BofA SECURITIES

Global Rates Viewpoint

Global supply through 2024: it's only just begun

14 September 2023

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Global

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Bonds for sale: you ain't seen nothing yet

The global sovereign supply picture in coming quarters is daunting. While the market is largely cognizant of this, there are reasons to believe the overall impact of this supply has yet to be realized. In the EA and UK, the overall uptick in the pace of supply ex-central banks has already occurred, but levels will remain elevated. In the US, this adjustment is still ahead and may struggle to get absorbed with limited structural demand. Historic sovereign supply levels across developed markets globally serve as another headwind, posing risks to cash market cheapening and a build in term premium.

All about central banks

Overall net supply is not expected to be particularly elevated across regions vs history. However, the picture looks quite different after accounting for changes in central banks' balance sheets. This suggests that the significant uptick in supply going forward is more about central bank balance sheet policies than fiscal deficits. Much of the recalibration in EUR/GBP net supply to the public has occurred and will remain elevated throughout 2024. US, JP, and AU have this supply adjustment forthcoming and so the market has yet to contend with the pace of new supply to the market that we anticipate in 2024.

US: uptick to start hitting in Q4

While this increase in supply is well anticipated and may be largely priced from a stock perspective, the test will come as the market digests these significant issuance levels in the current demand environment. The flow impact comes in two core aspects: 1. who buys the bonds, 2. how duration risk gets intermediated. UST supply may struggle to get absorbed with limited structural demand in a soft landing and signs that collateral is already building and impacting funding rates.

EUR: No large cuts to issuance

We expect deficits to slowly normalize from here (mainly driven by the phasing out of the energy support measures) even if we may get upside surprises relative to the June AMECO projections or 2024 fiscal efforts. Despite the (small) drop in treasury deficits, gross bond issuance is unlikely to decline commensurately given rising bond redemptions. On top of this, when looking at issuance flows net of ECB we note that issuance ending in private hands may increase (marginally) in 2024 relative to 2023.

UK: QT pace, Gilt Remit updates ahead

Regarding potential upcoming changes to the DMO's Gilt Remit, Autumn statement is currently penciled in for 22 November. Our projections in this note are based on the current Remit and DMO's gross financing need estimates for the next fiscal year. But our calculations suggest tentative risks of an additional £20bn from the DMO (largely via increased debt servicing costs) and an additional £7bn from the BoE (assuming £20bn extra QT in original cost terms over the twelve months from September).

UST = US Treasury

DMO = debt management office

QT = quantitative tightening

QE = quantitative easing

AMECO = annual macro-economic database of the European Commission

MPC = monetary policy committee

Timestamp: 14 September 2023 07:00AM EDT

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The global sovereign supply picture in coming quarters is daunting. While the market is largely cognizant of this, there are reasons to believe the overall impact of this supply has yet to be realized. In the EA and UK, the overall uptick in the pace of supply absorbed by the market ex-central banks has already occurred, but levels will remain elevated. In the US this adjustment is still forthcoming: starting this month and continuing through next year.

UST supply may struggle to get absorbed with limited structural demand in a soft landing and signs that collateral is already building and impacting funding markets. Historic sovereign supply levels across developed markets globally serve as another headwind, posing risks to cash market cheapening and a build in term premium.

All about central banks

We can compare the global supply profile two ways:

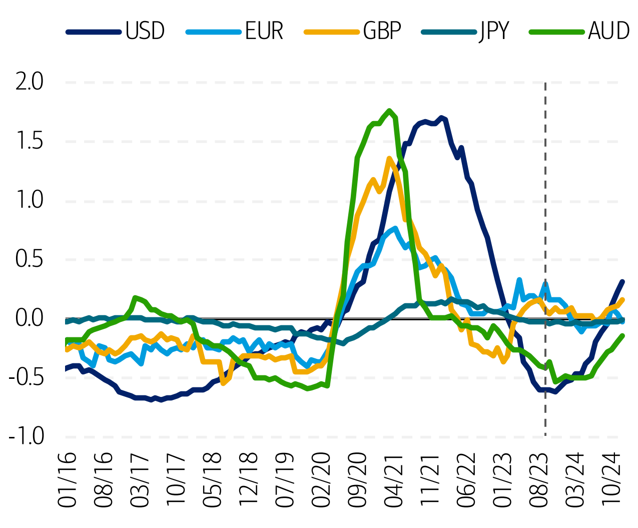
(1) net issuance = gross issuance less maturing securities

(2) net supply to the public = net issuance adjusted for changes in central bank ownership. As central banks conduct QT, government holdings roll off their balance sheet & must be absorbed by the public.

Net issuance is directly related to deficit spending. Supply to the public is a more impactful figure to the market as it is a better read on how much supply has to be absorbed accounting for both net issuance and central bank activity.

Overall net issuance of >1y securities is not expected to be particularly elevated across regions vs history (Exhibit 1). However, net supply to the public looks quite different as it accounts for changes in central banks' balance sheets (Exhibit 2). This suggests that the significant uptick in supply going forward is more about central bank (CB) balance sheet policies than fiscal deficits.

Exhibit 1: Z-score of monthly net notional supply
Average rolling 12mo Z-score of each region's monthly net supply normalized back to start of 2015; net supply figures are set to increase but are relatively low vs history



Source: BofA Global Research, Note: >1y maturities only

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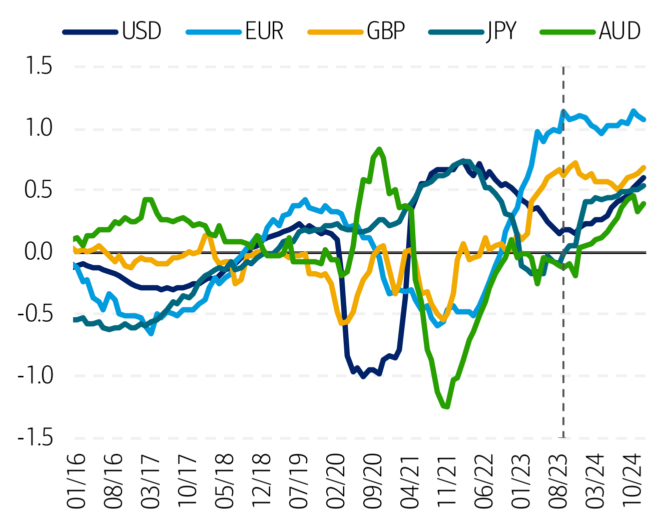
Exhibit 2: Z-score of net notional supply to the public after CBs
Average rolling 12mo Z-score of each region's monthly net supply normalized back to start of 2015; net supply figures are set to increase but will remain most aggressive in EUR and GBP vs regional history



Source: BofA Global Research, Note: >1y maturities only

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As shown in Exhibit 1, based on our projections GBP and EUR net issuance will remain in line with historical averages in 2024. AUD issuance is set to pickup, but will not breach the average monthly pace of issuance observed since 2015. The US is moving from a period where net coupon supply was notably below average to above average in 2024. As anticipated, in 2023 the US saw much more net supply come in the form of bills vs coupons. Over the remainder of 2023 and into 2024, we anticipate that coupon auction sizes will continue to grow as Treasury seeks to stabilize and moderate bills as a share of total outstanding debt.

Exhibit 2 shows net supply after accounting for changes in the central bank balance sheet policy. Much of the recalibration in EUR/ GBP net supply to the public has occurred and will remain elevated throughout 2024. US, JP, and AU have this supply adjustment forthcoming and so the market has yet to contend with the monthly pace of new supply to the market that we anticipate in 2024. By end '24 supply digestion in the US and Japan will be similar to late '21/ early '22 and for Australia it will be similar to early '21.

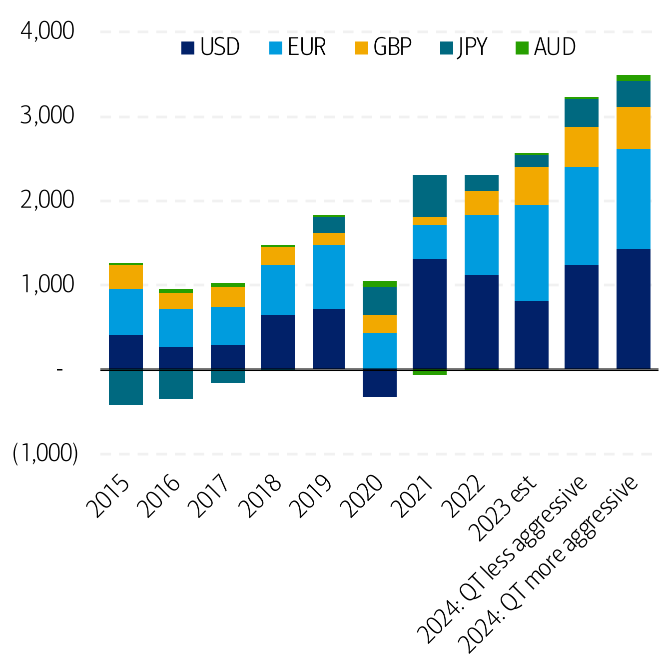
2024 inflection point for duration supply

While net supply to the public will be elevated globally in 2024, the US will observe the largest delta in 10y equivalent terms vs current levels. Exhibit 3 shows the annual supply to the public in USD 10y equivalents across the five regions. Next year marks a material step up in supply which could be more notable in our more aggressive scenario where QT continues for longer in the US and EUR and RBA sales commence. We discuss these scenarios in greater detail below.

Across the five regions, net supply in 2024 will only be lower in Japan vs supply in 2021, when governments were still spending to support the covid recovery (Exhibit 4). In the US, net supply in 2024 will be around the same vs 2021 under our US Econ team's baseline scenario where QT ends next June and modestly above should QT end due to reserve scarcity in 2025.

Exhibit 3: Annual net supply to the public after central banks ($bn, 10y equiv)

2024 set to be unprecedented in terms of net supply to the public



Source: BofA Global Research, Note: >1y maturities only

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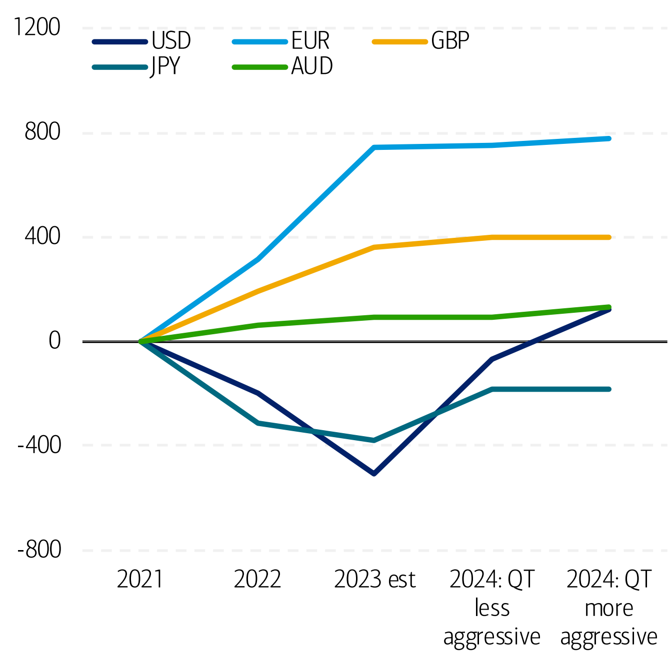
Exhibit 4: Cumulative change in annual net supply to the public after central banks ($bn, 10y equiv)

Increase in net supply across all regions besides Japan



Source: BofA Global Research, Note: >1y maturities only

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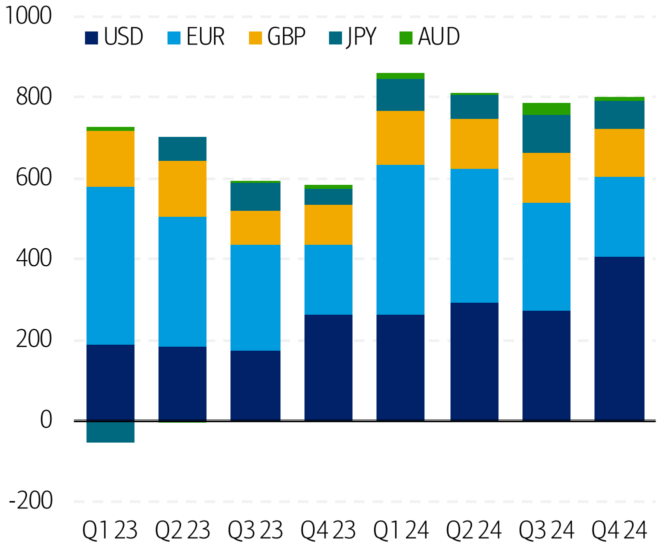
The quarterly pace of net issuance in total across regions is expected to pickup meaningfully starting in Q1 2024 (Exhibit 5). This uptick vs recent quarters is primarily driven by the US where the quarterly pace of issuance is between $100-$200bn higher in 24 vs Q3 23 (Exhibit 6). GBP net supply will be around $50bn higher per quarter, and EUR quarterly supply will peak in Q1 '24 before moderating.

Based on these projections, the US will be the region that sees the largest adjustment in 10y equivalent net supply to the public. While net supply is likely to remain particularly elevated the Euro Area, the market has likely already adapted to this new pace of issuance. In the US this adjustment is still ahead. The increase in net supply to the US is widely anticipated and a contributor to the bear-steepening observed in August. However, the market's ability to digest these new net supply numbers has yet to be tested in the current demand landscape where banks and foreign investors are less active.

Exhibit 5: Quarterly net supply to the public after central banks ($bn, 10y equiv)

Supply will pickup meaningfully in 2024



Source: BofA Global Research, Note: >1y maturities only

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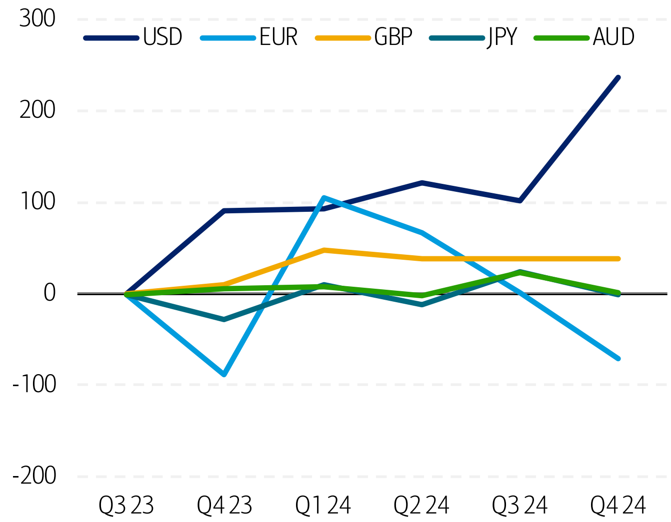
Exhibit 6: Quarterly net supply to the public after central banks vs Q3 '23 level ($bn, 10y equiv)

US is only region that will see material pickup in quarterly supply profile over 2024 vs Q3 '23 levels



Source: BofA Global Research, Note: >1y maturities only

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US: uptick to start hitting in Q4

Stock vs flow

The expected increase in UST supply in coming quarters has been well advertised and was likely one of the key drivers of the bear-steepening of the curve in August (see: Sharp rise in US rates). The supply surprise to the market has come through both larger than expected deficits and the scenario where the Fed continues QT for longer. We see upside risks to our baseline forecasts given rising interest expenses, financing needs, and a this potentially longer run rate of QT.

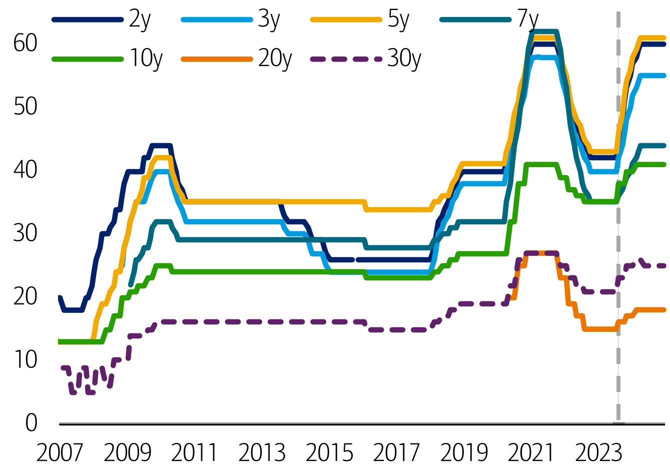
As discussed in August Refunding, we expect US Treasury will increase coupon auction sizes two more times (at both the November and February refunding meetings) so that that some auction sizes (2y, 5y, 10y, FRN) will hit the prior peaks observed in mid 21 (Exhibit 7).

The need for higher auction sizes is driven in part by Fed QT as larger redemptions mean more the UST will issue to cover its financing need. Our base case supply forecasts incorporate our US Economics team's view that QT will end with the Fed's first rate cut in June. An extension of QT until reserves hit about 9% of GDP (April 2025) imply about

$330bn higher net coupon supply. Using the QE rule of thumb this would suggest about a 10bps impact on 10s (see: QT FAQ).

While this increase in supply is well anticipated and may be largely priced from a stock perspective, the test will come as the market digests these significant issuance levels in the current demand environment. As shown in Exhibit 8, this material uptick in supply will largely start to hit this month (September), with the quarterly pace climbing in Q4 and through next year.

Exhibit 7: Treasury auction sizes by tenor with projections through YE '24 ($bn)
We forecast that Treasury note and bond auction sizes will grow through April '24



Source: BofA Global Research, US Treasury

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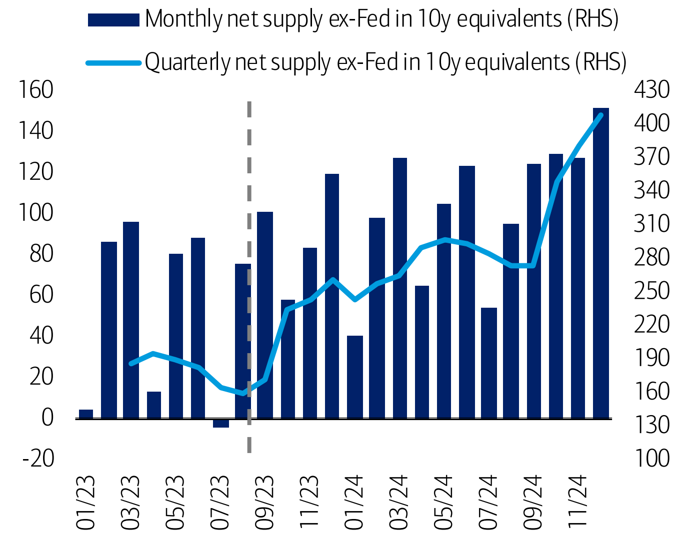
Exhibit 8: 10y equivalent net supply ex Fed ($bn)
Supply picks up meaningfully in next quarter



Source: BofA Global Research, US Treasury, Federal Reserve, Note: >1y maturities only

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Liquidity and end buyers headwinds to digestion

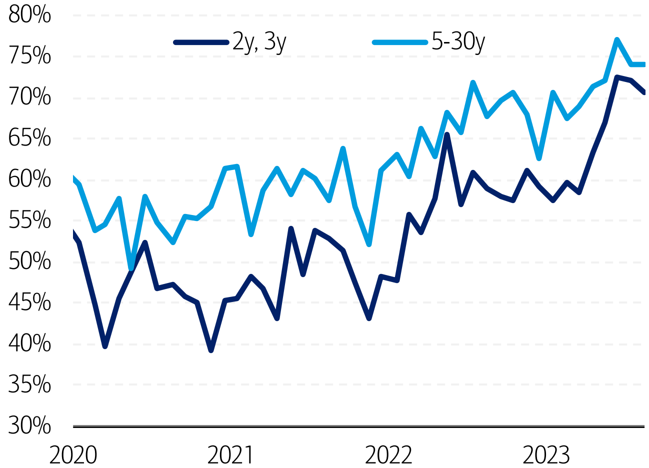
The flow impact comes in two core aspects: 1. who buys the bonds, 2. how duration risk gets intermediated. The goldilocks scenario for the US economy is one of the hardest outcomes for the supply/ demand landscape with the Fed more likely to do QT for a longer period and less flight to quality flow allowing for the easy absorption of USTs.

So far auctions have generally gone well with relatively low primary dealer participation and very strong demand from investment funds (Exhibit 9). We continue to think that the burden remains on the domestic real money to take down this incremental supply with limited bid from foreign investors and banks (see: Higher supply fewer buyers). While the real money bid has been persistent (see: Not so neutral), a recalibration in view could make this supply harder to digest.

As discussed in Flow of funds data evidence basis trade, leveraged hedge funds have also been another important buyer in the market. We see evidence of this bid in the growth of the short futures position and household sector taking down large amounts of UST supply. Any potential reforms limiting their activity could also make the digestion of UST supply more difficult.

We are already seeing some signs in the repo market that dealer balance sheets are getting crowded (see: Repo ripple). Increased supply will only exacerbate this problem. As shown in Exhibit 10, UST market size has already outgrown dealer ability to effectively intermediate risk. Larger collateral levels will make intermediation harder and drive funding rates higher.

Exhibit 9: Investment fund – average auction allotment
Fund participation still elevated



Source: BofA Global Research, US Treasury

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Exhibit 10: Primary dealer repo as % of UST marketable debt
Dealer repo balances have not grown with UST market size

Source: BofA Global Research, Bloomberg

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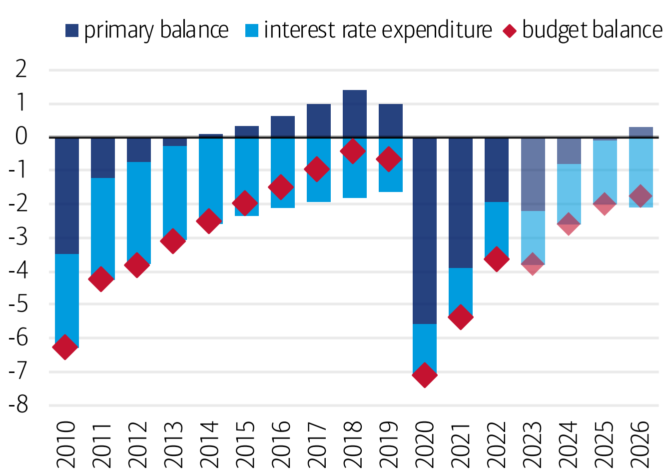
Bottom line: stock impact of UST supply is likely baked in as numbers are well advertised and expected. However, the flow impact of the supply wave has not been fully realized which poses risks to cash market cheapening and a build in term premium. UST supply may struggle to get absorbed with limited structural demand in a soft landing and signs that collateral is already building and impacting funding rates.

Eurozone: No large cuts to issuance

Eurozone member states are currently working on updating funding requirements for 2023 as well as beginning to draft budgets for 2024. With inflation worries still on top of the electorates' worries, member states are trying to find the fiscal space for the measures supposed to address these. All in all, we expect deficits to slowly normalize from here (mainly driven by the phasing out of the energy support measures) even if we may get upside surprises relative to the June AMECO projections or 2024 fiscal efforts.

Exhibit 11: Euro area planned aggregated fiscal deficit, % of GDP
National plans project Euro area deficit dropping from 3.8% to 2.6% in 2024



Source: National Stability and Convergence Plans

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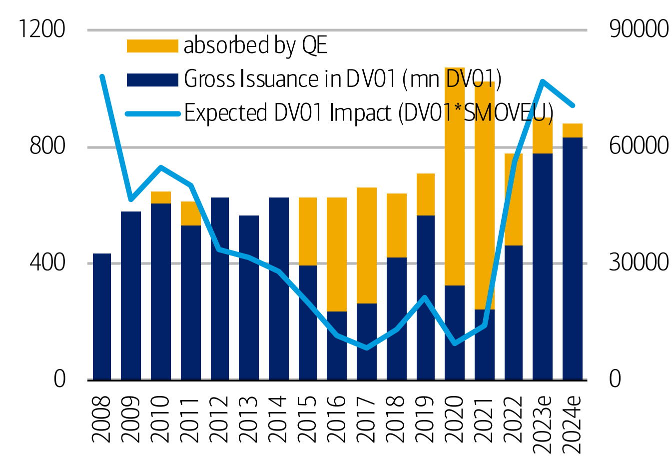
Exhibit 12: EGB gross issuance in DV01, DV01*Vol and ECB share
If volatility continue on the current normalization path, the 2024 bond supply outlook remains challenging but less so than in 2023



Source: ECB, National Treasuries, Bloomberg and own calculation

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Despite the (small) drop in treasury deficits, gross bond issuance (at c. EUR1.2tn) is unlikely to decline commensurately given rising bond redemptions. On top of this, when looking at issuance flows net of ECB operations we note that issuance ending in private hands may increase (marginally) in 2024 relative to 2023. The potential of 50% runoff of the PEPP portfolio from the second half of 2024 may just add another 30bn, so it is unlikely to be a meaningful story for EGBs overall provided that credit spreads remain relatively tight (and therefore do not need to benefit from PEPP's investment flexibility).

Significant country by country differences but guidance is limited

> A more in-depth version of this is available on Liquid Insight: Do not expect large cuts to EGB net issuance 14 August 2023

Closer to Q4 we will refine our forecasts on a country by country basis as we receive clearer guidance from 2024 budgets. For the moment we are assuming Germany net issuance in the order of €60bn (of which c. €10bn from the defense fund and c. €29bn from the climate fund). Our understanding is the original plan assumed c. €45bn for the Economic Stabilization Fund but given the success of European policymakers' quest for alternative natural gas sources we expect a re-design - this would lead to German gross issuance in the order of €260bn. The same argument skews risks towards a lower funding target for Q4 this year, similarly to the Q3 experience.

Our numbers assume a very limited effort from France leading to a gross supply of €290-300bn (from which €15-25bn in buybacks would need to be deducted).

The Italian assumption is particularly uncertain for us given that the country is running at a faster issuance pace than we expected this year in the first place and it is uncertain whether a potential addition of BTP Valore or BTP Italia before year-end would generate pre-funding cash (cash levels have been relatively low so far despite issuance because of the delayed tax payments on few items). The government coalition is drafting the general framework of proposals for 2024 but is dealing with scarce resources (also because of the potential upside revision of 2023's deficit) but also from the uncertain quantification of the "Superbonus" measure in both accrual and cash terms over the 2021-2027+ period.

For the sake of this exercise, we are assuming gross bond issuance at c. €315bn there. Spain sees a significant uptick in redemption flows in 2024, pushing our assumed gross bond issuance target to c.€183bn.

Another (major) layer of uncertainty for periphery countries is the timing and progress of NGEU funding tranches. Funding tranches may be delayed/cancelled in 2024 leading partially to higher issuance, or this year's slowdown may be recouped next year (leading to lower issuance numbers). This last scenario is something that may partially fit what is happening with Italy this year.

UK: QT pace, Gilt Remit updates ahead

At its September 2022 meeting, the Bank of England's (BoE) Monetary Policy Committee (MPC) voted to reduce the stock of Gilts by £80bn over the subsequent twelve-month period. This month, the MPC will communicate its intended Gilt stock reduction target for the next twelve months. That, and any potential tweaks to this year's Debt Management Office (DMO) Gilt Remit in November, will be two key factors deciding Gilt supply dynamics through end-2024.

Dave Ramsden's 19 July speech was a signal of what might be expected when the new year of Quantitative Tightening (QT) starts in October. He discussed accelerating the pace of Gilt Asset Purchase Facility (APF) reduction to £100bn over the year from September. This would mean £50bn of active Gilt sales in original cost terms.

Total QT of £100bn would be £20bn more than status quo assumption of Gilt QT being kept unchanged at £80bn. For active QT, the increase would be marginal £5bn versus this year's sales in original cost terms, given an increase in passive roll off from £35bn to £50bn. An assumption of additional £20bn of active QT for October 2023 - September 2024 would total £50bn (£34bn in market value terms, we would estimate).

Regarding potential upcoming changes to the DMO's Gilt Remit, Autumn statement is currently pencilled in for 22 November. Our projections in this note are based on the current Remit and DMO's gross financing need estimates for the next fiscal year (Exhibit 14 and Exhibit 15). But our calculations suggest tentative risks of an additional £20bn from the DMO (largely via increased debt servicing costs) and an additional £7bn from the BoE (assuming £20bn extra QT in original cost terms over the twelve months from September) this Autumn. We will refine our estimates as we get closer to November.

Exhibit 13: APF stock reduction in Oct'22 - Sep'23 and Oct'23 - Sep'24

Dave Ramsden's speech suggested total APF stock reduction could be kept at £100bn in Oct'23 – Sep'24

	Oct'22 - Sep'23	
Total APF stock reduction: £100bn	APF - Gilts: £80bn stock reduction APF - Corp bonds: £20bn stock reduction	Passive QT: £35bn Active QT: £45bn
	Oct'23 - Sep'24	
Scenario 1 Total APF stock reduction: £100bn	APF – Gilts stock reduction: £100bn	Passive QT: £50bn Active QT: £50bn
Scenario 2 Total APF stock reduction: £80bn	APF – Gilts stock reduction: £80bn	Passive QT: £50bn Active QT: £30bn

Source: BofA Global Research

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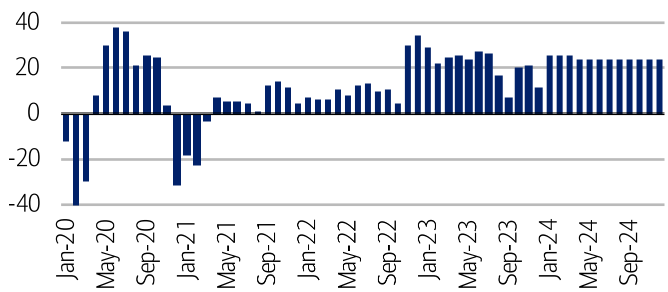
Exhibit 14: Gross Gilt supply net of QE, £bn nominal

BofA forecast from Sep-2023



Source: Debt Management Office, Bank of England, BofA Global Research

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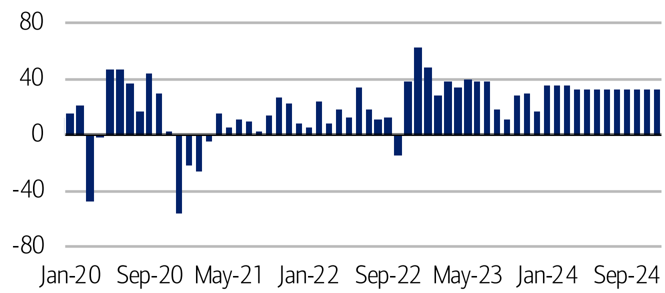
Exhibit 15: Gross Gilt supply net of QE, 10y equivalent

BofA forecast from Sep-2023



Source: Debt Management Office, Bank of England, BofA Global Research

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AUD: QT decision to end bond scarcity

In Australia, ACGBs have been scarce because of unanticipated fiscal surpluses and an upcoming RBA decision about the future of its balance sheet will be pivotal to the pace of future supply. The RBA has signalled a more aggressive approach to balance-sheet reduction is possible, indicating in the minutes of May's Board meeting that active bond sales would be reconsidered after the first tranche of the Term Funding Facility repayments concludes around the end of September 2023. Unanticipated fiscal surpluses have reduced bond supply significantly below projections and led to scarcity in the 3-7y sector of the curve.

We forecast another fiscal surplus (of around USD 6bn) this financial year and an announcement from the RBA in Q4 2023 that they will embark on asset sales of around AUD 1bn/ week from 2024. In the absence of RBA bond sales (i.e., the 'less aggressive' scenario for QT in Exhibit 3 & Exhibit 4), net bond supply will fall below 2021 levels in 10y equivalent terms.

Given the RBA has expressed an interest in reducing the interest-rate risk on its balance sheet, bond scarcity gives the central bank to reduce its holdings more rapidly with minimal risk of causing bond-market disorder. The 'more aggressive' QT scenario is therefore our base case for 2024. We estimate asset sales will add about 37bps term premium to 10y bonds, steepening the curve. On a cross-market basis, ACGBs will likely continue trading rich vs USTs but our preferred expressions are in domestic rates markets. We recommend positioning for cheaper bonds by receiving 10y swap spreads, adding 3s10s steepeners and selling bonds vs OIS.

Appendix: monthly supply forecasts

Exhibit 16: 10y equivalent net supply to the public after central banks ($bn)

Globally net supply to the public will increase in coming months

	USD	EUR	GBP	JPY	AUD	Total
1/31/2023	4	137	59	-68	0	133
2/28/2023	86	157	33	16	3	295
3/31/2023	96	100	47	0	3	247
4/28/2023	13	118	42	24	-11	187
5/31/2023	80	82	48	46	2	259
6/30/2023	88	122	48	-11	2	249
7/31/2023	-4	95	49	39	2	180
8/31/2023	75	64	23	16	2	180
9/29/2023	101	106	13	13	2	236
10/31/2023	59	76	36	14	6	191
11/30/2023	84	75	37	49	2	248
12/29/2023	119	25	21	-23	2	144
1/31/2024	40	140	44	41	2	268
2/29/2024	98	119	44	26	6	293
3/29/2024	127	111	44	11	6	299
4/30/2024	65	109	41	22	-8	229
5/31/2024	105	103	41	50	6	305
6/28/2024	124	119	41	-15	6	275
7/31/2024	55	93	41	52	10	251
8/30/2024	95	67	41	27	10	239
9/30/2024	125	107	41	13	10	296
10/31/2024	129	90	41	25	10	295
11/29/2024	128	82	41	51	-11	290
12/31/2024	152	21	41	-9	10	215

Source: BofA Global Research, Note: >1y maturities only

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