

Thirteen days in October: how central bank balance sheets can support monetary and financial stability – speech by Andrew Hauser

Given at the ECB's 2022 Conference on Money Markets

04 November 2022

Speech

Introduction

What a difference a month makes!

My original plan for this speech, back in early September, had been to talk through the Bank of England's plans for accelerating its unwind of Quantitative Easing (QE) by selling government bonds.

That story can still be told – because QE sales began, successfully, on 1 November.

But the tale also has a surprise new chapter – a programme of temporary and targeted asset purchases that ran for 13 days between 28 September and 14 October, aimed at heading off a clear and present threat to financial stability.

Switching so rapidly from planned sales, to purchases, and back to sales again might appear to some to imply a confusing or contradictory policy stance. But I want to show today how, through a combination of operational choices – clear communications, robust tool design, and following through on pre-commitments – it is possible to use the central bank balance sheet to support both monetary and financial stability, in ways that reinforce and complement, rather than undermine, either goal.¹

In my remaining remarks I will first describe the events that triggered our extraordinary intervention, and the ways in which we designed that intervention to maintain clear separation from the monetary stance – drawing on national and international thinking that has been underway since the 2020 'dash for cash'.

I will then explain why we have returned to asset sales in support of monetary stability, and how those operations in turn have been designed to minimise the risks of triggering renewed dysfunction.

Finally, I will conclude by identifying some possible lessons and next steps.

¹ For a discussion of the policy choices that guided this approach, see: [Monetary policy and financial stability interventions in difficult times – speech by Andrew Bailey | Bank of England](#)

1) Using the central bank balance sheet to support financial stability: LDIs & gilts

The story of recent weeks has already been widely reported – and a detailed account can be found in the two letters sent by Sir Jon Cunliffe, Deputy Governor for Financial Stability, to the House of Commons Treasury Committee.²

For the purposes of my remarks today, the key facts are these.

On 22 September, the Bank's Monetary Policy Committee (MPC) voted to fire the starting gun for gilt sales, as it had signalled it was minded to do at its August meeting. Those sales were designed to increase the pace of QE unwind that had begun in February (when the MPC decided to cease reinvestment of the proceeds from maturing assets).³ Sales were scheduled to start in the week of 3 October.⁴

But within 24 hours, following the announcement of the Government's 'Growth Plan', gilt market conditions began to deteriorate sharply. By the following Wednesday morning, thirty year nominal gilt yields had risen by 130 basis points (Chart 1, upper panel) – twice the increase ahead of the Covid lockdown in Spring 2020, and three times larger than any other historical move over a similar period. As yields rose, we began to hear from the managers of so-called 'Liability Driven Investment (LDI)' funds through our market intelligence channels: first quietly, and then with increasing volume.

From the extraordinary days that followed, I want to explain four things: why the LDI funds were so vulnerable to a large spike in yields; why we concluded asset purchases were needed; how we designed those interventions initially; and how they evolved.

Why were the LDI funds so vulnerable?⁵

LDI funds provide defined benefit (DB) pension funds with leveraged exposure to longer-term gilt yields. In a low rate environment, this strategy gives DB funds cover against upside risks to the value of their liabilities, whilst also making room for them to hold riskier, higher-yielding assets such as equities to boost returns. When yields rose sharply, however, three key aspects of this strategy put LDI funds at the centre of the storm:

- First, **LDI funds' leverage left them particularly exposed to higher long-term yields (lower long-dated gilt prices)** – requiring extra resources to meet higher margin calls and maintain positive net asset value (NAV);

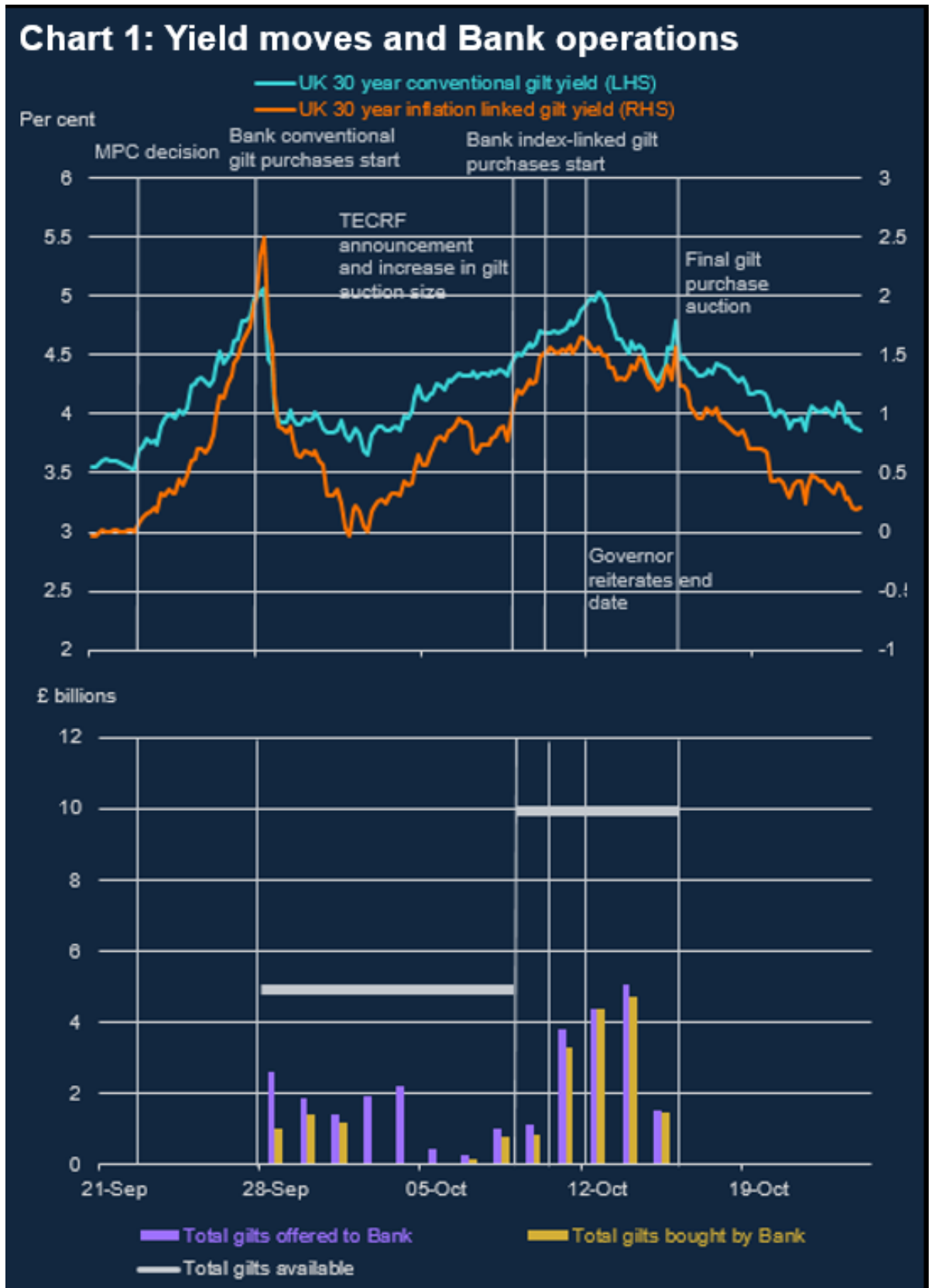
² [Bank of England confirms details of emergency bond buying in correspondence with Treasury Committee - Committees - UK Parliament](https://committees.parliament.uk/publications/30347/documents/175455/default/) and

<https://committees.parliament.uk/publications/30347/documents/175455/default/>

³ [Bank Rate increased to 0.5% - February 2022 | Bank of England](#)

⁴ See [Bank Rate increased to 2.25% - September 2022 | Bank of England](#) and [Asset Purchase Facility: Gilt Sales – Market Notice 22 September 2022 | Bank of England](#). Note that, for space reasons, this speech does not discuss the separate sales programme for the MPC's £20bn corporate bond portfolio, which began on 27 September. That process is targeted to conclude on or around the end of 2023

⁵ Sarah Breeden, Executive Director for Financial Stability Strategy and Risk, will discuss these issues in more depth in a speech on Monday 7 November.



Sources: Bank of England, Bloomberg Finance L.P.

- Second, **LDIs did not have sufficient financial resources of their own to meet these extra needs.** They therefore required urgent recapitalisation from their DB scheme clients; but
- Third, **the mechanisms for securing that recapitalisation were designed for calmer times, and hence were simply too slow to deal with the pace of developments.** DB schemes typically had both the means and the incentive to recapitalise (since persistently higher yields reduce the cost of future liabilities and hence boost the funding position of such funds)⁶ – but those resources took too long to mobilise.

As a result, by the evening of Tuesday 27 September, in the context of further steep rises in yields, LDI fund managers concluded that they had no choice but to begin selling their gilt holdings in large size to secure the necessary resources. Those sales, into already thin markets, began to push yields up further. And that in turn risked triggering more sales, feeding a self-reinforcing downward price spiral that could undermine financial stability and lead to an unwarranted tightening of financing conditions and credit supply to UK households and firms.

Why did we intervene using asset purchases?

In the midst of growing market-wide panic, we urgently considered potential solutions.

A private sector led response was much the preferred outcome. But none of the options identified proved workable. The LDI funds did not have, or could not identify, sufficient amounts of readily-marketable collateral to raise cash in the market (such collateral had either already been sold or encumbered in the LDI strategy itself). Recapitalisation by DB funds would take too long. And forbearance or stays by trustees, regulators or banks was either infeasible, too modest in size, or too threatening to the interests of innocent parties.

If temporary central bank liquidity assistance might be required, much our preferred approach from a financial risk perspective was to lend against collateral, either via the banking system, or directly. It rapidly became clear, however, that this too could not be the main solution. LDI funds needed less leverage, not more, to avoid going into negative NAV. Just as they lacked sufficient collateral to borrow from the market, they lacked sufficient collateral to give to us too. And the DB schemes were too numerous and slow-moving to do so in their stead.

So, reluctantly, we began to contemplate targeted gilt purchases.

⁶ As an illustration, the Pension Protection Fund's [PPF 7800 index](#) suggests that, between end-2021 and end-September 2022 – a period in which interest rates rose substantially – the liabilities of UK DB schemes fell by 36% (from £1,689bn to £1,076bn), whereas their assets fell by only 20% (from £1,818bn to £1,451bn), leaving their net assets nearly three times higher.

How was our initial intervention designed?

Any intervention had to meet three key criteria: it had to provide a credible window for the LDI funds to return themselves to greater resilience; it had to avoid creating a ‘cliff edge’ at the end of that window that might re-trigger financial instability, making credible exit impossible; and it had to avoid interfering with the MPC’s monetary policy strategy.

These were challenging design goals. Fortunately, we were not starting from scratch. In 2020, following the Covid ‘dash for cash’, the Bank’s Financial Policy Committee (FPC) underscored the need for a comprehensive strategy for strengthening vulnerabilities in the liquidity management of Non-Bank Financial Institutions (NBFIs).⁷ Front and centre in this strategy was the need for stronger private self-insurance, market infrastructure and liquidity regulation. But the FPC also identified the need to develop more targeted central bank tools that could step in when genuine tail risks arose, but did so in a way that adhered strictly to the longstanding principle of the central bank acting only as a backstop. I set out some possible criteria for such tools in a speech in January 2021;⁸ and the Bank for International Settlements established a working group, which I co-led with the Federal Reserve’s Lorie Logan, to identify a broad menu of potential operational design features. The conclusions of that group were published this Spring.⁹

To deliver our goals in responding to the LDI crisis, we made four key design choices – summarised in Table 1. First, the purpose of the intervention announced on the morning of Wednesday 28 September was clearly linked to the Bank’s financial stability objective, and followed a recommendation from the FPC. Second, the intervention was explicitly temporary: the thirteen day period was chosen in light of market intelligence to provide a challenging, but achievable, window for the lion’s share of the necessary LDI adjustment, before the MPC’s QE unwind sales programme re-started. Third, the intervention was targeted solely at the assets most affected by the LDI issue – initially long-dated conventional gilts, later extended to index-linked gilts (ILGs). And fourth, our operations were positioned as a genuine backstop, aimed not at purchasing a set quantum of assets, or at achieving a particular level of yields, but instead at purchasing only as many assets as required to resolve the financial stability issue and recatalyse the market. That approach was implemented, amongst other things, using a system of reserve pricing. Finally, HM Treasury confirmed that it would stand behind the financial risks of the operation, covering the Bank against any financial losses but also benefiting from any upside.¹⁰

⁷ See for instance [Financial Stability Report August 2020 \(bankofengland.co.uk\)](https://www.bankofengland.co.uk/financial-stability-report/2020/08), [Assessing the resilience of market-based finance | Bank of England](https://www.bankofengland.co.uk/assessing-the-resilience-of-market-based-finance/). For a summary of the international work agenda, see [Non-Bank Financial Intermediation - Financial Stability Board \(fsb.org\)](https://www.fsb.org/2020/09/non-bank-financial-intermediation/).

⁸ [From Lender of Last Resort to Market Maker of Last Resort via the dash for cash: why central banks need new tools for dealing with market dysfunction \(bankofengland.co.uk\)](https://www.bankofengland.co.uk/financial-stability-report/2021/01/)

⁹ See [Market dysfunction and central bank tools \(bis.org\)](https://www.bis.org/2022/05/market-dysfunction-and-central-bank-tools/), 11 May 2022.

¹⁰ <https://committees.parliament.uk/publications/30129/documents/174330/default/>

Table 1: Comparing gilt purchases for financial stability & monetary stability purposes

	Financial Stability purchases (October 2022)	Monetary Stability purchases (QE)
Purpose and governance¹¹	Aimed at reducing the risk of a self-reinforcing downward price spiral triggered by LDI vulnerabilities. FPC recommended action to tackle financial stability risk; MPC informed, in line with the Concordat regarding balance sheet operations; ¹² Bank executive implemented.	QE aimed at easing monetary conditions in pursuit of the inflation target. MPC voted on quantity targets; Bank executive implemented.
Duration of purchases and exit plan	Temporary: purchases took place for only as long as required by financial stability issue. Unwind of those purchases to occur in a timely and orderly way.	High level targets for purchase, unwind and sales programmes voted on by MPC as part of its monetary policy process.
Asset selection	Targeted: at assets most affected by financial stability issue.	Appropriately broad based to achieve monetary policy goals.
Pricing	Backstop pricing: to ensure the facility did not unduly interfere with price discovery or substitute for the need for market participants to manage their own risks over the medium term.	Priced to deliver MPC-determined quantity targets.

How did the programme evolve?

Inevitably, the operation of a new tool of this kind involved some learning-by-doing.

Some of that learning was for market participants, as they adjusted to the differences between temporary, targeted purchases in support of financial stability (which were new) and QE (which was well understood). One reading of the very sharp fall in long-maturity conventional and ILG yields when purchases were first announced (Chart 1, upper panel) is that at least some market participants initially thought that the Bank had really restarted QE. Lower yields were helpful in calming the immediate panic. But, had they persisted, disproportionate falls far below market-clearing levels would have overly dampened the incentive for LDI funds to improve their resilience (by relaxing the need to meet margin calls or avoid NAV triggers) – in turn creating an excessively large ‘cliff edge’ as the end date approached.

¹¹ Further information on the roles of the Bank’s statutory policy committees can be found [here](#) for the FPC and [here](#) for the MPC

¹² [The MPC and the Bank’s Sterling Monetary Framework \(bankofengland.co.uk\)](#)

As it became apparent to the market that the Bank's operations really were positioned as a backstop (with pricing designed to exclude opportunistic offers), and that relatively few LDIs were incentivised to sell (Chart 1, lower panel), yields gradually picked up. That pickup sharpened LDI incentives, increased the chances of private sector gilt buyers emerging alongside the Bank's operations, and reduced the potential for an end-period cliff edge. Those market incentives were further reinforced by clear and unambiguous messaging to LDI funds – both publicly and privately – that the facility would indeed close as intended on Friday 14 October.

Just as the market's approach evolved, so did ours. In particular, as we entered the final week of the programme, our close liaison with LDI funds, their DB fund clients and broader market participants, threw up a number of new pieces of information. First, LDI funds clarified their own estimates of the scale and shape of their need to sell gilts as the recapitalisation process progressed. And, second, some LDI funds were able to identify a range of less marketable non-gilt collateral that, if lent out for cash, might help bridge delays in recapitalisation. In response, we increased the maximum size of our daily operations from £5bn to £10bn on Monday 10 October, and launched a new Temporary Expanded Collateral Repo Facility (TECRF), accepting corporate bonds down to a credit rating equivalent to Baa3/BBB.¹³

LDI funds were also increasingly highlighting challenges they faced in selling the necessary quantity of ILGs. We did not include ILGs in our initial purchase operations, for three reasons. First, the policy-related exclusion of ILGs from past QE operations meant we had no pre-existing operational capacity to purchase them. Second, the highly illiquid (and typically one-way) market for ILGs complicated pricing, and risked leaving the Bank acting as a frontstop rather than a backstop. And, third, in the early stages of the programme when LDI funds' own estimates of their necessary gilt sales were still poorly defined, it had seemed that market makers' ability to purchase ILGs from LDIs and sell equivalent conventional gilts into our operations, warehousing the inflation basis risk, might prove sufficient.

As it became increasingly clear that these assumptions might be challenged, a team of Bank staff began working around the clock to build the necessary capacity to add ILGs to our purchase operations. When real yields began to move up sharply during on Monday 10 October, as LDIs attempted to sell into the open market, we took the decision to extend our operations to cover ILGs from the start of Tuesday, subject to the proviso that we would not buy at yields lower than the closing level the previous day – a design feature aimed at reinforcing the backstop nature of our operations and preventing the sudden collapse of real yields in a potentially one-way market.¹⁴

¹³ [Temporary Expanded Collateral Repo Facility - Market Notice 10 October 2022 | Bank of England](#)

¹⁴ [Bank of England widens gilt purchase operations to include index-linked gilts | Bank of England](#)

Taken together, these decisions provided the space, the means and the incentives for LDIs to increase their resilience significantly by Friday 14 October. Some of that increase took place through sales of gilts to us – we eventually bought £19.3bn of gilts, three-quarters of which took place in the final week of operations. But that figure was much lower than some early estimates – and that’s because the scheme also provided time for LDIs to raise cash from their DB scheme clients, and enabled some private market gilt activity to restart too, allowing some funds to liquidate in the secondary market. Our ongoing market intelligence discussions gave assurance that the facility could close as scheduled, and that fears about the potential for an immediate cliff edge would prove unfounded.

To deliver the goals we set out for the facility, the key remaining challenge is to unwind the assets accumulated in a way that is both **timely** – underscoring the strictly temporary nature of the intervention – and **orderly** – ensuring that the unwind does not itself materially impair market functioning. We have been working at pace to design an exit strategy that meets these goals, and will be announcing our initial approach shortly. Just as our financial stability purchases differed in important ways from QE so our initial financial stability sales will too: there will be no binding volume target for sales, but rather a demand-led approach guided by market appetite.

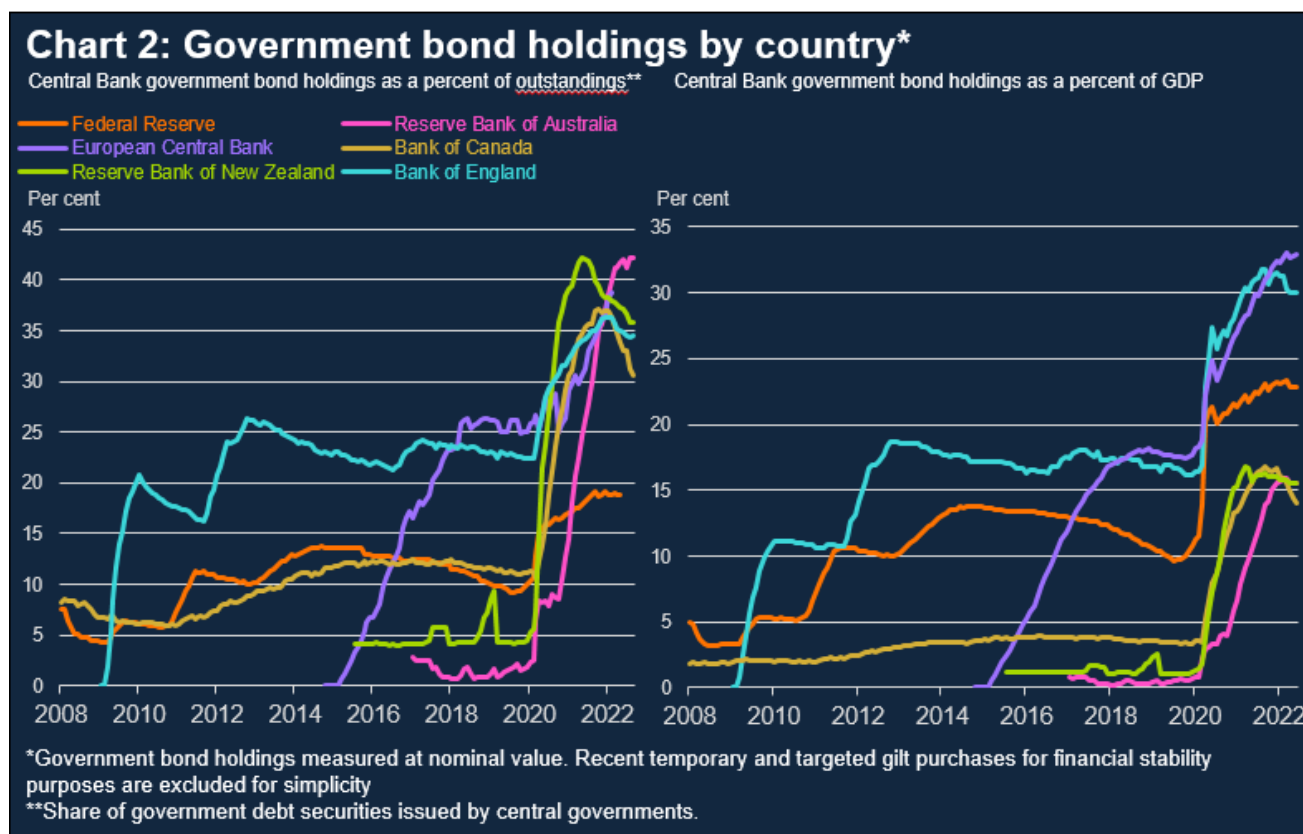
2) Using the central bank balance sheet to support monetary stability: QE unwind

While the Bank has used the balance sheet to support financial stability, we also continue to face equally pressing concerns on the monetary stability side, where the challenge is how to ensure policy is set appropriately to deal with elevated inflation.

It is sometimes suggested that monetary and financial stability goals can conflict. We certainly took care to ensure clear separation between our extraordinary purchases and QE, as I’ve just described. But in truth, monetary and financial stability are much more commonly complements rather than substitutes – and this case was no exception. Eliminating the risk of a self-reinforcing downward price spiral taking hold at the long end of the yield curve allowed the MPC to stay rigorously focused on its own goals. And that includes beginning the programme of gilt sales it voted for in September.

QE unwind is not the MPC’s active tool for monetary policy tightening. That role is played by Bank Rate. But it does support that tightening process. And it has other important benefits too. It helps alleviate collateral shortages distorting market functioning. It reduces the size of the central bank balance sheet. It helps return public sector interest rate risk exposure to levels closer to those initially envisaged. And it increases the headroom available for future QE, should that ever be needed.

It is worth reminding ourselves just how big the numbers are. The gilts accumulated under QE account for around a third of the bonds in issue, and of annual UK GDP (Chart 2).



Sources: Bank of England, UK Debt management Office, Reserve Bank New Zealand, The New Zealand Debt Management Office, Federal Reserve Bank New York, FRED by Federal Reserve Bank of St Louis, Bank of Canada, ECB, Reserve Bank Australia, Australian Office of Financial Management, BIS Debt Statistics

Numbers like that are not unique to the UK, as the chart shows – and you can make a decent start on working off those stocks just by allowing assets to mature naturally without reinvestment. Indeed, since the MPC’s decision to do just that in February, the stock of QE assets has fallen by nearly £40bn on a purchase proceeds basis. Such ‘passive unwind’ will subtract a further £40-50bn per annum, on average, in coming years (Table 2).

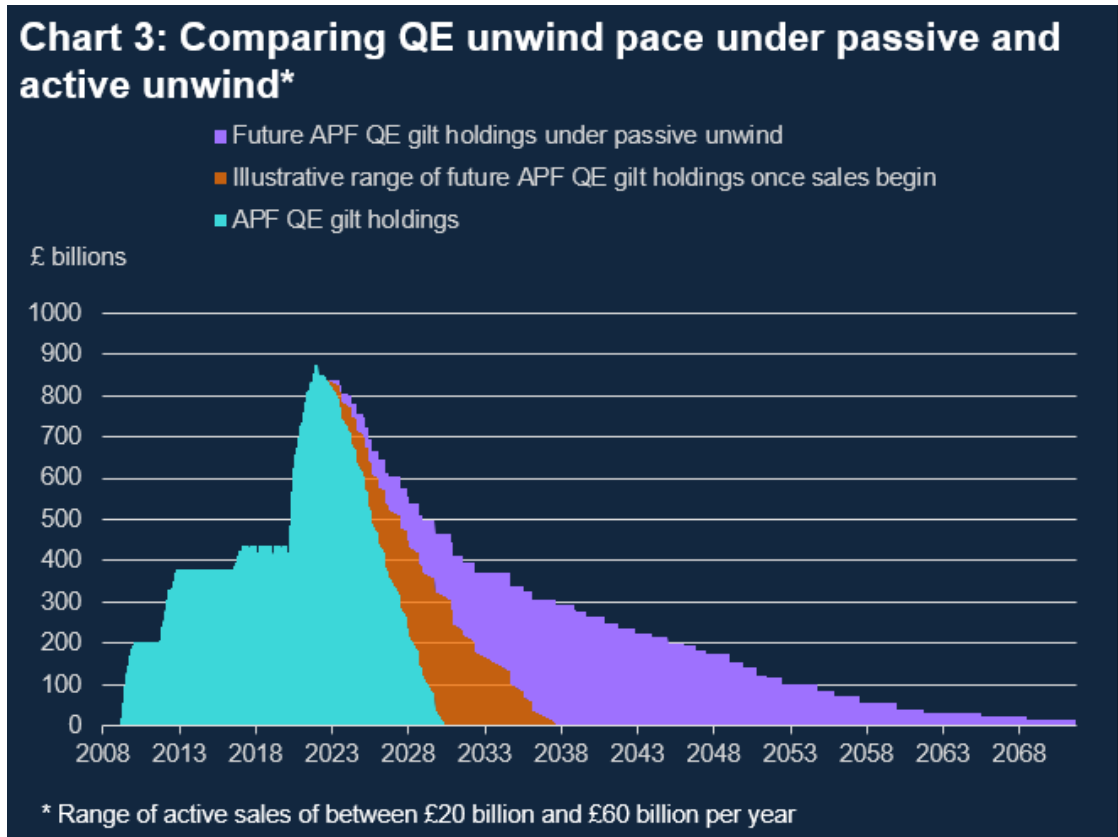
But the size and composition of the UK’s QE asset portfolio means that relying on this mechanism alone would yield an exceptionally drawn out unwind. Left to its own devices, the last gilt bought as part of QE would take 49 years to mature (Chart 3); the last corporate bond would take 96 years.

Table 2: APF QE maturities over 12 month periods*

£ billions	Gilts	Corporate Bonds
2022/23	35	1
2023/24	49	1
2024/25	87	1
2025/26	52	1
2026/27	38	1
2027/28	36	1
2028/29	41	2
2029/30	54	1

*Data reflect current APF QE holdings; 12 month periods run from 22nd September.

Sources: Bank of England; Bank calculations

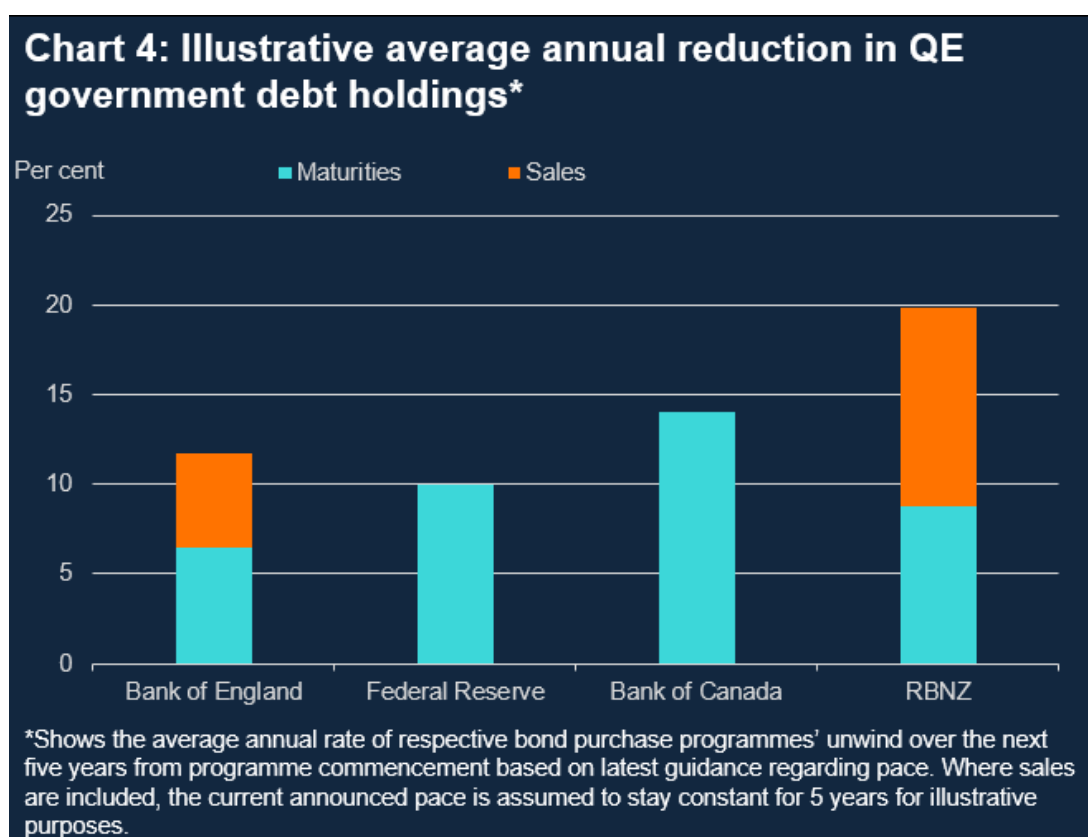


Source: Bank of England; Bank Calculations.

Of course, even if QE sales are necessary, that does not mean they should be executed blindly, or regardless of any broader impact. The Bank has consistently stated that it would conduct any asset sales programme in a gradual, predictable and orderly way, so as not to cause additional disruption to the functioning of financial markets.¹⁵

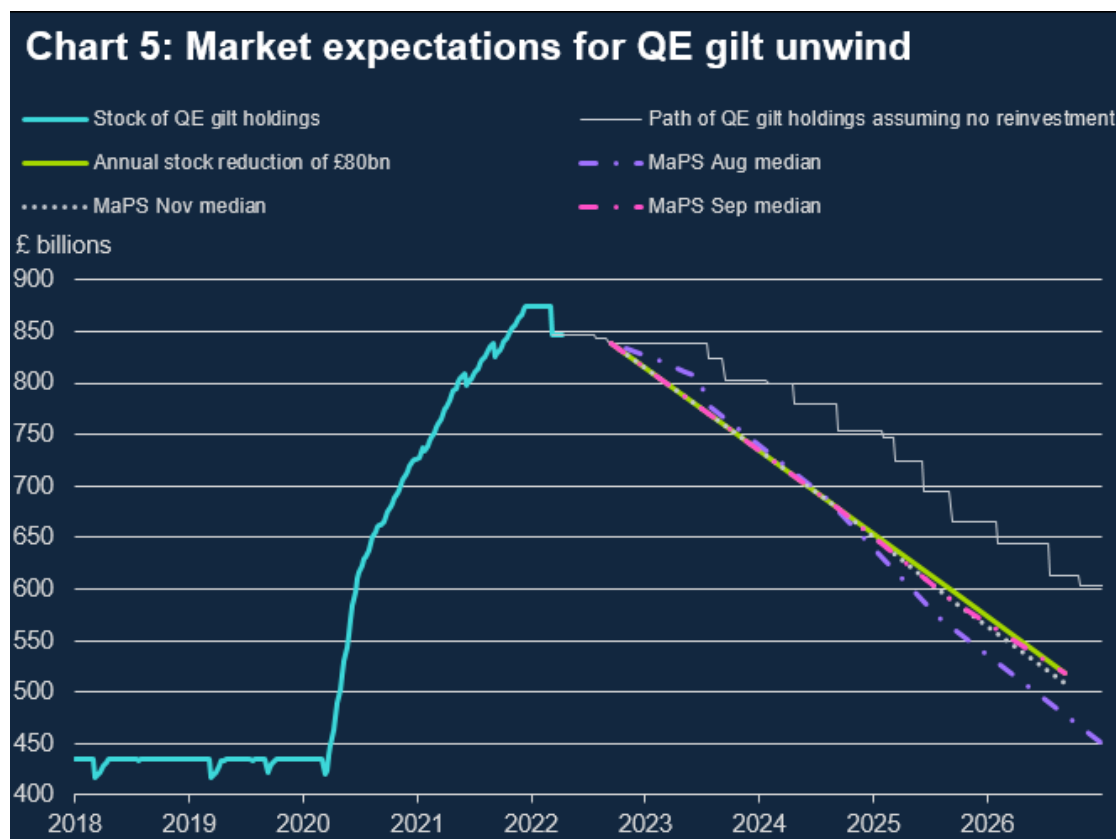
That objective is being delivered in four ways.

First, **the MPC has adopted a progressive and heavily telegraphed approach to developing and communicating its unwind programme.** High level principles were set out in August 2021; reinvestment was ceased in February 2022; staff were asked to work on a strategy for gilt sales in May 2022; and a provisional plan for those sales was announced in August 2022, with a final vote in September 2022. Taking maturities and sales together the overall pace of unwind is not materially faster than that adopted by a range of other central banks (Chart 4) And the MPC's consistent messaging is echoed in a very stable path for market expectations of unwind over the past six months (Chart 5).



Source: Bank of England, UK Debt Management Office, Reserve Bank New Zealand, the New Zealand Debt Management Office, Federal Reserve Bank New York and Bank of Canada.

¹⁵ [Letter from the Governor to the Chancellor, 17 February 2009 \(bankofengland.co.uk\)](https://www.bankofengland.co.uk/letter-from-the-governor-to-the-chancellor-17-february-2009)



Source: Bank of England Market Participants Survey; Bank calculations

Second, **the operational delivery of QE sales can be, and has been, adjusted in light of market conditions.** The MPC itself has set a high bar for changing its high level unwind vote, in order to maintain predictability, and focus on Bank Rate as the active monetary policy tool. But it has given delegated authority to Bank staff to adjust the operational delivery of that plan in light of market developments (Table 3).¹⁶

¹⁶ Table 3 draws on the statutory roles of the policy committees, and the MPC's stated strategy for QE sales set out in its [August 2022 meeting minutes](#)

Table 3: Contingency planning during unwind

	Markets volatile but functioning	Market functioning impaired independent of QE unwind	QE unwind judged to be materially impairing market functioning	Bank Rate judged insufficient to meet inflation target
MPC	No change to QE unwind – high bar for changing outside annual review		MPC considers whether to halt or amend sales programme	MPC considers whether to amend sales programme and or recommence reinvestments/purchases
Bank Executive	Heightened market monitoring	Consider how to adjust timing/design of auctions to respond to conditions	Implements any requested change to MPC strategy	
FPC	Monitor market functioning for potential financial stability risks, judging appropriate actions if such risks crystallise			

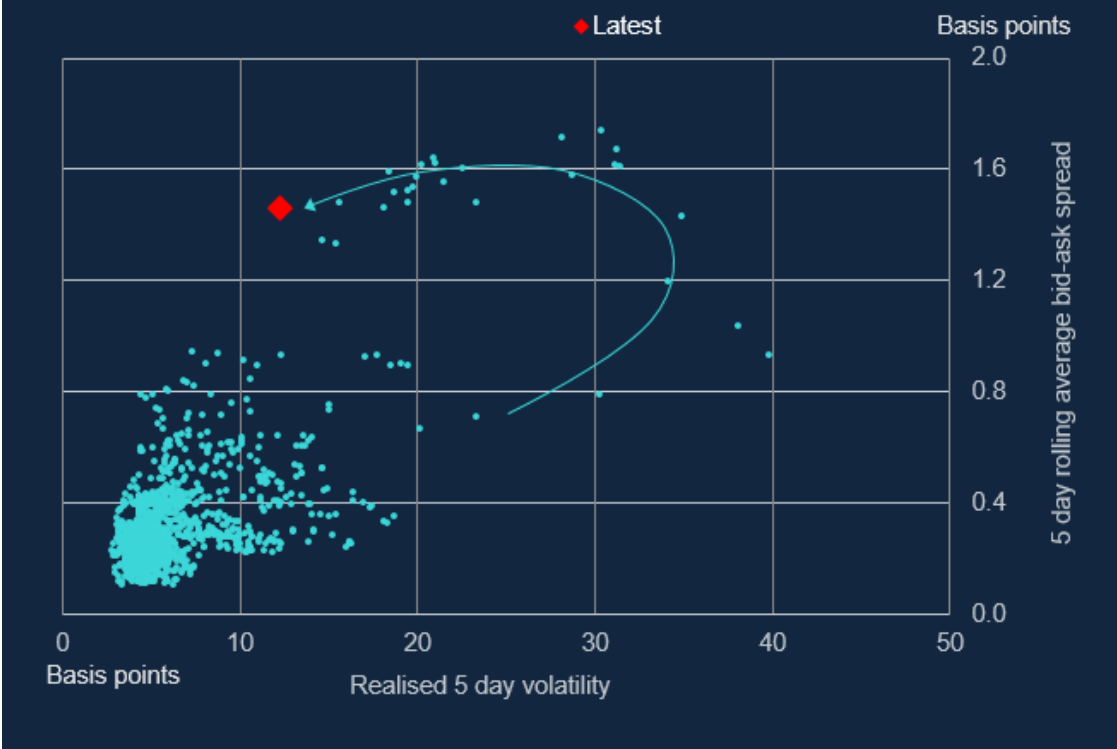
In light of recent events, we have exercised that discretion in two ways:

- By delaying the start of QE sales by a month we avoided the worst of the gilt market turbulence, and reduced Q4 QE sales by a third. Realised volatility and bid/ask spreads, though still elevated, have been on an improving path since mid-October (Chart 6).
- By skewing QE sales in Q4 to the short and medium-maturity buckets,¹⁷ we have avoided the part of the market most affected by the LDI crisis. Doing so also focuses our initial sales on sectors that have been particularly affected by QE-related collateral shortages, as shown by the elevated gaps between yields on gilts and swaps at the shorter end of the curve (Chart 7).

These adjustments have been welcomed by market participants. But gilt market functioning remains highly sensitive to developments. So we will continue to monitor market functioning closely, drawing on a wide range of qualitative and quantitative market intelligence.

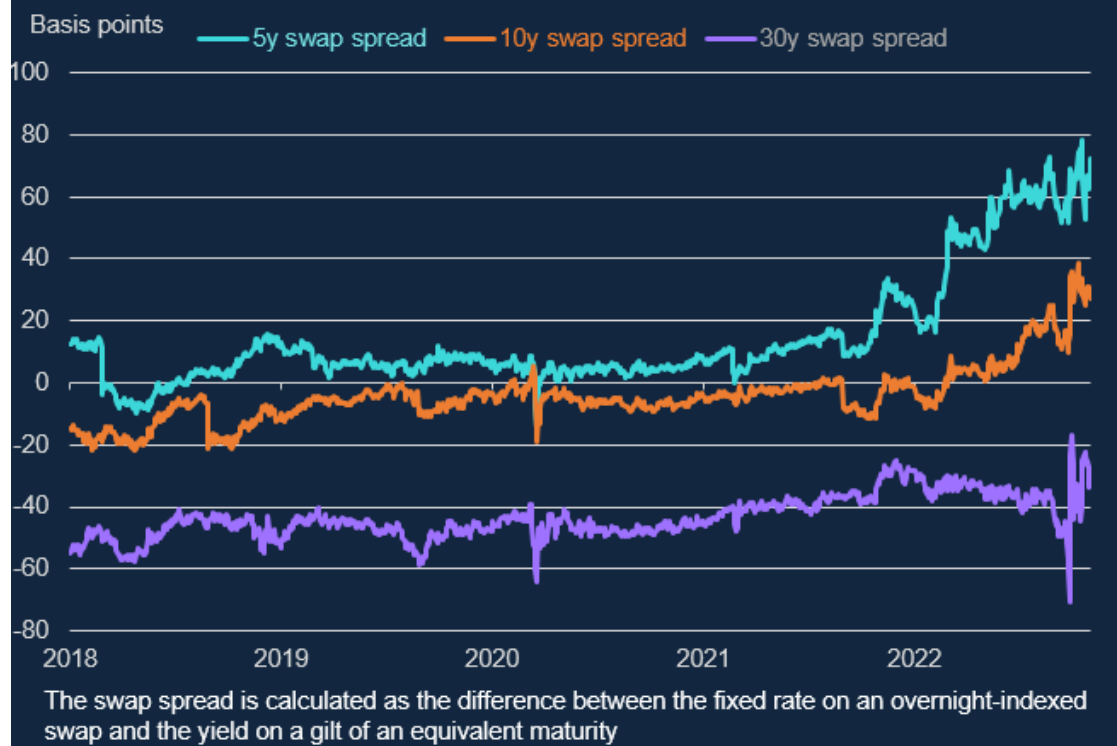
¹⁷ [Asset Purchase Facility: Gilt Sales – Market Notice 20 October 2022 | Bank of England](#)

Chart 6: Daily indicators of market functioning



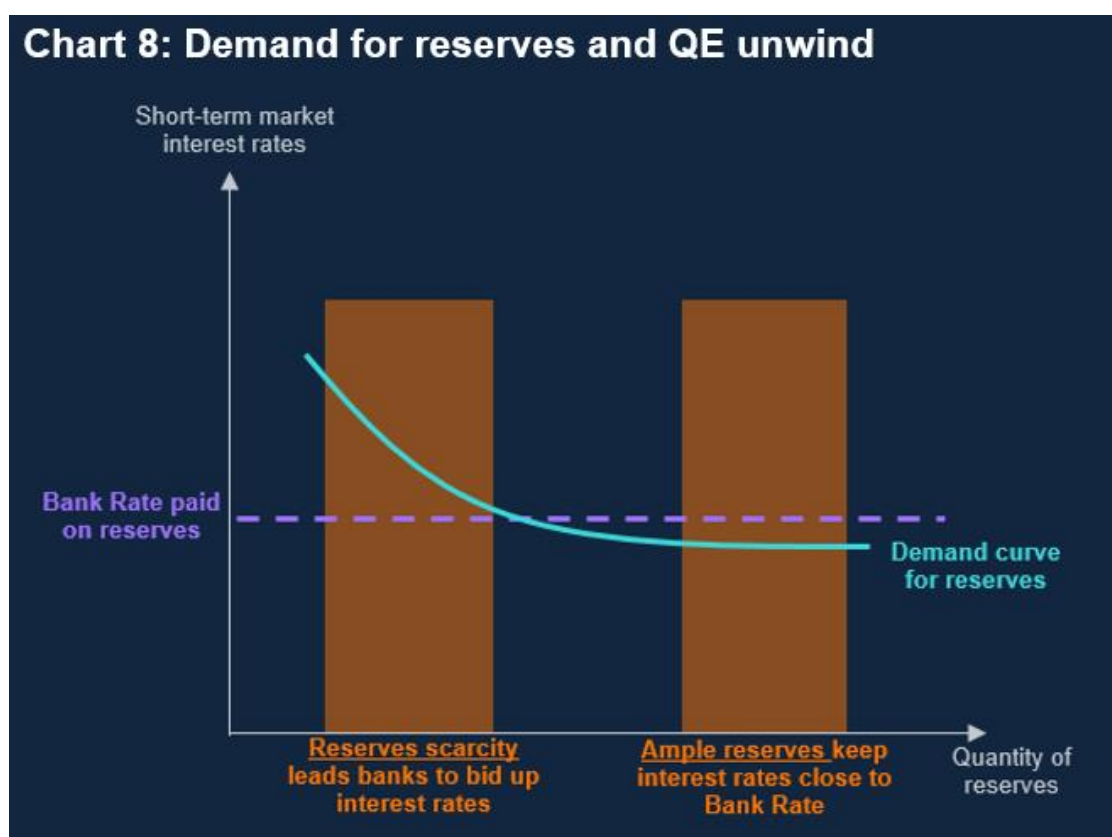
Source: Bloomberg Finance L.P., Bank calculations

Chart 7: Gilt swap spreads over time



Source: Bloomberg Finance L.P., Bank calculations

Third, we have designed QE gilt sales operations to work with the grain of the market, wherever possible. Potential purchasers are able to bid for the full range of our holdings right across the short and medium buckets. The core auction mechanics are very similar to those used during QE, including an allocation methodology that ensures bonds are sold in a transparent and predictable way, where demand is highest, and without unduly impacting market prices. Operations will be frequent, and modestly sized, to avoid overloading the market. To minimise interference with the issuance programme of the UK's Debt Management Office's (DMO), we will not schedule sales operations on the same day as the DMO is also selling, nor will we sell a specific gilt that the DMO is also selling a fortnight either side of any DMO sales event in that gilt. And we will endeavour to ensure a sufficient gap between supply events of the same maturity. Bank and DMO staff are in close touch at an operational level to ensure both organisations can fulfil their respective remits.¹⁸



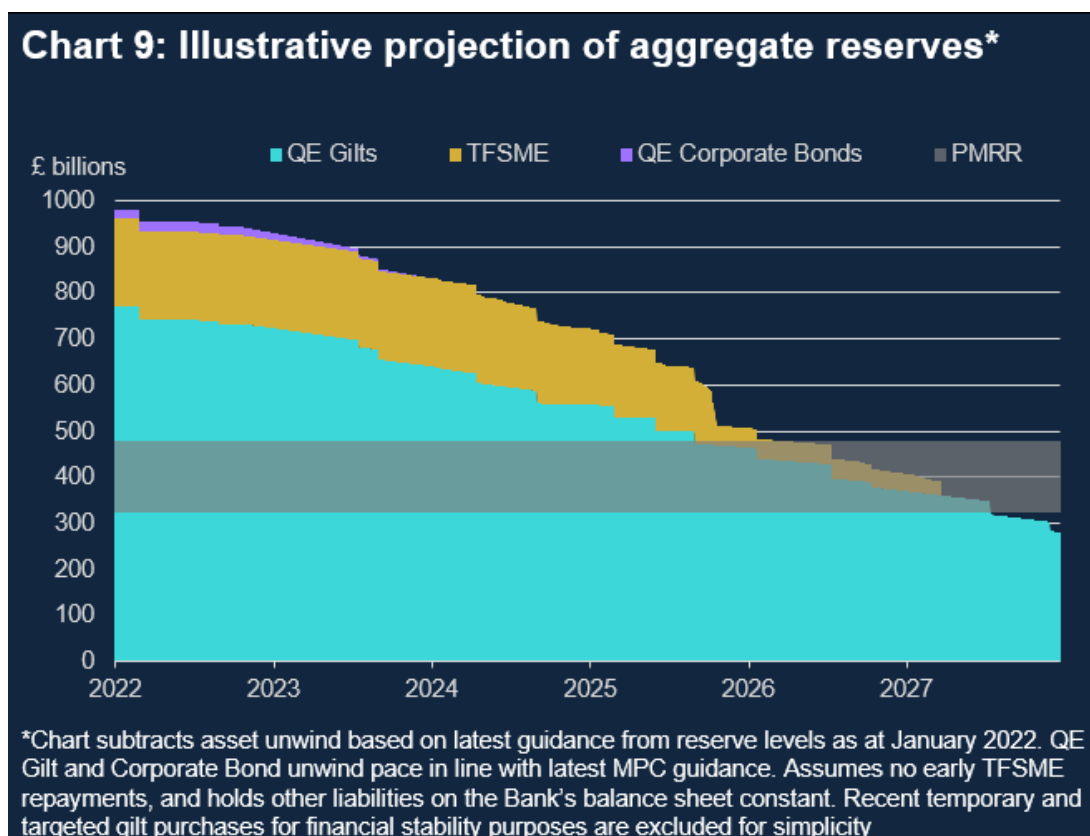
Fourth, we have introduced a new Short Term Repo (STR) facility to ensure that QE exit does not put undue upwards pressure on short term money market rates.¹⁹ As QE assets fall, so does the aggregate stock of central bank reserves used to fund them. When that level falls below that required by commercial banks to meet their payments obligations and broader liquidity needs, absent any action from us, banks would start trying

¹⁸ The full set of operational arrangements are set out in the Market Notices referenced earlier in this speech.

¹⁹ The issues in this part of the speech are set out in more detail in the [Explanatory Note: Managing the operational implications of APF unwind for asset sales, control of short-term market interest rates and balance sheet | Bank of England](#), published alongside the August 2022 Monetary Policy Report.

to borrow reserves in money markets, causing short-term interest rates to rise significantly relative to Bank Rate, impairing the transmission mechanism for monetary policy (Chart 8).

Our best guess is that point lies some years away. Chart 9 compares a simple projection of future reserves (extrapolating the MPC's chosen QE unwind pace, and adding in scheduled maturities of the Term Funding Scheme with incentives for Small and Medium Sized Enterprises ('TFSME')) with our latest survey-based estimate of the aggregate preferred minimum range of reserves demand (or 'PMRR').²⁰ And you can see that the two don't intersect till 2026 or later.



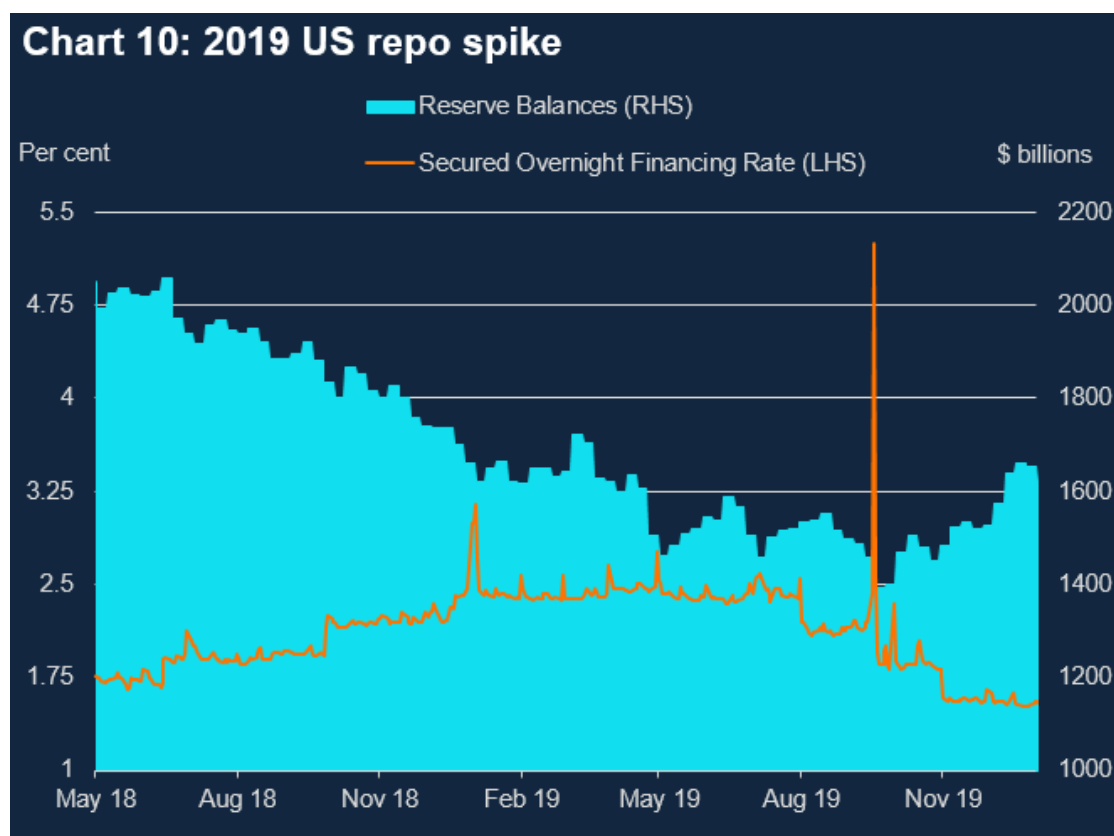
Source: Bank of England, Bank calculations

But such estimates are highly uncertain.²¹ In the United States, during a previous QE exit phase in 2019, short term rates rose sharply (Chart 10) and much earlier in the exit cycle than similarly-derived Federal Reserve estimates suggested was likely.²²

²⁰ This estimate is £325-480bn – about half today's actual reserves level.

²¹ There are a number of possible reasons for this. Banks vary substantially in how they define their 'minimum' demand levels. Demand is sensitive to variables that can change rapidly, such as relative rates of return. And limits to the capacity of some market participants to recycle reserves efficiently mean that the aggregate minimum may not be the sum of individual minima.

²² See for instance: Senior Financial Officer surveys for September 2018 and February 2019, available at: [The Fed - Release Dates \(federalreserve.gov\)](https://www.federalreserve.gov) and [Observations on Implementing Monetary Policy in an Ample-Reserves Regime - FEDERAL RESERVE BANK of NEW YORK \(newyorkfed.org\)](https://www.newyorkfed.org).



Source: Federal Reserve Bank of New York, Federal Reserve Board

There are various ways to deal with this uncertainty. One, now adopted by the US, is to build in a much bigger buffer, planning to halt QE unwind much earlier than the central case estimate suggests. Another, that we have chosen to adopt, is to offer banks an alternative source of reserves, so that they can continue to meet their liquidity needs as and when they arise – allowing QE unwind to continue. The STR, which went live on 6 October, offers reserves holders the ability to borrow unlimited amounts of reserves for 7 days, at Bank Rate, secured against the highest quality collateral.²³ The STR is designed to be freely usable from the start: the vast majority of reserves holders who are also active in money markets already have access to the facility; and the PRA has confirmed that it judges use of the STR to be routine participation in sterling money markets, and intends that it should be seen as such by bank boards and overseas regulators.²⁴

Conclusions and next steps

Let me conclude.

Over the past six weeks, we have clearly demonstrated that it is possible to use the central bank balance sheet to support both monetary and financial stability whilst maintaining

²³ [Short Term Repo - Market Notice 1 September 2022 | Bank of England](#)

²⁴ [PRA statement on Short Term Repo \(STR\) facility | Bank of England](#)

clear separation between those goals. This case study will be of lasting interest to us and other central banks.

At the same time, key challenges remain.

In the short term, to solidify that separation we must execute a timely and orderly unwind of the assets accumulated as part of the financial stability purchase operations, whilst also delivering the MPC's QE unwind programme. In doing that we will need to remain sensitive and, if necessary, appropriately responsive to still-febrile market conditions.

In the medium term, there are clearly other profound lessons to be learned: about how to continue improving the resilience of non-banks to liquidity shocks; about how to build the lessons from this experience into further refinements to the central bank balance sheet toolkit, including through the development of effective tools for lending to non-banks; and about the appropriate long-term shape of central bank balance sheets as QE unwind progresses.

I look forward to discussing these and other issues with you here today.

I am grateful to Joshua Jones for his help in preparing this speech, and to Paul Alexander, Callum Ashworth, Andrew Bailey, Sarah Breeden, Jon Bridges, Rohan Churm, Rand Fakhoury, Lydia Henning, Tom Horn, James Howat, Joshua Lillis, Clare Macallan, Finn Meinecke, Arif Merali, Ali Moussavi, Rupal Patel, Rhys Phillips, Huw Pill, Dave Ramsden, Matt Roberts-Sklar, Andrea Rosen, Martin Seneca, Daniel Walker and Jack Worlidge for their helpful comments and suggestions.