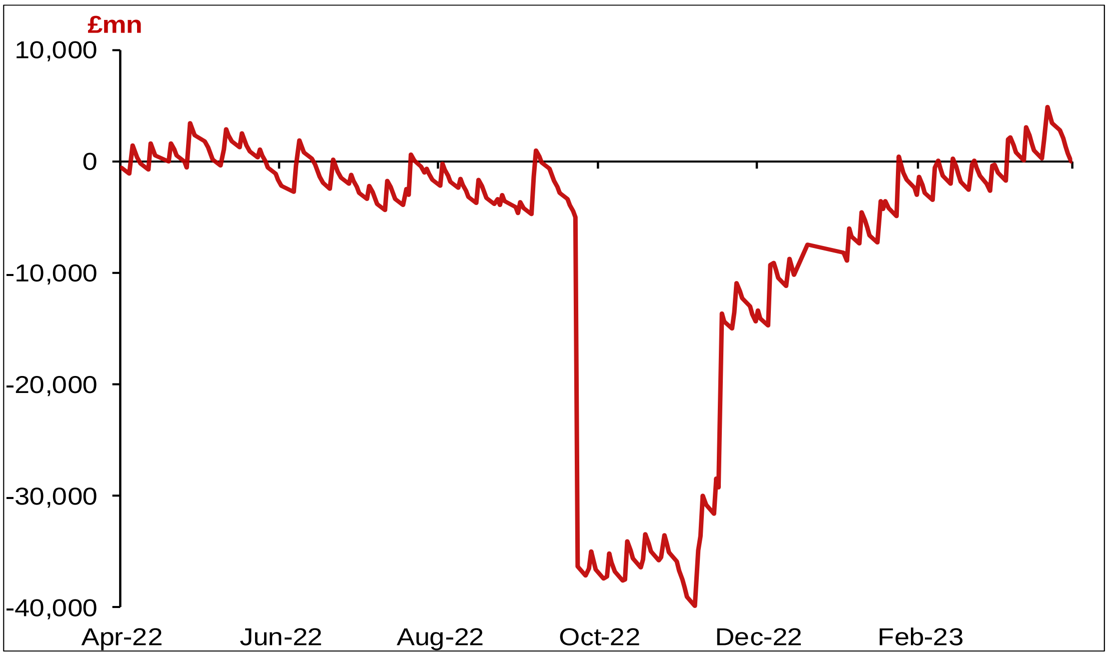
Table 7: Monthly gilt sales in 2022-23

($bn)	Gilt sales	Cumulative	% of total
Apr-22	12.6	12.6	7.4%
May-22	7.4	20.0	11.8%
Jun-22	10.2	30.2	17.8%
Jul-22	12.0	42.2	24.9%
Aug-22	9.0	51.1	30.2%
Sep-22	12.0	63.1	37.3%
Oct-22	17.5	80.6	47.6%
Nov-22	21.7	102.3	60.4%
Dec-22	15.2	117.6	69.4%
Jan-23	19.0	136.6	80.6%
Feb-23	14.3	150.9	89.0%
Mar-23	18.6	169.5	100.0%

Source DMO

Chart 9 shows cumulative proceeds from all sales operations, compared with a counterfactual even-flow pace of financing required to deliver the final gilt sales total in 2022-23. The even-flow position sharply declined in September 2022, after the gilt financing remit was increased by £62.4 billion following the publication of the Government's Growth Plan. The deficit in cumulative financing relative to the counterfactual even-flow pace was reduced in November, due to a reduction in the gilt financing remit following the publication of the OBR's updated EFO. This deficit was further reduced over the remainder of the financial year, as elevated monthly gilt financing exceeded an even-flow pace.

Chart 9: Cumulative financing relative to the even-flow position[6] 2022-23



Source: DMO

[6] The even-flow counterfactual assumes that the same amount of cash is raised on every business day sufficient to meet the final total annual gilt sales requirement.

The gilt financing arithmetic

The initial financing arithmetic for 2022-23 as published at Spring Statement 2022 was restated as usual at the April 2022 CGNCR ex NRAM, B&B and NR outturn, and again in the September and November 2022 revisions. Developments in the 2022-23 financing arithmetic are shown in Table 8.

Table 8: The 2022-23 financing arithmetic[7]

(£ billion)	Spring Statement 2022	April 2022 revision	September 2022 revision	November 2022 revision	April 2023 outturn
CGNCR (ex NRAM, B&B and NR)	94.3	94.3	94.3	136.1	111.3
Additional financing for Growth Plan	n.a.	n.a.	72.4	n.a.	n.a.
Gilt redemptions	107.1	107.1	107.1	107.1	107.1
Financing adjustment carried forward from previous financial years	-46.8	-33.1	-33.1	-33.1	-33.1
Gross financing requirement	**154.6**	**168.4**	**240.8**	**210.2**	**185.3**
less:					
NS&I net financing	6.0	6.0	6.0	6.0	9.4
NS&I Green Savings Bonds	n.a.	n.a.	n.a.	n.a	0.6
Other financing[8]	0.7	0.7	0.7	1.4	-1.6
Net financing requirement (NFR) for the DMO	**147.9**	**161.7**	**234.1**	**202.7**	**176.9**
DMO's NFR will be financed through:					
a) Gilt sales of which:	**124.7**	**131.5**	**193.9**	**169.5**	**169.5**
Short conventional gilts	37.1	39.4	73.5	66.5	65.3
Medium conventional gilts	26.5	28.1	46.6	43.2	45.4
Long conventional gilts	35.5	37.3	47.0	39.8	41.1
Index-linked gilts	18.6	19.7	21.2	17.0	17.7
Unallocated amount of gilts	7.0	7.0	5.6	3.0	0.0
b) Total net contribution of Treasury bills for debt financing	**23.2**	**30.2**	**40.2**	**33.2**	**32.0**
Total financing	**147.9**	**161.7**	**234.1**	**202.7**	**201.5**
DMO net cash position	2.3	2.3	2.3	2.3	26.9

Source: DMO

[7] Figures may not sum due to rounding.
[8] Prior to publication of the end-year outturn in April each year, this financing item will mainly comprise estimated revenue from coinage. At outturn it will include outturn revenue from coinage and additional financing through non-governmental deposits, certificates of tax deposit and foreign exchange transactions relating to the Exchange Equalisation Account.

Gilt financing operations

The DMO held a total of 66 financing operations in 2022-23, five fewer than in the previous financial year. In addition, the Post Auction Option Facility (PAOF) was activated, in whole or in part, at 39 of the 59 gilt auctions; including these transactions, the number of gilt sales operations in 2022-23 was 105. The history of DMO outright gilt sales operations is shown in Table 9.

Table 9: DMO outright gilt sale operations history 1998-99 to 2022-23

	Auctions	Syndications	Tenders*	Taps**	Residual tenders***	Total	Gilt sales (£bn)
1998-99	4			4		8	8.2
1999-00	8			1	1	10	14.4
2000-01	7					7	10.0
2001-02	8					8	13.7
2002-03	13				1	14	26.3
2003-04	24					24	49.9
2004-05	26					26	50.1
2005-06	25	1				26	52.3
2006-07	36					36	62.5
2007-08	34					34	58.5
2008-09	58		8			66	146.5
2009-10	58	6	12		1	77	227.6
2010-11	49	5	7			61	166.4
2011-12	49	8	3			60	179.4
2012-13	44	8	4			56	165.1
2013-14	43	5	4			52	153.4
2014-15	41	4	1			46	126.4
2015-16	39	6	2			47	127.7
2016-17	48	7	3			58	147.6
2017-18	40	5	1			46	115.5
2018-19	36	4				40	98.5
2019-20	43	5	4			52	137.9
2020-21	150	7	2			159	485.8
2021-22	64	7				71	194.7
2022-23	59	6	1			66	169.5

**Mini-tenders from 2008-09 to 2015-16. Gilt tenders thereafter.*
***Index-linked taps in 1998-99. Tap for market management in 1999-2000.*
****Tenders of uncovered auction residuals.*

Source: DMO

- ## Gilt auctions

Auctions (including the associated PAOF proceeds) accounted for £144.1 billion or 85.0% of gross gilt sales in 2022-23. Of the 59 auctions held, 18 were of short, 16 of medium and 15 were of long conventional gilts, and 10 were of index-linked gilts[9].

The average cover ratio at gilt auctions in 2022-23 was 2.39x, a marginal decline on the average of 2.41x in 2021-22. The average concentration of bidding at conventional gilt auctions, as measured by the tail[10], was an average of 0.8bp, an increase from an average tail of 0.4bp in the previous financial year. Details are shown in Table 10.

Table 10: Auction cover and tail 2021-22 and 2022-23

	Average cover ratio (x)		Average yield tail (bp)	
	2022-23	**2021-22**	**2022-23**	**2021-22**
Short conventional	2.26	2.46	1.0	0.6
Medium conventional	2.42	2.55	0.6	0.3
Long conventional	2.45	2.30	0.7	0.5
Index-linked	2.49	2.36	N/A	N/A
All	**2.39**	**2.41**	**0.8**	**0.4**

Source: DMO

- ## PAOF

PAOF was taken-up in whole or in part at 39 of the 59 auctions held in 2022-23 raising £15.3 billion. The rate of take-up declined slightly compared with 2022-21, but, at 47.5% remains close to the level that might be expected (i.e. over the year as a whole on any operation day, the option may be equally likely to be in or out of the money at the close of the window). Recent PAOF performance is summarised in Table 11.

Table 11: PAOF performance 2019-20 to 2022-23

	Rate (%)	Take-up (%)	Take-up rate* (%)	Proceeds (£bn)
2019-20	15.0	7.2	48.0	7.8
2020-21	25.0	13.1	52.4	49.6
2021-22	25.0	12.1	48.4	16.4
2022-23	25.0	11.9	47.5	15.3
*The percentage of total available PAOF that was taken-up in the financial year.				

Source: DMO

[9] The results of gilt auctions and other operations are available on the DMO's website at: https://www.dmo.gov.uk/data/gilt-market/results-of-gilt-operations/

[10] The tail is the difference in basis points between the yield at the average and lowest accepted prices at multiple price auctions (conventional gilts only).

- ## Syndicated offerings

Six syndicated offerings, including one green gilt syndication, were held in 2022-23, raising £24.0 billion or 14.1% of gross gilt sales. The results of the syndication programme in 2022-23 are summarised in Table 12.

Table 12: Syndications in 2022-23

Date	Gilt	Size (£mn nominal)	Issue Price (£)	Issue Yield (%)	Proceeds (£mn cash)
27 Apr 2022	0⅛% Index-linked Treasury Gilt 2073	1,800	241.84	-1.645	4,514
21 Jun 2022	1⅛% Treasury Gilt 2073	5,500	57.63	2.636	3,158
28 Sep 2022	1½% Green Gilt 2053	4,500	52.45	4.295	2,352
08 Nov 2022	3¾% Treasury Gilt 2038	6,000	96.34	4.076	5,770
22 Nov 2022	0⅛% Index-linked Treasury Gilt 2073	1,500	128.52	-0.388	2,166
24 Jan 2023	3¾% Treasury Gilt 2053	6,000	100.49	3.723	6,018
Total					**23,978**

Source: DMO

Green gilt issuance

Following the successful launch of the government's Green Financing Programme in June 2021, green gilt issuance for the financial year 2022-23 raised a total of £9.9 billion (cash) across four auctions and one syndication (Table 13). The focus was on re-opening the existing medium and long maturity green gilts issued in 2021, in order to build up liquidity in these bonds.

Table 13: Green gilt issuance in 2022-23

Date	Gilt name	Operation	Cash proceeds (£bn)	Cover ratio (x)
10 May 2022	0⅞% Green Gilt 2033	Auction	2.0	2.37
28 September 2022	1½% Green Gilt 2053	Syndication	2.4	-
9 November 2022	0⅞% Green Gilt 2033	Auction	2.1	2.25
1 February 2023	0⅞% Green Gilt 2033	Auction	2.3	2.22
22 February 2023	1½% Green Gilt 2053	Auction	1.1	2.42

Publication of the UK Green Financing Allocation Report

As part of the government's stated commitment to report regularly on the way in which the funds raised under the Green Financing Programme are spent, the first Allocation Report was published in September 2022. The report outlines how private capital is allocated across government initiatives to address climate change and biodiversity loss.

The government plans to publish the inaugural Impact Report in September 2023 showing, where relevant and feasible, the positive environmental impacts and social co-benefits of schemes financed by the Green Financing Programme.

Spring Budget 2023

As announced alongside Spring Budget 2023, green gilt issuance of £10.0 billion (cash) is planned in 2023-24, the third year of the Green Financing Programme. The expectation is that the focus this year will be on further re-openings of the two existing green gilts and continuing to build them towards benchmark size for gilts.

All reports and documents relating to green gilts are available in the Green Gilts section of the DMO's website[11].

[11] https://www.dmo.gov.uk/responsibilities/green-gilts/

Debt management performance

This section includes data on the DMO's performance in the execution of the gilt financing remit in 2022-23.

The gilt data compare the actual cost of gilt issuance (measured by the average yield at which gilts were sold in accordance with the DMO's financing remit) with illustrative counterfactual costs of different patterns of gilt financing. It also looks at the performance of gilt auctions by comparing the average accepted/strike price of an auction with prevailing secondary market price levels.

Table 9 above reports on the average cover ratios at all gilt auctions in 2022-23 and on the concentration of bidding (the tail) at conventional gilt auctions.

a) Gilt issuance counterfactuals

Since 2001 the DMO has published in its Annual Reviews the results of its measurement of relative performance of outright issuance in each financial year against counterfactuals. Although the UK's debt management objective is concerned with minimising the cost of issuance "over the long term" rather than in any one year, the intention here is to illustrate whether different non-discretionary issuance patterns during a particular year could have resulted in higher or lower costs of financing.

The calculations compare the cash weighted yield of actual issuance with the yield on various counterfactual issuance patterns but on the basis of a key assumption that the different issuance patterns modelled would not have impacted the levels of yields relative to those achieved in practice (see below).

There are a number of limitations to this analysis. In particular, a major assumption that is unlikely to hold in practice is that the shape of the yield curve remains fixed over time. This is particularly relevant when considering the refinancing timeframes associated with different maturities of debt (i.e. short issuance needs to be refinanced much more frequently than long issuance) so this analysis is not comparing like-for-like in this regard. In principle, therefore, if yields evolve as reflected by the forward yield curve it would be too simplistic to say that, in any one year, one issuance pattern has outperformed another.

Another relevant assumption is that the counterfactual issuance patterns themselves would not have had any impact on yields. This is unlikely to hold in practice particularly where the gilt issuance pattern under the counterfactual is significantly different from actual issuance (e.g. a heavy skew to a certain maturity). Whilst it is likely, certainly over the medium- to longer-term, that the greatest influences on the level of yields will be macroeconomic conditions, market expectations of interest rates, and other external factors over which the debt manager has no control, establishing the extent to which changes in volumes and patterns of supply might affect yields is more difficult.

The underlying rationale for considering issuance performance against counterfactuals is that it provides one means by which to analyse the performance of the debt management authorities in achieving the debt management objective, in particular regarding the decisions on the split between maturities/types of gilt sold in a given year. It is worth noting in this context that measuring performance against the primary debt management objective is not straightforward, a fact widely acknowledged by many other sovereign debt managers and international institutions. Hence, presentation of annual counterfactuals should not be interpreted as a complete or authoritative means by which to test achievement against the debt management objective – which as noted above is a long-term test.

For these reasons, caution is required when interpreting the yield impact of counterfactual issuance patterns in comparison with the actual issuance yield.

The cash weighted average yield of actual issuance at the gilt auctions and syndicated offerings in 2022-23 was 3.178% (233.8bp higher than the 0.840% in the previous financial year).

The cash weighted average yield of issuance by type of gilt and maturity is shown in Table 14. Note that the index-linked yields reported in Tables 14 and 15 are nominalised yield equivalents of real yields assuming 3% RPI inflation.

Table 14: Average issuance yield by type and maturity of gilt in 2022-23

	Cash (£mn)	Yield (%)
Conventional		
Short	65,301	3.274
Medium	45,389	3.172
Long	41,087	3.408
Total conventional	**151,777**	**3.280**
Index-linked		
Medium	5,108	2.603
Long	12,612	2.176
Total index-linked	**17,720**	**2.299**
All issuance	**169,497**	**3.178**

Source: DMO

The actual yield of 3.178% can be compared with yields derived by applying the actual annual cash weighted yield on total issuance for that year of different maturities/types of gilt to different gilt issuance patterns. Table 15 contrasts the actual average issuance yield in 2022-23 with three counterfactuals which assume the same yields by maturity and type as shown above, but with alternative issuance skews, namely:

- a significantly greater skew towards short issuance;
- a more even distribution of financing between maturity buckets; and
- a significantly greater skew towards long issuance.

Table 15: Illustrative average issuance yields assuming different issuance distributions

	Yield (%)	Actual distribution £mn	Shorter distribution £mn	Even distribution £mn	Longer distribution £mn
Conventional					
Short	3.274	65,301	75,889	50,592	37,944
Medium	3.172	45,389	37,944	50,592	37,944
Long	3.408	41,087	37,944	50,592	75,889
Total conventional	**3.280**	**151,777**	**151,777**	**151,777**	**151,777**
Index-linked					
Medium	2.603	5,108	13,290	8,860	4,430
Long	2.176	12,612	4,430	8,860	13,290
Total index-linked	**2.299**	**17,720**	**17,720**	**17,720**	**17,720**
All issuance		**169,497**	**169,497**	**169,497**	**169,497**
Average issuance yield	**3.178%**	**3.178%**	**3.200%**	**3.191%**	**3.208%**
Difference (bp)			**2.3**	**1.4**	**3.0**

Figures may not sum due to rounding.

Source: DMO

The more even distribution to financing by maturity produces an average yield of issuance 1.4bp higher than the actual average yield, reflecting the higher proportion of higher yielding long maturity gilts. The shorter distribution[12] produces an implied issuance yield 2.3bp higher than the actual average yield while the longer distribution[13] produces an issuance yield 3.0bp higher than the actual average yield.

The results from counterfactual modelling of this kind need to be considered in the context of an objective that requires the DMO (and many other sovereign issuers with similar objectives) to pursue policies designed to minimise long-term cost whilst taking account of the risks to which debt issuance exposes the Exchequer i.e. the DMO does not seek exclusively to minimise yield at the expense of other considerations. In order to determine the maturity and composition of debt issuance, the government takes into account a number of factors including:

- the government's own appetite for risk, both nominal and real;
- the shape of both the nominal and real yield curves; and
- investors' demand for gilts.

[12] This skew assumes 50% of conventional issuance is short with medium and long shares of 25% each. Index-linked issuance is assumed to be split 75% medium/25% long.

[13] This skew assumes 50% of conventional issuance is long with short and medium shares of 25% each. Index-linked issuance is assumed to be split 25% medium/75% long.

b) Auction concession analysis

There are a number of ways to measure auction concessions. The method presented below shows the size of any concession/premium at gilt auctions by measuring the difference between the actual proceeds received and those that would have been generated had each gilt at auction been sold at the secondary market price of the gilt at the close of bidding in 2022-23 (i.e. at 10.00am or 11.30am on days when a single auction was scheduled and at 10.00am and 11.30am on days when two auctions were scheduled).

On this basis, a total premium of £90.9 million was achieved across the 59 gilt auctions held in 2022-23: an average of £1.5 million per auction. The average premia for auctions at the different maturities and types of gilt were as follows:

- Short conventional: £1.1 million
- Medium conventional: £1.6 million
- Long conventional: £2.1 million
- Index-linked: £1.4 million

The DMO’s financing remit in 2023-24

The DMO’s financing remit for 2023-24 was published alongside the Spring Budget on 15 March 2023. Planned gilt sales of £241.1 billion were announced, including £10.0 billion of green gilt sales, and an unallocated portion of £12.0 billion for issuance of any type or maturity of gilt (apart from green gilts). In addition, planned net sales of Treasury bills for debt management purposes of £5.0 billion were announced.

The 2023-24 financing remit was revised on 25 April 2023, alongside the publication of the 2022-23 outturn of the CGNCR ex NRAM, B&B and NR. Planned gilt sales were reduced by £3.3 billion, to £237.8 billion and planned net sales of Treasury bills for debt management purposes remained unchanged at £5.0 billion.

Chapter 3: Exchequer Cash Management

Exchequer cash management remit 2022-23

The DMO's cash management remit for 2022-23, published alongside Budget 2022 on 23 March 2022, specified that the government's cash management objective remains:

> "*to ensure that sufficient funds are always available to meet any net daily central government cash shortfall and, on any day when there is a net cash surplus, to ensure this is used to best advantage*".

HM Treasury and the DMO work together to achieve this, with HM Treasury providing information to the DMO about flows into and out of the National Loans Fund (NLF) and the DMO making arrangements for funding and for placing net cash positions, primarily by carrying out market operations on the basis of HM Treasury forecasts.

The DMO successfully delivered its cash management remit for 2022-23. The DMO monitored and assessed its performance using a range of key performance indicators, details of which are in Annex B.

During the year, the DMO continued to meet the government's net cash requirements primarily by raising and investing cash in the sterling repo market.

The DMO also used weekly Treasury bill tenders to support its daily cash management activities. Throughout the year, there remained a strong market demand to buy Treasury bills at tender and through bilateral agreement.

The Debt Management Account Deposit Facility (DMADF) continued to take cash deposits from local authorities and government agencies, which can place surplus funds with the Debt Management Account (DMA) for up to six months. Deposit levels remained fairly stable throughout the year.

Additionally, the DMO traded a number of other money market instruments to ensure that the government's daily cash requirements were met.

In 2022-23 the DMO carried out its cash management objective primarily through a combination of:

- Treasury bill sales; and
- bilateral market operations with DMO counterparties.

The average accepted yields achieved at the weekly Treasury bill tenders are assessed against the SONIA rates for the relevant maturities. These are reported in Annex B.

The stock of Treasury bills in issue can vary within year and across the financial year-end according to cash management requirements[14].

[14] Details are published on the DMO website at: https://www.dmo.gov.uk/data/treasury-bills/treasury-bill-issuance-and-stock/ The breakdown of the Treasury bill portfolio by maturity date is published on the DMO website at: https://www.dmo.gov.uk/data/treasury-bills/treasury-bills-outstanding/

Bilateral cash management operations

In practice, the most significant portion of cash management operations in 2022-23, as in previous years, was negotiated bilaterally by the DMO with market counterparties. To ensure competitive pricing, the DMO maintains relations with a wide range of money market counterparties with whom it transacts both directly and via voice and electronic brokers.

Cash management is conducted using market instruments in order to minimise cost whilst operating within agreed risk limits. Sterling denominated repurchase agreements (repo) and reverse repurchase agreements (reverse repo) currently dominate these transactions, though short-dated cash bonds, certificates of deposit, commercial paper, reverse repo of foreign currency bonds swapped into sterling, unsecured loans and deposits can also be used.

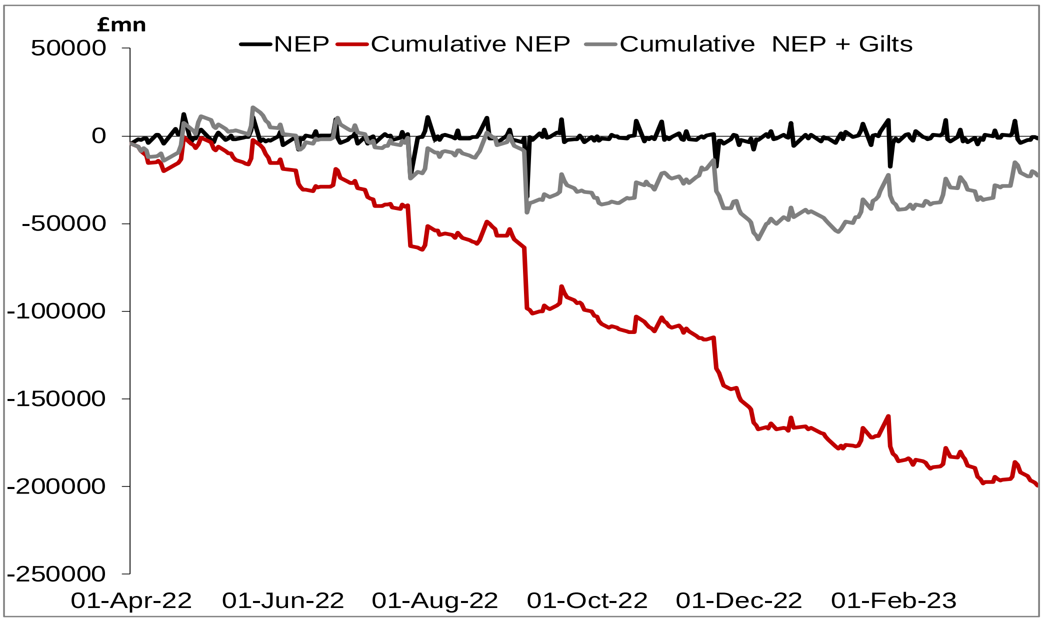
The DMO's money market dealers borrow from and/or lend to the market on each business day to balance the position on the NLF. In order to do so the DMO receives from HM Treasury forecasts of each business day's cash flows into and out of central government. Additionally, the DMO obtains up-to-date intra-day monitoring of cash flows as they occur. The DMO trades only with the purpose of offsetting current and forecast future government cash flows, subject to the agreed risk limits. The DMO does not take interest rate positions, except in so far as that is necessary to offset forecast future cash flows.

Over the course of a financial year, the Exchequer's cash flow has typically had a fairly regular and predictable pattern associated with the tax receipts and expenditure cycles. Outflows associated with gilt coupons and redemptions are also known in advance.

Chart 10 shows the scale of daily cash flows measured in terms of the Net Exchequer Position (NEP) in 2022-23 on a daily and cumulative basis. The NEP excludes the effects of gilt sales, Treasury bill issuance and NS&I's overall net contribution to financing, and therefore shows the cumulative in-year deficit which has to be financed.

Chart 10 also shows the net effect including gilt sales demonstrating how the timing of these flows made a significant contribution to reducing the in-year financing required by Exchequer cash management operations.

Chart 10: Exchequer cash flows 2022-23



Source: HM Treasury/DMO

Active cash management performance framework

Since 2000, the in-year cash needs of the government have been managed actively by HM Treasury and the DMO, with HM Treasury providing short- and medium-term forecasts of daily net cash surpluses and deficits and the DMO transacting with its market counterparties in a range of instruments at a range of different maturities to offset the current and forecast future cumulative net cash position.

This active cash management framework is designed to allow specialist cash managers to select appropriate counterparties, instruments and maturities with which to deliver the cash management remit at minimum cost subject to the agreed risk limits. Formal performance reporting is in place as a means of enhancing effectiveness and ensuring accountability. The results for 2022-23 are presented below.

HM Treasury and the DMO recognise that performance measurement needs to capture the wider policy objectives the government sets the DMO as its cash manager, as well as the cost minimisation objective, and for this reason a number of key performance indicators are used, including a quantifiable measure of net interest saving which is shown under key performance indicator (KPI) 1.4.

HM Treasury and the DMO equally recognise that to measure performance solely in terms of net interest savings is a somewhat narrow interpretation that does not fully capture the ethos or the wider policy objectives the government sets the DMO as its cash manager. Exchequer cash management differs from that of a commercial entity in that it does not seek to maximise profits, but rather to minimise costs subject to risk, while playing no role in the determination of sterling interest rates. Consequently, the DMO and HM Treasury monitor and assess overall performance in meeting the government’s objectives using a number of quantitative and qualitative KPIs and controls.

The cash management performance report

The DMO's high level cash management objective as set out above has been subdivided into a series of objectives, to each of which has been attached a KPI as seen in Table 16. The following section explains how performance was delivered against these objectives in 2022-23.

Table 16: Components of the cash management objective

CASH MANAGEMENT OBJECTIVE	KEY PERFORMANCE INDICATORS AND CONTROLS
The DMO must supply sufficient cash each day to enable government to meet its payment obligations. This is fundamental and unconditional.	Ways and Means transfers must be avoided for cash management purposes by ensuring that there is always a positive Debt Management Account (DMA) balance. (NB: HM Treasury is responsible for monitoring and reporting performance of the forecasting function against outturns).
Cash management operations and arrangements should be conducted in a way that does not interfere with monetary policy operations.	The DMO will conduct market operations with a view to achieving, within a very small range, the weekly cumulative target balance for the DMA at the Bank of England. The DMO will maintain formal and informal channels of communication with the Bank on conditions in the Sterling money markets. The DMO will seek to avoid holding weekly or ad hoc Treasury bill tenders if and when the Bank conducts its weekly open market operations.
Cash management operations and arrangements should be conducted without impeding the efficient working of the Sterling money markets.	The DMO will advise HM Treasury as appropriate on the impact of Exchequer cash flows on liquidity conditions in the Sterling money markets.
The DMO should maintain a system in which the costs and risks are transparent, measured and monitored and the performance of government cash management is assessed. The DMO maintains an ethos of cost minimisation rather than profit maximisation.	The DMO will report to HM Treasury on a quarterly basis the details of its cash management activity, its active management performance against the government's marginal cost of funds and the market and credit risks incurred. Performance may also be reported in the DMO Annual Review.
The DMO should maintain a credible reputation in the market that leads to lower costs in the long term and a cash management system that is sustainable.	The DMO should maintain channels of communication with money market participants and Treasury bill counterparties both formally and informally to explain, as far as possible, the nature and intent of its operations in the money markets. The DMO should monitor compliance with its operational notices; provide complete, accurate and timely instructions to counterparties, agents, external systems and operators; and achieve the successful settlement of agreed trades on the due date.

Objective 1.1: DMO must supply sufficient cash each day to enable government to meet its payment obligations. This is fundamental and unconditional.

The core requirement of Exchequer cash management is to secure the day-to-day funding of Exchequer cash needs. This objective is supported by HM Treasury's daily net cash flow forecasts for 19 weeks ahead and intraday updates of same-day scheduled expenditure and revenue flows. The DMO cash dealers raise and place current and future anticipated net daily balances in the Debt Management Account (DMA) with counterparties in the sterling money markets, transacting in a range of instruments and at a range of different maturities to smooth the profile of the forecast cumulative net cash position.

The DMA is used to manage the Exchequer's net cash position. Balances in central government accounts contained within the Exchequer pyramid are swept on a daily basis into the NLF and the DMA is required to offset the resultant NLF balance through its borrowing and lending in the money markets. The DMA is held at the Bank of England and a positive end-of-day balance must be maintained at all times; it cannot be overdrawn. Automatic transfers from the government Ways and Means (II) account at the Bank of England would offset any negative end-of-day balances, though it is an objective to minimise such transfers. Thus, evidence of meeting this objective is provided by reference to the number of occasions the DMA goes overdrawn.

KPI 1.1: Ways and Means end of day transfers for cash management purposes must be avoided by ensuring that there is always a positive DMA balance.

- The DMO ensured a positive end-of-day DMA balance for every day in 2022-23.

Objective 1.2: Cash management operations and arrangements should be conducted in a way that does not conflict with the operational requirements of the Bank of England for monetary policy implementation.

The DMA target balance at the Bank of England serves solely as a buffer against unexpected payments that occur after the wholesale money markets have closed for same-day settlement. It serves to mitigate the risk of going overdrawn. All changes to the daily net cash forecast that occur before markets are closed should be transacted by DMO cash dealers with market counterparties. The DMO cash forecasters are required to notify the Bank of England, in advance of its weekly round of open market operations, of the weekly target balance on the DMA for the week ahead. This contributes to the forecast money market shortage and hence it is important that actual cumulative end-of-day balances do not differ significantly from target.

KPI 1.2: The DMO will conduct market operations with a view to achieving, within a very small range, the weekly cumulative target balance for the DMA at the Bank of England. The DMO will maintain formal and informal channels of communication with the Bank on conditions in the sterling money markets. The DMO will seek to avoid holding weekly or ad hoc Treasury bill tenders when the Bank conducts its weekly open market operations.

- The DMO achieved its target weekly cumulative balance for the DMA within a very small range (+/-2% of its weekly cumulative target) in 40 out of 52 weeks in 2022-23[15] (compared with 46 out of 52 weeks in 2021-22). All significant known daily and forecast cumulative weekly variations from target were notified to the Bank of England in a timely

[15] The +/-2% target pre-dates the current challenging money market conditions. Measured against, for example, a +/- 5% target, the weekly cumulative target balance would have been achieved in 49 out of 52 weeks in 2022-23 (49 in 2021-22).

fashion. The DMO and the Bank held regular meetings to review the operation of these arrangements.

- No cash management operations were undertaken that, by their nature or timing, could be perceived as clashing with the Bank's open market operations.

Objective 1.3: Cash management operations and arrangements should be conducted to avoid undermining the efficient functioning of the sterling money markets.

While this objective is difficult to capture in a KPI, the DMO interprets this as a responsibility to seek to minimise the impact of individual daily flows on the sterling money markets while ensuring it transacts at competitive prices. The DMO operates as a customer at the core of the money markets, seeking to ensure the widest possible access to maturities, instruments, trading arrangements and counterparties across which to diversify its cash management operations. Limits have been set on the amount of dealing with individual counterparties and in individual instruments; exposure to sterling overnight liquidity and sterling interest rates are also subject to limits. In accordance with objective 1.3, limits and controls are intended to avoid concentration of exposures and are reviewed regularly to ensure consistency with market trends and developments; they find their expression in KPI 1.3.

KPI 1.3: The DMO will advise HM Treasury as appropriate on the impact of Exchequer cash flows on liquidity conditions in the sterling money markets.

Throughout 2022-23, the DMO undertook regular formal and informal communication with the Bank of England, money market counterparties, and industry groups to assess liquidity in the sterling money markets. It also maintained frequent and regular dialogue to update HM Treasury on market liquidity and, working with HM Treasury, reviewed its trading policies and risk controls to respond to significant sterling liquidity trends and developments.

Objective 1.4: The DMO should maintain a system in which the costs and risks are transparent, measured and monitored and the performance of government cash management is assessed. The DMO maintains an ethos of cost minimisation rather than profit maximisation.

The active cash management framework encompasses a series of quantitative liquidity, interest rate, foreign exchange and credit risk limits that together reflect the government's risk preferences and are designed to be consistent with the wider policy objectives which the government sets its cash manager.

Under the current approach active cash performance is measured and evaluated by comparing actual net interest paid and received with the associated cost of funds (i.e. deducting net interest on daily cash management balances using the Bank of England repo rate and also deducting any associated transaction and management costs).

KPI 1.4: The DMO will report to HM Treasury on a quarterly basis the details of its cash management activity, including active cash management performance after cost of funds and the liquidity, interest rate, foreign exchange and credit risks incurred. Performance may also be reported in the DMO Annual Review.

The DMO duly reported to HM Treasury on a quarterly cycle the details of Exchequer cash management activity carried out through the DMA, including active cash management performance and usage of liquidity, interest rate, foreign exchange and credit risk limits.

Net returns on active cash management (over cost of funds) to the DMA are affected by market conditions, including any differential between the DMA's internal cost of funds and prevailing market rates, and the non-discretionary size and volatility of the Exchequer's cumulative cash position, both of which vary significantly over time. The Exchequer cash management results should not therefore be considered a reflection of, for example, the DMO's cash management trading strategies or performance.

The Exchequer cash management activity is carried out in accordance with the government's ethos of cost minimisation: cash transactions are intended to support the statutory objectives of the DMA and, in particular, to enable the Exchequer's daily net cash positions to be offset over time by using a range of products and instruments, within agreed risk parameters, and are not intended to seek risk opportunities to generate excess return.

Active cash management recorded positive net interest after cost of funds, but before transaction and management costs, of £79.3 million for 2022-23. The DMO's estimated transaction and management costs during 2022-23 were £12.6 million.

Positive net interest after cost of funds has been recorded by virtue of funding the Exchequer's daily cash needs in the wholesale money markets at rates that have been on average below the DMA's internal cost of funds (Bank Rate) and from investing surpluses at market rates that were on average very close to this.

There were no breaches of the credit, interest rate, foreign exchange or liquidity risk limits in 2022-23 and the Exchequer's net cash position was successfully offset each day. However, there was one daily settlement limit breach, which returned within limit the next day.

Objective 1.5: The DMO should maintain a credible reputation in the market that leads to lower costs in the long term and a system that is sustainable.

The DMO seeks to maintain and enhance its reputation in the market by being open, transparent and consistent about the aims and intentions of its operations and transactions. This has allowed it to continue to widen its market and counterparty access and to deal at fair and competitive rates.

In addition, DMO personnel, processes and internal systems have to be capable of complying with market standards and following market practice in respect of speed and accuracy in negotiation, clearing and settlement of trades.

KPI 1.5: The DMO should maintain channels of communication with money market participants and Treasury bill counterparties both formally and informally to explain, as far as possible, the nature and intent of its operations in the money markets. The DMO should monitor compliance with its operational notices; provide complete, accurate and timely instructions to counterparties, agents, external systems and operators; and achieve the successful settlement of agreed trades on the due date.

As stated in the report on KPI 1.3 above, in 2022-23 the DMO maintained an active and open dialogue with cash counterparties and other market stakeholders to explain its cash management approach and strategy and to explain the context for and receive feedback on Treasury bill tenders and other market operations.

There were no breaches of cash management operational targets for trade settlement (percentage by value on the due date[16]) or the timing of the announcement of Treasury bill tender results[17].

The DMO publishes a large volume of data and market sensitive announcements across a range of activities, including gilt and Treasury bill issuance. There were five factual errors in material published by the DMO and three instances of material being published later than planned. There was no consequential impact on financial markets and appropriate steps have been taken to reduce the risk of recurrence.

Treasury bill tender performance

Table 17 and Charts 11-13 compare the results (in terms of the average accepted yield) of all Treasury bill tenders held in 2022-23 with the corresponding SONIA rates. Over the financial year the average accepted yields at one-, three- and six-month tenders outperformed the corresponding SONIA rates by 39.4bp, 28.4bp and 20.9bp respectively.

The average size of six-month Treasury bill tenders was more than two times that of the average for one-month tenders. However, the average cover ratios were more consistent across the three maturities (See Table 18).

Table 17: Comparison of average Treasury bill tender yields with SONIA rates in 2022-23

	Average tender yield (%)	Average SONIA rate (%)	Difference (bp)
One-month	2.024	2.418	-39.4
Three-month	2.452	2.735	-28.4
Six-month	2.913	3.123	-20.9
Average	**2.463**	**2.759**	**-29.6**

Source: DMO/Bloomberg

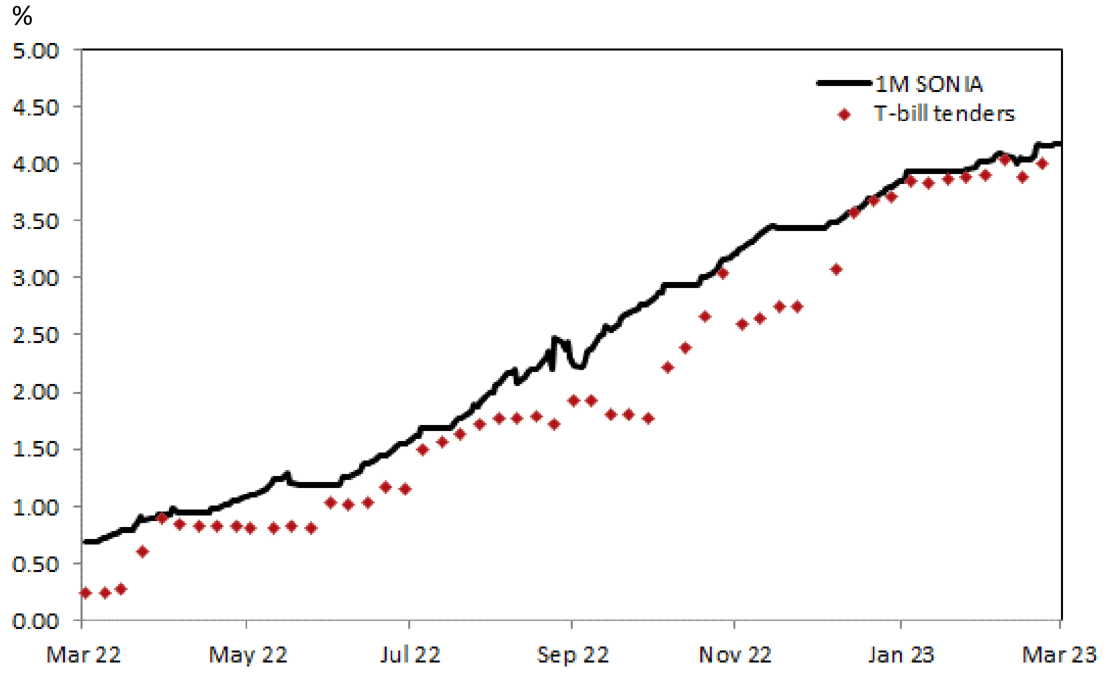
Table 18: Comparison of average Treasury bill tender sizes and cover ratios 2022-23

	Average tender size (£mn)	Average cover ratio (x)
One-month	634.6	3.88
Three-month	1,086.5	3.50
Six-month	1,442.3	3.45

Source: DMO

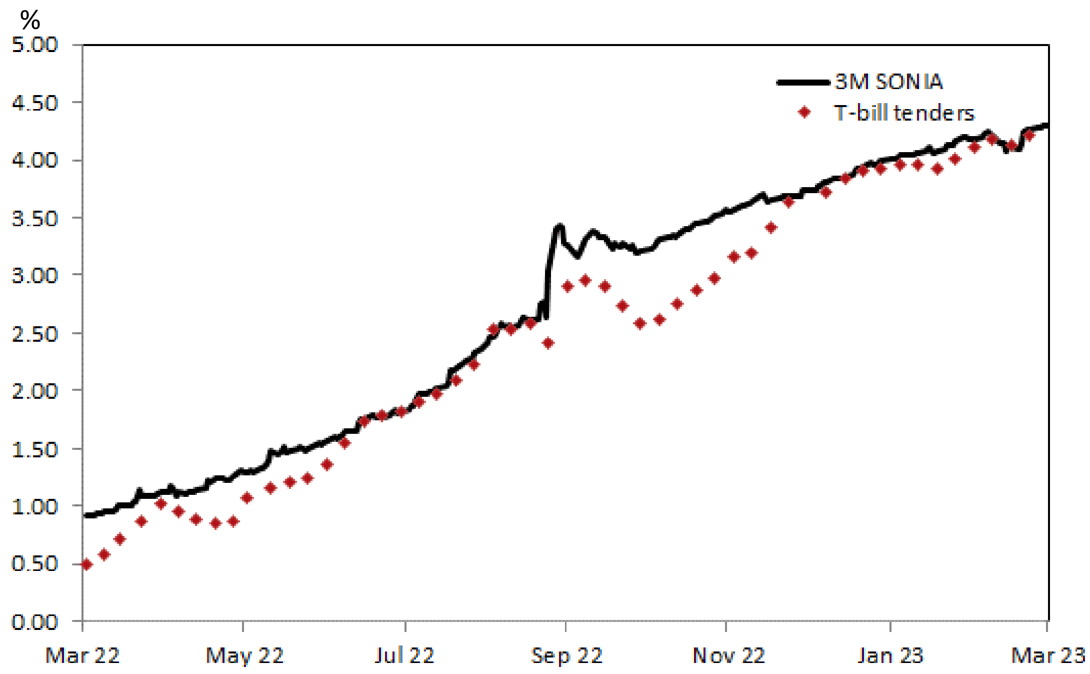
[16] The target is to settle at least 99% of trades by value on the due date, where the DMO is responsible for delivering stock or cash: the level achieved was over 99.9%.
[17] The target is to release Treasury bill tender results within 15 minutes of the close of offer: the release time for the 52 Treasury bill tenders ranged from 3 to 6 minutes and averaged 4.2 minutes.

Chart 11: One-month Treasury bill tender yields compared with SONIA rates in 2022-23



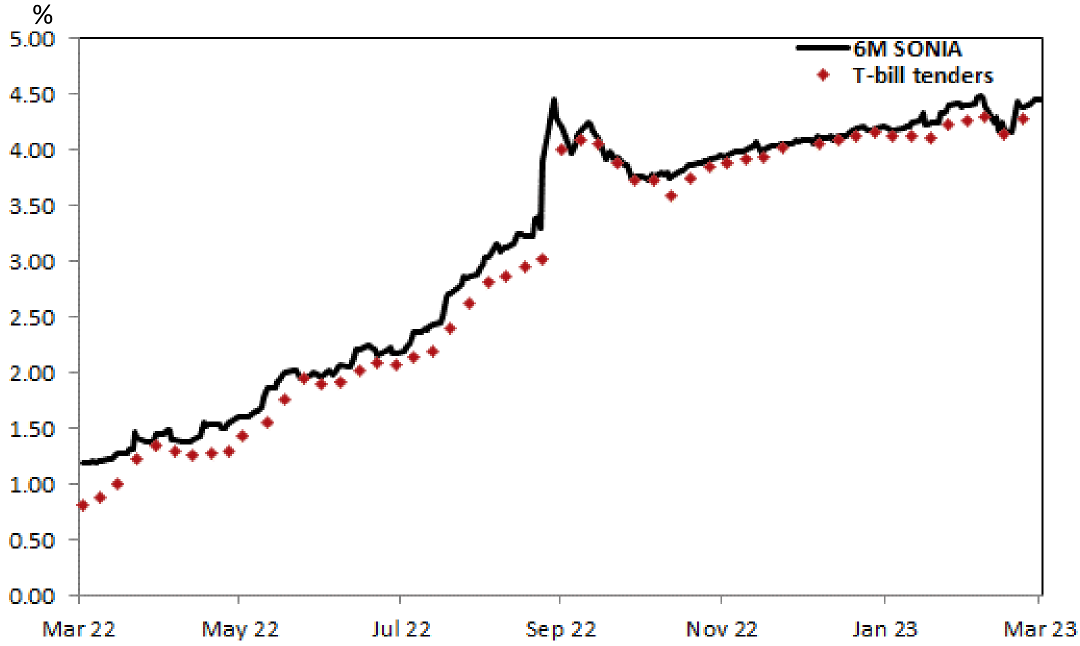
Source: DMO/Bloomberg

Chart 12: Three-month Treasury bill tender yields compared with SONIA rates in 2022-23



Source: DMO/Bloomberg

Chart 13: Six-month Treasury bill tender yields compared with SONIA rates in 2022-23



Source: DMO/Bloomberg

Annexes

a) The gilt portfolio

The key statistics of the government's marketable debt portfolio at end-March 2023 compared with end-March 2022 are shown in Tables 19 and 20 below.

Tables 19 and 20: Debt portfolio statistics

Gross values (including DMO holdings)	31 March 2022	31 March 2023
Uplifted nominal value		
Debt portfolio	£2,140bn	£2,378bn
Conventional gilts	£1,593bn	£1,742bn
Index-linked gilts	£510bn	£566bn
Treasury bills	£37bn	£70bn
Market value		
Debt portfolio	£2,614bn	£2,212bn
Conventional gilts	£1,748bn	£1,547bn
Index-linked gilts	£829bn	£595bn
Treasury bills	£37bn	£69bn
Average maturity (nominal value-weighted)		
Debt portfolio	14.86 years	14.54 years
Gilt portfolio	15.12 years	14.98 years
Conventional gilts	14.20 years	13.98 years
Index-linked gilts	17.98 years	18.04 years
Average maturity (market value-weighted)		
Debt portfolio	16.69 years	13.71 years
Average yield (market value-weighted)		
Conventional gilts	1.57%	3.68%
Index-linked gilts	-2.60%	0.12%
Average modified duration (market value-weighted)		
Conventional gilts	11.47 years	9.17 years
Index-linked gilts	20.30 years	16.80 years

Source: DMO

Net values (excluding DMO holdings)	31 March 2022	31 March 2023
Uplifted nominal value		
Debt portfolio	£2,040bn	£2,217bn
Conventional gilts	£1,500bn	£1,588bn
Index-linked gilts	£504bn	£559bn
Treasury bills	£37bn	£70bn
Market value		
Debt portfolio	£2,482bn	£2,051bn
Conventional gilts	£1,626bn	£1,395bn
Index-linked gilts	£819bn	£587bn
Treasury bills	£37bn	£69bn
Average maturity (nominal value-weighted)		
Debt portfolio	14.88 years	14.57 years
Gilt portfolio	15.15 years	15.04 years
Conventional gilts	14.16 years	13.94 years
Index-linked gilts	18.10 years	18.17 years
Average maturity (market value-weighted)		
Debt portfolio	16.74 years	13.72 years
Average yield (market value-weighted)		
Conventional gilts	1.56%	3.68%
Index-linked gilts	-2.59%	0.12%
Average modified duration (market value-weighted)		
Conventional gilts	11.46 years	9.13 years
Index-linked gilts	20.42 years	16.93 years

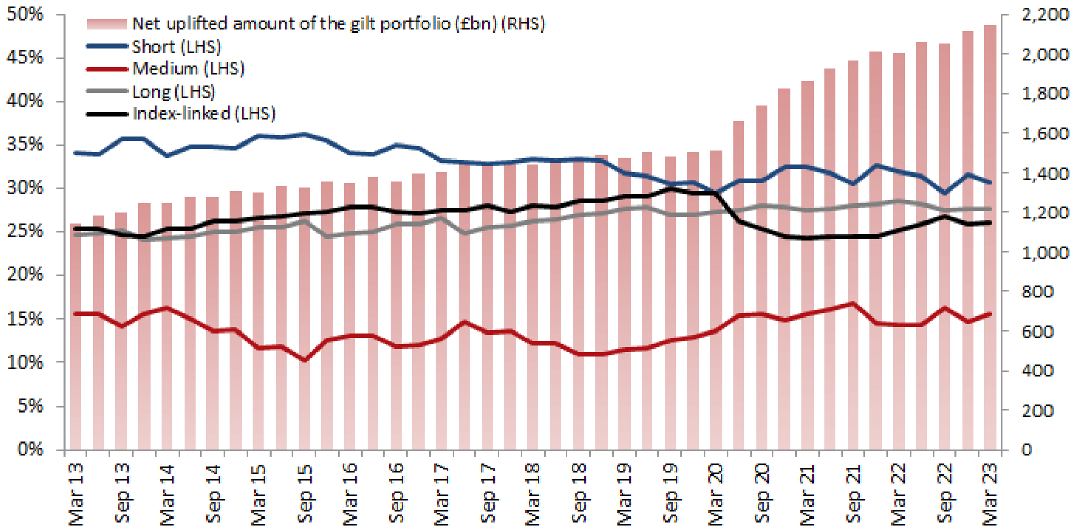
Source: DMO

The gross nominal value[18] of the gilt portfolio rose by 9.7% to £2,308 billion as gross gilt issuance together with inflation accrual on index-linked gilts exceeded gilt redemptions. The gross market value of the portfolio fell by 16.9% to 2,142 billion[19], as the fall in gilt prices/increase in gilt yields, outweighed the increase in the nominal value of the gilt portfolio over the course of the financial year (an increase by 212bp in the case of nominal yields and by 272bp in the case of real yields).

The growth and changing composition of the gilt portfolio is shown in Chart 14. Developments in portfolio maturity are shown in Chart 15.

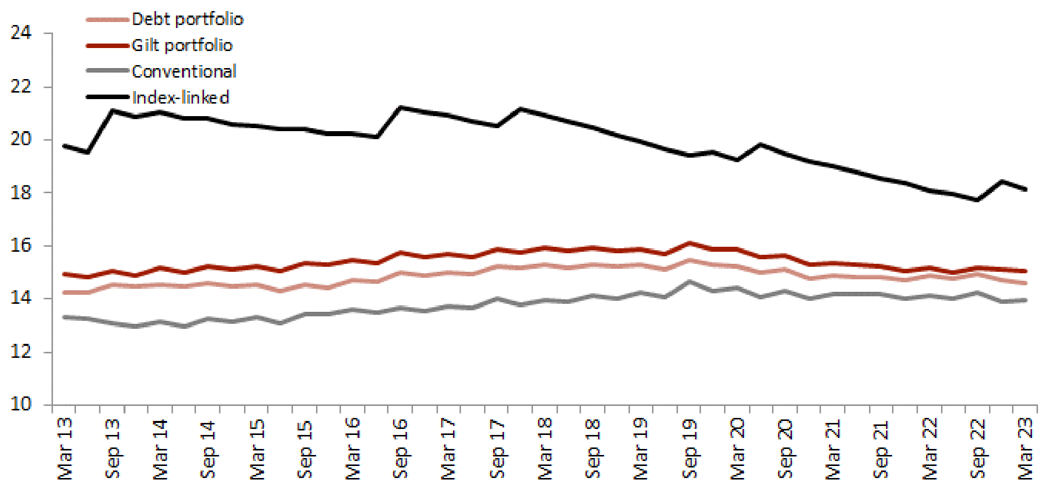
[18] Including inflation uplift on index-linked gilts.
[19] Figures may not sum due to rounding.

Chart 14: Portfolio composition[20]



Source: DMO

Chart 15: Portfolio maturity (years)



Source: DMO

[20] A list of gilts, including first issue and coupon dates and nominal amounts outstanding (updated daily) is available on the DMO website at: https://www.dmo.gov.uk/data/pdfdatareport?reportCode=D1A

b) Other published information on DMO activities

- ### General DMO performance

Aspects of the DMO's performance each financial year are reported in the DMO's Annual Report and Accounts. These comprise (page references refer to the 2022-23 Accounts published on 10 July 2023):

- The purpose and principal activities of the DMO (pages 11-12);

- A performance summary of the DMO's main activities (pages 18-22);

- A report on achievements against agency objectives as set by HM Treasury (pages 26-27);

- A report on performance against agency targets (pages 28-30), including:

    - Compliance with the financing remit
    - Gilt and Treasury bill operation results - release times
    - Accuracy of the recording of transactions through the Debt Management Account
    - Compliance with the Freedom of Information Act 2000
    - Avoidance of breaches of operational notices
    - Compliance with the schedule for reporting cash management operational balances
    - Accurate and timely administration of settlement procedures
    - Accuracy of publications and timeliness of announcements
    - Timeliness of processing of local authority loan and early repayment applications
    - Appropriate operation of the DMO (retail) gilt purchase and sales service

- ### Debt management operations

The principal publications[21] describing the DMO's activities in the gilt market are:

- Official Operations in the Gilt Market – an Operational Notice, which provides details on the operational procedures conducted by the DMO in the gilt market;

- The GEMM Guidebook - a guide to the roles of the DMO and Primary dealers in the UK government bond market, which is aimed at DMO gilt market counterparties and outlines their obligations as gilt-edged market makers and the DMO's obligations to them.

The legal details behind the DMO's gilt issuance activities are set out in:

- The Information memorandum – Issue, Stripping and Reconstitution of British Government Stock

[21] These publications can be accessed via the gilt market operational rules section of the DMO website: https://dmo.gov.uk/publications/gilt-market/operational-rules/

- **Cash management operations**

The principal publication describing the DMO's activities in carrying out Exchequer Cash Management in the UK and also the legal and technical background to the issuance of Treasury bills is the:

- Cash Management Operational Notice and UK Treasury Bills Information Memorandum: https://dmo.gov.uk/media/17701/cmopnot200921.pdf

Other relevant sources of information include:

- About Treasury bills:

  https://www.dmo.gov.uk/responsibilities/money-markets/about-treasury-bills/

- Discretionary bilateral Treasury bill Issuance

  https://www.dmo.gov.uk/responsibilities/money-markets/discretionary-bilateral-treasury-bill-facility/

- A list of Treasury bill Primary Participants:

  https://www.dmo.gov.uk/responsibilities/money-markets/primary-participants/