

# European Rates Supply Preview: Week ahead

## Heavy supply, redemptions from Italy and Austria

**EGBs: Finland, Holland, Germany, Greece, France and Spain**  
Gross EGB auctions volume increases to c.€35.55bn with Finland, the Netherlands, Germany, Greece, France and Spain in the market. Germany, Italy and Austria repay c.€32.4bn in coupons and redemptions.

On Tuesday, 1) Finland taps the FRGB Sep28 and RFGB Sep33 for €750mln each  
2) the Netherlands issue the new Green DSL Jan44 for up to €5bn; 3) Germany launches the BKO Dec25 for €5bn.

On Wednesday, 1) Germany taps the DBR Aug33 for €4bn; 2) Greece runs a GGB auction.

On Thursday, 1) France taps the OAT Sep26, Oct27, Feb29 and May 30 for up to €11.5bn. It also taps the OAT€i Mar26, Mar29 and OATi Mar36 for up to €1.75bn. 2) Spain taps the Oct25, Jul29 and Oct33 (details TBA).

### Exhibit 3: EGB spread residuals (in bp) according to PCA RV (cheap = positive residual)

Cheap 5y segment across EGBs ex Spain

|             | 2y   | 5y   | 7y   | 10y  | 15y  | 25y  |
|-------------|------|------|------|------|------|------|
| Austria     | 1.0  | 2.4  | -0.5 | -0.9 | 0.5  | 1.2  |
| Netherlands | 1.5  | 1.9  | -0.2 | -0.4 | 1.7  | -2.0 |
| Belgium     | -1.6 | 1.7  | -0.2 | -1.4 | -0.3 | 0.4  |
| France      | -0.8 | 2.1  | 0.5  | -1.0 | -1.4 | -1.0 |
| Italy       | -0.1 | 2.3  | -0.7 | -2.5 | 1.3  | 0.0  |
| Spain       | -0.6 | -0.8 | -2.1 | -2.0 | 2.4  | 2.5  |
| Portugal    | -0.5 | 2.0  | 0.1  | -0.9 | 1.0  | -1.7 |

Source: BofA Global Research, Bloomberg (BFV rates). Residuals = Actual - Fitted EGB yield (expressed in bp and as a spread to Germany). The current value of dislocation (top-left corner of the table) is the z-score of the current standard deviation of EGB residuals originating from the regression on the first 11 principal components. For the full methodology please refer to report.

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### Bills: FR, GE, NE, SP + the EU

On Monday, 1) **France** offers three 3m and one 12m lines for up to €6.8bn; 2) **Germany** offers the 12m line for €3bn; 3) **the Netherlands** offer two 3m lines for up to €3.5bn in total. On Tuesday, **Spain** offers the 3m and 9m lines. On Wednesday, **the EU** offers the 3m and 6m lines for €1bn each.

### UK: UKT Oct53

In the UK, the DMO taps the UKTI Oct53 for £2.75.

### US: 20y Bond and 5y TIPS

In the US, the Treasury taps the new 20y Note for \$13bn and issues the new 5y TIPS for \$22bn.

For a complete list of our open trade ideas and risks, see latest [Global Rates Weekly](#).

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Rates Research  
Europe

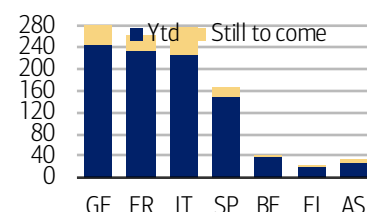
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### Exhibit 1: Euro fixed coupon bond issuance, ytd vs. our estimates for the rest of 2023

Year to date versus expected 2023 target

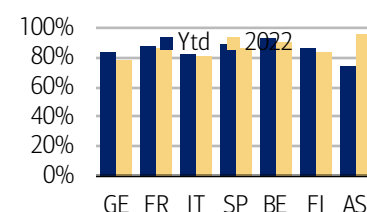


BofA Global Research Note that this is only an indication of issuance evolution in the EUR FIXED COUPON market. It does not incorporate the funding through inflation linked bonds, CTZs and CCTs

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### Exhibit 2: Ytd Euro fixed coupon bond issuance in % of 2022 estimated targets

85% of the issuance done so far



BofA Global Research Note that this is only an indication of issuance evolution in the EUR FIXED COUPON market. It does not incorporate the funding through inflation linked bonds, CTZs and CCTs

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## Global bond supply/redemptions next 2 weeks

### Exhibit 4: Eurozone, UK and US government bond supply and C&R in the next two weeks

Significant redemptions and coupons flows with a higher gross supply leading to a positive net supply of €3.15bn

|        | Date   | Settle | Country | Sector | Amount (bn)   | Bond                  | Type                    |                  | Date   | Country | Amt (bn) |      | Type             |                 |            |        |
|--------|--------|--------|---------|--------|---------------|-----------------------|-------------------------|------------------|--------|---------|----------|------|------------------|-----------------|------------|--------|
| Europe | 17-Oct | 19-Oct | FI      | 5y     | 0.75          | RFGB 0.5% 09/28       | Tap                     |                  | 15-Oct | IT      | -        | 16.1 | BTPS 0.65% 10/23 | R               |            |        |
|        | 17-Oct | 19-Oct | FI      | 10y    | 0.75          | RFGB 3% 09/33         | Tap                     |                  | 15-Oct | GE      | 4y       | 0.7  | OBL 1.3% 10/27   | C               |            |        |
|        | 17-Oct | 19-Oct | NE      | 20y    | 4.0-5.0       | Green DSL 3.25% 01/44 | New                     |                  | 15-Oct | IT      | 0-8y     | 2.7  | BTP/CCTeu        | C               |            |        |
|        | 17-Oct | 19-Oct | GE      | 2y     | 5.0           | BKO 12/25             | New                     |                  | 20-Oct | AS      | -        | 12.1 | RAGB 1.75% 10/23 | R               |            |        |
|        | 18-Oct | 20-Oct | GE      | 10y    | 4.0           | DBR 2.6% 08/33        | Tap                     |                  | 20-Oct | AS      | 0-30y    | 0.8  | RAGB/AUST        | C               |            |        |
|        | 18-Oct | 20-Oct | GR      | TBA    | 0.1-0.3(e)    | GGB                   | TBA                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 3y     |               | OAT 2.5% 09/26        | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 4y     |               | OAT 2.75% 10/27       | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 6y     | 10.0-11.5     | OAT 2.75% 02/29       | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 7y     |               | OAT 2.5% 05/30        | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 2y     |               | OATeI 0.1% 03/26      | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 5y     | 1.25-1.75     | OATeI 0.1% 03/29      | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | FR      | 12y    |               | OATi 0.1% 03/36       | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | SP      | 2y     |               | SPGB 2.15% 10/25      | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | SP      | 6y     | 5.5-6.5(e)    | SPGB 0.8% 07/29       | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        | 19-Oct | 23-Oct | SP      | 10y    |               | SPGB 3.55% 10/33      | Tap                     |                  |        |         |          |      |                  |                 |            |        |
|        |        |        |         |        |               |                       | Total week              | €31.35-35.55 (e) |        |         |          |      |                  |                 | Total week | €32.4  |
|        | 23-Oct | 25-Oct | EU      | TBA    | TBA           |                       | EU                      | TBA              |        | 22-Oct  | BE       | -    | 8.3              | BGB 0.2% 10/23  | R          |        |
|        | 23-Oct | 25-Oct | BE      | TBA    | 2.0-3.0(e)    |                       | BGB                     | TBA              |        | 22-Oct  | BE       | 0-1y | 0.1              | BGB/ BELG Float | C          |        |
|        | 24-Oct | 26-Oct | NE      | 10y    | 1.5-2.5(e)    |                       | DSL 2.5% 07/33          | Tap              |        | 25-Oct  | FR       | -    | 44.9             | OAT 4.25% 10/23 | R          |        |
|        | 24-Oct | 26-Oct | GE      | 5y     | 4.0           |                       | OBL 2.4% 10/28          | Tap              |        | 25-Oct  | PO       | -    | 9.4              | PGB 4.95% 10/23 | R          |        |
|        | 25-Oct | 27-Oct | GE      | 15y    | 1.25          |                       | DBR 1% 05/2038          | Tap              |        | 25-Oct  | FR       |      | 8.8              |                 | C          |        |
|        | 25-Oct | 27-Oct | GE      | 15y    | 0.75          |                       | DBR (details TBA)       | Tap              |        | 25-Oct  | PO       | -    | 0.5              | PGB 4.95% 10/23 | C          |        |
|        | 25-Oct | 27-Oct | IT      | TBA    | 3.0-5.0(e)    |                       | BTPShort, BTPeI         | TBA              |        |         |          |      |                  |                 |            |        |
|        | 25-Oct | 27-Oct | PO      | TBA    | 0.75-1.25(e)  |                       | PGB (potential auction) | TBA              |        |         |          |      |                  |                 |            |        |
|        | 26-Oct | 30-Oct | FI      | TBA    | 0.4(e)        |                       | RFGB ORI                | ORI Facility     |        |         |          |      |                  |                 |            |        |
|        |        |        |         |        |               |                       | Total week              | €13.65-18.15 (e) |        |         |          |      |                  |                 | Total week | €72.0  |
| UK     | 17-Oct | 18-Oct | UK      | 30y    | 2.75          | UKT 3.75% 10/53       | Tap                     |                  |        |         |          |      |                  |                 | Total week | £0.0   |
|        |        |        |         |        |               |                       | Total week              | £2.75            |        |         |          |      |                  |                 | Total week | £0.0   |
|        | 24-Oct | 25-Oct | UK      | 10y    | TBA           | UKTI 0.75% 11/33      | Tap                     |                  | 22-Oct | UK      | 1-50y    | 3.3  | UKT              | C               |            |        |
|        | 25-Oct | 26-Oct | UK      | 15y    | TBA           | UKT 3.75% 01/38       | Tap                     |                  |        |         |          |      |                  |                 | Total week | £3.3   |
|        |        |        |         |        |               | Total week            | TBA                     |                  |        |         |          |      |                  | Total week      | £3.3       |        |
|        | 18-Oct | 31-Oct | US      | 20y    | 13.0          | T                     | Tap                     |                  | 15-Oct | US      | -        | 53.5 | T                | R               |            |        |
|        | 19-Oct | 31-Oct | US      | 5y     | 22.0          | TIPS                  | New                     |                  | 15-Oct | US      | 0-2y     | 2.7  | T                | C               |            |        |
|        |        |        |         |        |               |                       | Total week              | \$35.0           | 15-Oct | US      | 0-8y     | 2.3  | TIPS             | C               |            |        |
|        |        |        |         |        |               |                       | Total week              | \$35.0           |        |         |          |      |                  |                 | Total week | \$58.5 |
|        | 24-Oct | 31-Oct | US      | 2y     | TBA on 19-Oct | T                     | New                     |                  |        |         |          |      |                  |                 | Total week | \$0.0  |
|        | 25-Oct | 31-Oct | US      | 2y     | TBA on 19-Oct | FRN                   | New                     |                  |        |         |          |      |                  |                 | Total week | \$0.0  |
|        | 25-Oct | 31-Oct | US      | 5y     | TBA on 19-Oct | T                     | New                     |                  |        |         |          |      |                  |                 | Total week | \$0.0  |
|        | 26-Oct | 31-Oct | US      | 7y     | TBA on 19-Oct | T                     | New                     |                  |        |         |          |      |                  |                 | Total week | \$0.0  |
|        |        |        |         |        |               |                       | Total week              | TBA on 19-Oct    |        |         |          |      |                  |                 | Total week | \$0.0  |
|        |        |        |         |        |               |                       | Total week              | TBA on 19-Oct    |        |         |          |      |                  |                 | Total week | \$0.0  |

Treasuries, BofA Global Research. (e ) = estimate, C= Coupon, R= Redemption

Source: Treasuries, BofA Global Research.

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### Exhibit 5: Euro-area bill auction calendar next week (€ bn)

Strong activity in the T-bill market

| Auctions | Date   | Ctry | Amt €bn | Sector | Maturity  |
|----------|--------|------|---------|--------|-----------|
| Week 42  | 16-Oct | FR   | 0.2-0.6 | 3m     | 08-Nov-23 |
|          | 16-Oct | FR   | 2.6-3.0 | 3m     | 17-Jan-24 |
|          | 16-Oct | FR   | 1.4-1.8 | 3m     | 06-Mar-24 |
|          | 16-Oct | FR   | 1.0-1.4 | 12m    | 02-Oct-24 |
|          | 16-Oct | GE   | 3.0     | 12m    | 16-Oct-24 |
|          | 16-Oct | NE   | 1.5     | 3m     | 30-Jan-24 |
|          | 16-Oct | NE   | 2.0     | 3m     | 27-Mar-24 |
|          | 17-Oct | SP   | -       | 3m     | 12-Jan-24 |
|          | 17-Oct | SP   | -       | 9m     | 05-Jul-24 |
|          | 18-Oct | EU   | 1.0     | 3m     | 12-Jan-24 |
|          | 18-Oct | EU   | 1.0     | 6m     | 05-Apr-24 |
|          |        |      |         |        |           |
|          |        |      |         |        |           |
|          |        |      |         |        |           |
|          |        |      |         |        |           |

Source: Treasuries, BofA Global Research.



**Exhibit 5: Euro-area bill auction calendar next week (€ bn)**

Strong activity in the T-bill market

| Auctions | Date | Ctry | Amt €bn | Sector | Maturity |
|----------|------|------|---------|--------|----------|
|----------|------|------|---------|--------|----------|

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**Exhibit 6: Issuance of EUR denominated fixed coupon bonds YTD versus estimated 2023 target – comparison with % reached at same time in '22 (\*\*)**

Issuance volume led by Italy

|                     | EZ total | AS   | BE   | FI   | FR*** | GE    | GR* | CY | IR   | IT**  | NE   | PO   | SP    |
|---------------------|----------|------|------|------|-------|-------|-----|----|------|-------|------|------|-------|
| Issued week 09 Oct  | 10.5     | -    | -    | -    | -     | 2.5   | -   |    | -    | 8.0   | -    | -    | -     |
| Issued YTD, Gross   | 999.9    | 25.1 | 39.4 | 18.5 | 233.2 | 245.1 | 9.4 |    | 7.0  | 225.5 | 35.1 | 13.1 | 148.6 |
| As% of 2023         | 85%      | 74%  | 94%  | 86%  | 88%   | 83%   |     |    | 100% | 82%   | 70%  | 83%  | 90%   |
| Difference vs 22    | 1%       | -22% | 3%   | 3%   | 2%    | 5%    |     |    | 0%   | 1%    | -14% | -8%  | 3%    |
| Gross supply left   | 180.8    | 8.6  | 2.7  | 3.0  | 30.8  | 50.0  | 0.7 |    | 0.0  | 50.5  | 14.9 | 2.4  | 17.4  |
| Redemptions (bn) ** | 170.1    | 12.1 | 8.5  | 0.0  | 44.9  | 18.0  |     |    | 0.0  | 50.7  | 0.0  | 9.4  | 26.5  |
| Net supply left     | 10.8     | -3.5 | -5.8 | 3.0  | -14.1 | 32.0  | 0.7 |    | 0.0  | -0.2  | 14.9 | -7.0 | -9.2  |

**Source:** BofA Global Research, Bloomberg. Difference vs 22: positive when the country is more advanced than in 2022. Numbers may not add-up due to rounding. Numbers between bracket correspond to provisory figures (awaiting second day allocation), (\*\*\*) NOT netted for buy-back operations (estimated at €20bn).(\*) we expect very small Euro bond issuance from these countries, as they will mainly rely on EU/IMF help to pay back their debt and fund their deficit; (+) Exclusively held by the ECB/EIB(\*\*) This is an indication of issuance evolution in the EUR FIXED COUPON bonds. It may not translate the full picture of evolution of state funding as it does not incorporate inflation linked bonds, zeros and floating rate notes issuance / redemp. The table only tracks auctions and syndications. Changes of funding pace is due to EUR FIXED COUPON bonds target revision.

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**Exhibit 7: Total bond and Bill issuance in 2023 across all bond types, with buybacks included where relevant**

Supply through the quarter

|   | 2023 Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Portugal | Spain | Totals |
|---|--------------|---------|---------|--------|---------|--------|---------|-------|-------------|----------|-------|--------|
| EUR fixed coupon bonds (1)                      | 34           | 42      | 22      | 264    | 287     | 10     | 7       | 276   | 46          | 13       | 166   | 1166   |
| Change versus 2022                              | 1            | -2      | 3       | 4      | 65      | 4      | 0       | 59    | 2           | 1        | 21    | 157    |
| Other Bonds (EUR linkers/floating/zero cpn) (2) | 0            | 0       | 1       | 26     | 5       | 0      | 0       | 61    | 0           | 0        | 7     | 100    |
| Gross Bond Issuance (3) = (1)+(2)               | 34           | 42      | 23      | 290    | 292     | 10     | 7       | 337   | 46          | 13       | 173   | 1266   |
| Change versus 2022                              | 1            | -2      | 5       | 4      | 63      | 2      | 0       | 66    | 2           | 1        | 22    | 162    |
| Total Redemptions* (4)                          | 28           | 21      | 11      | 156    | 185     | 5      | 7       | 266   | 30          | 10       | 92    | 811    |
| Net Bond issuance (*inc. Buybacks)              | 6            | 21      | 12      | 134    | 107     | 5      | 0       | 71    | 16          | 3        | 81    | 456    |
| Change versus 2022                              | -1           | 5       | 4       | 11     | 46      | 2      | 5       | 30    | 3           | -1       | -2    | 101    |
| Net Bill issuance (6)                           | 6            | 1       | 1       | 3      | 10      | 1      | 0       | 0     | 4           | 4        | -5    | 25     |
| Net Total (5)+(6)                               | 12           | 22      | 13      | 138    | 117     | 6      | 0       | 71    | 20          | 7        | 76    | 481    |

**Source:** BofA Global Research, Countries Treasuries. Note: Numbers are expressed in EUR bn and may not add up due to rounding. (2) Total bonds correspond to the sum of EUR-denominated fixed coupon bonds

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**Exhibit 8: Forecasted European government bond gross supply in 2023**

Monthly supply through the quarter

|             | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct (est.) | Nov (est.) | Dec (est.) | 2023 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|------------|------------|------|
| Austria     | 6   | 2   | 2   | 7   | 2   | 1   | 2   | 1   | 1   | 6          | 3          | 1          | 34   |
| Belgium     | 7   | 6   | 4   | 5   | 4   | 5   | 3   | 3   | 2   | 2          | 0          | 0          | 42   |
| Finland     | 4   | 0   | 2   | 5   | 1   | 2   | 0   | 3   | 1   | 1          | 2          | 0          | 22   |
| France      | 27  | 32  | 31  | 24  | 24  | 28  | 26  | 18  | 28  | 29         | 19         | 4          | 290  |
| Germany     | 28  | 32  | 27  | 30  | 27  | 23  | 24  | 31  | 22  | 23         | 23         | 5          | 292  |
| Greece      | 4   | 0   | 3   | 0   | 0   | 0   | 2   | 0   | 0   | 1          | 0          | 0          | 10   |
| Ireland     | 4   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 1   | 0          | 0          | 0          | 7    |
| Italy       | 31  | 31  | 37  | 39  | 31  | 37  | 27  | 15  | 30  | 33         | 24         | 3          | 337  |
| Netherlands | 6   | 8   | 4   | 6   | 2   | 4   | 2   | 0   | 2   | 5          | 6          | 0          | 46   |
| Portugal    | 3   | 5   | 1   | 0   | 0   | 0   | 1   | 0   | 2   | 1          | 1          | 0          | 13   |
| Spain       | 25  | 19  | 15  | 14  | 14  | 25  | 13  | 6   | 13  | 15         | 7          | 5          | 173  |
| Total       | 145 | 134 | 127 | 130 | 105 | 127 | 100 | 78  | 103 | 114        | 85         | 16         | 1265 |

**Exhibit 8: Forecasted European government bond gross supply in 2023**

Monthly supply through the quarter

Source: BofA Global Research. Note: Numbers are expressed in EUR bn.

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**Exhibit 9: Projected supply net of coupons, redemptions, buybacks and QE**

Monthly supply through the year

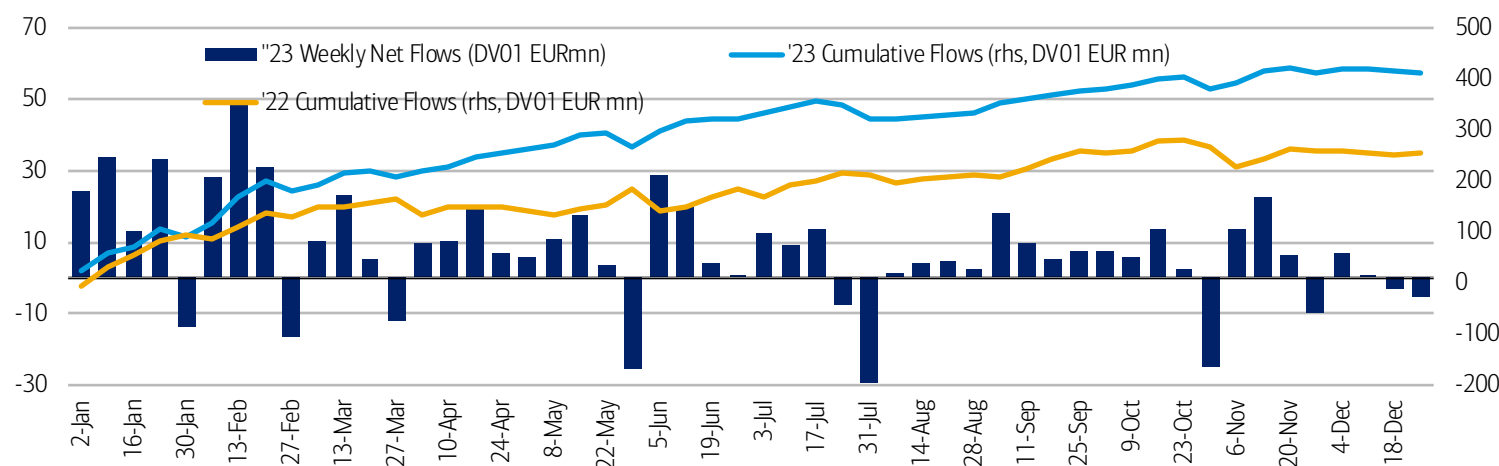
|              | Jan       | Feb       | Mar       | Apr       | May        | Jun       | Jul       | Aug       | Sep       | Oct        | Nov       | Dec       | 2023       |
|--------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|------------|
| Austria      | 6         | 2         | 1         | 1         | 2          | 1         | -6        | 1         | 1         | -3         | 3         | 1         | 10         |
| Belgium      | 7         | 6         | 2         | 5         | 4          | -9        | 3         | 3         | 2         | -5         | 0         | 0         | 19         |
| Finland      | 4         | 0         | 2         | 1         | 1          | 2         | 0         | 3         | -3        | 1          | 2         | 0         | 13         |
| France       | 27        | 19        | 9         | 6         | -23        | 28        | 4         | 19        | 28        | -14        | 17        | 4         | 123        |
| Germany      | 26        | 12        | 14        | 2         | 8          | 11        | 22        | 13        | 11        | 10         | 23        | -8        | 143        |
| Greece       | -2        | 0         | 2         | 0         | 0          | 0         | 2         | 0         | 0         | 1          | 0         | 0         | 3          |
| Ireland      | 4         | 0         | -6        | 0         | 0          | 1         | 0         | 0         | 1         | 0          | 0         | 0         | 0          |
| Italy        | 14        | 27        | -1        | 28        | -7         | 19        | 15        | -22       | 2         | 3          | -7        | -9        | 60         |
| Netherlands  | -8        | 9         | 4         | 7         | 2          | 4         | -11       | 0         | 2         | 5          | 6         | 0         | 20         |
| Portugal     | 3         | 4         | 1         | -1        | 0          | 0         | 1         | 0         | 2         | -8         | 0         | 0         | 1          |
| Spain        | 0         | 18        | 15        | 12        | -5         | 25        | -9        | 5         | 12        | -7         | 1         | 4         | 71         |
| <b>Total</b> | <b>81</b> | <b>95</b> | <b>42</b> | <b>60</b> | <b>-18</b> | <b>81</b> | <b>19</b> | <b>24</b> | <b>59</b> | <b>-18</b> | <b>46</b> | <b>-7</b> | <b>465</b> |

Source: BofA Global Research. Note: Numbers are expressed in EUR bn.

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**Exhibit 10: Weekly DV01 of gross issuance net of reinvestment flows (from privates and ECB)**

Net supply in DV01 terms accelerates markedly in September



Source: ECB, Treasuries, Own calcs

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**Eurozone bond supply/redemption quarterly****Exhibit 11: Euro-area government bond auctions (incl. fixed coupons, IL, CTZ, CCT), coupons and redemptions (only EUR) for Q4 2023**

Flows through the quarter

| Auctions    | Date  | Ctry | Amt        | Sector(s)      | Date  | Country | Amount | Type   |
|-------------|-------|------|------------|----------------|-------|---------|--------|--------|
| Syndication | Oct   | AS   | 3.0-5.0(e) | TBA            |       |         |        |        |
|             | Oct   | SP   | 4.0-6.0(e) | TBA            |       |         |        |        |
|             | Oct   | NE   | 4.0-5.0    | 20y Green DSL  |       |         |        |        |
| Wk 40       | 3-Oct | AS   | 1.0-2.0(e) | RAGB           | Wk 40 | 1-Oct   | IT     | 16.0 R |
|             | 4-Oct | GE   | 3.0        | DBR 2.4% 11/30 |       | 1-Oct   | IT     | 1.1 C  |
|             | 5-Oct | SP   | 5.5-6.5(e) | SPGB/SPGB€I    |       |         |        |        |



**Exhibit 11: Euro-area government bond auctions (incl. fixed coupons, IL, CTZ, CCT), coupons and redemptions (only EUR) for Q4 2023**

Flows through the quarter

| Auctions  | Date   | Ctry | Amt                 | Sector(s)                    |       | Date      | Country | Amount | Type    |
|-----------|--------|------|---------------------|------------------------------|-------|-----------|---------|--------|---------|
|           | 5-Oct  | FR   | 9.0-10.5            | >8y OAT                      |       |           |         |        |         |
| Wk 41     | 10-Oct | GE   | 0.6-0.7(e)          | DBRi                         | Wk 41 | 13-Oct    | GE      | 18.5   | R       |
|           | 11-Oct | GE   | 1.5                 | DBR 0% 08/52                 |       |           |         |        |         |
|           | 11-Oct | GE   | 1.0                 | DBR                          |       |           |         |        |         |
|           | 11-Oct | PO   | 0.75-1.25(e)        | PGB (potential auction)      |       |           |         |        |         |
|           | 12-Oct | IT   | 7.0-9.0(e)          | 3y BTPS, 7y BTPS, >10y BTPS  |       |           |         |        |         |
| Wk 42     | 17-Oct | FI   | 1.0-1.5             | RFGB                         | Wk 42 | 15-Oct    | IT      | 16.1   | R       |
|           | 17-Oct | NE   | 4.0-5.0(e)          | New Green 20y DSL            |       | 15-Oct    | GE      | 0.7    | C       |
|           | 17-Oct | GE   | 5.0                 | BKO 12/25                    |       | 15-Oct    | IT      | 2.7    | C       |
|           | 18-Oct | GE   | 4.0                 | DBR 2.6% 8/33                |       | 20-Oct    | AS      | 12.1   | R       |
|           | 18-Oct | GR   | 0.1-0.3(e)          | GGB                          |       | 20-Oct    | AS      | 0.6    | C       |
|           | 19-Oct | SP   | 5.5-6.5(e)          | SPGB                         |       |           |         |        |         |
| Wk 43     | 23-Oct | BE   | 2.0-3.0(e)          | BGB                          | Wk 43 | 22-Oct    | BE      | 8.3    | R       |
|           | 24-Oct | NE   | 1.5-2.5(e)          | DSL                          |       | 25-Oct    | FR      | 44.9   | R       |
|           | 24-Oct | GE   | 4.0                 | OBL 2.4% 10/28               |       | 25-Oct    | PO      | 9.4    | R       |
|           | 25-Oct | GE   | 1.25                | DBR 1% 05/2038               |       | 25-Oct    | FR      | 8.9    | C       |
|           | 25-Oct | GE   | 0.75                | DBR                          |       |           |         |        |         |
|           | 25-Oct | IT   | 3.0-5.0(e)          | BTPShort, BTPeI              |       |           |         |        |         |
|           | 25-Oct | PO   | 0.75-1.25(e)        | PGB (potential auction)      |       |           |         |        |         |
|           | 26-Oct | FI   | 0.4(e)              | RFGB ORI                     |       |           |         |        |         |
| Wk 44     | 31-Oct | GE   | 1.0(e)              | Green DBR                    | Wk 44 | 30-Oct    | IT      | 0.5    | C       |
|           | 31-Oct | IT   | 7.0-9.0(e)          | 5y BTPS, 10y BTPS, CCTeu     |       | 31-Oct    | SP      | 21.1   | R       |
|           |        |      |                     |                              |       | 31-Oct    | SP      | 8.8    | C       |
| Total Oct |        |      | up to €70.6-85.9(e) |                              |       | Total Oct |         |        | € 169.7 |
| Wk 44     | 1-Nov  | GE   | 3.0                 | DBR 2.4% 11/30               | Wk 44 | 1-Nov     | IT      | 12.0   | R       |
|           | 2-Nov  | SP   | 5.5-6.5(e)          | SPGB/SPGBeI                  |       | 1-Nov     | IT      | 4.8    | C       |
|           | 2-Nov  | FR   | 9.5-11.5(e)         | >8y OAT                      |       |           |         |        |         |
|           | 3-Nov  | BE   | 0.5-0.7(e)          | ORI Facility                 |       |           |         |        |         |
| Wk 45     | 7-Nov  | AS   | 1.0-2.0(e)          | RAGB                         | Wk 45 |           |         |        |         |
|           | 8-Nov  | GE   | 4.0                 | DBR 2.6% 8/33                |       |           |         |        |         |
|           | 10-Nov | IT   | 7.0-9.0(e)          | 3y BTPS, 7y BTPS, >10y BTPS  |       |           |         |        |         |
| Wk 46     | 14-Nov | NE   | 1.5-2.5(e)          | DSL                          | Wk 46 | 15-Nov    | GE      | 0.6    | C       |
|           | 14-Nov | GE   | 5.0                 | BKO 12/25                    |       | 15-Nov    | IT      | 1.0    | C       |
|           | 15-Nov | GE   | 1.0                 | DBR 0% 08/52                 |       |           |         |        |         |
|           | 15-Nov | GE   | 1.0                 | DBR                          |       |           |         |        |         |
|           | 15-Nov | PO   | 0.75-1.25(e)        | PGB (potential auction)      |       |           |         |        |         |
|           | 15-Nov | GR   | 0.1-0.3(e)          | GGB                          |       |           |         |        |         |
|           | 16-Nov | SP   | 5.5-6.5(e)          | SPGB                         |       |           |         |        |         |
|           | 16-Nov | FR   | 9.5-11.5(e)         | 2-8y OAT/OATe                |       |           |         |        |         |
| Wk 47     | 21-Nov | GE   | 3.5                 | OBL 2.4% 10/28               | Wk 47 | 20-Nov    | IT      | 6.3    | R       |
|           | 21-Nov | FI   | 1.0-1.5             | RFGB                         |       | 25-Nov    | FR      | 2.7    | C       |
|           | 22-Nov | GE   | 1.0                 | DBR 1% 05/38                 |       |           |         |        |         |
|           | 22-Nov | GE   | 0.5                 | DBR                          |       |           |         |        |         |
|           | 24-Nov | IT   | 3.0-5.0(e)          | BTPShort, BTPeI              |       |           |         |        |         |
| Wk 48     | 29-Nov | GE   | 3.5                 | DBR 2.6% 8/33                | Wk 48 | 29-Nov    | IT      | 13.1   | R       |
|           | 29-Nov | IT   | 7.0-9.0(e)          | 5y BTPS, 10y BTPS, CCTeu     |       | 30-Nov    | SP      | 5.5    | R       |
|           |        |      |                     |                              |       | 30-Nov    | SP      | 0.9    | C       |
| Total Nov |        |      | up to €74.4-89.8(e) |                              |       | Total Nov |         |        | € 46.9  |
| Wk 48     |        |      |                     |                              | Wk 48 | 1-Dec     | IT      | 2.5    | C       |
| Wk 49     | 5-Dec  | GE   | 4.5                 | BKO 12/25                    | Wk 49 |           |         |        |         |
|           | 7-Dec  | FI   | 0.4(e)              | RFGB ORI                     |       |           |         |        |         |
|           | 7-Dec  | FR   | 9.5-11.5(e)         | >8y OAT or/and 2-8y OAT/OATe |       |           |         |        |         |
|           | 7-Dec  | SP   | 5.5-6.5(e)          | SPGB/SPGBeI                  |       |           |         |        |         |
| Wk 50     | 12-Dec | AS   | 1.0-2.0(e)          | RAGB                         | Wk 50 | 15-Dec    | GE      | 18.0   | R       |
|           | 14-Dec | SP   | 5.5-6.5(e)          | SPGB (potential auctions)    |       | 15-Dec    | IT      | 7.7    | R       |
|           | 15-Dec | BE   | 0.5-0.7(e)          | ORI Facility                 |       | 15-Dec    | IT      | 1.1    | C       |
| Wk 51     |        |      |                     |                              | Wk 51 | 22-Dec    | IT      | 3.1    | R       |
| Wk 52     | 27-Dec | IT   | 3.0-5.0(e)          | BTPShort                     | Wk 52 |           |         |        |         |
| Total Dec |        |      | up to €29.9-37.1(e) |                              |       | Total Dec |         |        | € 32.4  |

Source: BoFA Global Research estimates and national debt GE management agencies. Note: Numbers are expressed in EUR bn. In the leftmost column, C indicates a coupon payment, R a redemption

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**Exhibit 12: Common acronyms/abbreviations used in our reports**

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| Acronym/Abbreviation | Definition  | Acronym/Abbreviation | Definition   |
|----------------------|---|----------------------|--|
| 1H                   | First Half  | IT                   | Italy  |
| 2H                   | Second Half   | Jan                  | January  |
| 1Q                   | First Quarter   | Jul                  | July   |
| 2Q                   | Second Quarter  | Jun                  | June   |
| 3Q                   | Third Quarter   | lhs                  | left-hand side   |
| 4Q                   | Fourth Quarter  | m                    | month  |
| ann                  | annualized  | MA                   | Moving Average   |
| APP                  | Asset Purchase Programme                              | Mar                  | March  |
| Apr                  | April   | MBM                  | Meeting-by-meeting                                     |
| AS                   | Austria   | mom                  | month-on-month   |
| Aug                  | August  | Mon                  | Monday   |
| BdF                  | Banque de France (Bank of France)                     | MPC                  | Monetary Policy Committee                              |
| BE                   | Belgium   | MWh                  | Megawatt-hour  |
| BEA                  | Bureau of Economic Analysis                           | NGEU                 | NextGenerationEU                                       |
| BLS                  | Bank Lending Survey                                   | NE                   | Netherlands  |
| BoE                  | Bank of England                                       | Nov                  | November   |
| BofA                 | Bank of America                                       | NRRP                 | National Recovery and Resilience Plan                  |
| BoI                  | Banca d'Italia (Bank of Italy)                        | NSA                  | Non-seasonally Adjusted                                |
| BoJ                  | Bank of Japan   | OAT                  | Obligations assimilables du Trésor                     |
| BoS                  | Banco de España (Bank of Spain)                       | OBR                  | Office for Budget Responsibility                       |
| bp                   | basis point   | Oct                  | October  |
| BTP                  | Buoni Poliennali del Tesoro                           | OECD                 | Organisation for Economic Co-operation and Development |
| Buba                 | Bundesbank  | ONS                  | Office for National Statistics                         |
| c                    | circa   | p                    | preliminary/flash print                                |
| CA                   | Current Account                                       | PBoC                 | People's Bank of China                                 |
| CPI                  | Consumer Price Index                                  | PEPP                 | Pandemic Emergency Purchase Programme                  |
| CSPP                 | Corporate Sector Purchase Programme                   | PMI                  | Purchasing Managers' Index                             |
| d                    | day   | PSPP                 | Public Sector Purchase Programme                       |
| GE                   | Germany   | PT                   | Portugal   |
| Dec                  | December  | QE                   | Quantitative Easing                                    |
| DS                   | Debt sustainability                                   | qoq                  | quarter-on-quarter                                     |
| EA                   | Euro area   | QT                   | Quantitative Tightening                                |
| EC                   | European Commission                                   | RBA                  | Reserve Bank of Australia                              |
| ECB                  | European Central Bank                                 | RBNZ                 | Reserve Bank of New Zealand                            |
| ECJ                  | European Court of Justice                             | rhs                  | right-hand side  |
| EFSF                 | European Financial Stability Facility                 | RPI                  | Retail Price Index                                     |
| EGB                  | European Government Bond                              | RRF                  | Recovery and Resilience Facility                       |
| EIB                  | European Investment Bank                              | SA                   | Seasonally Adjusted                                    |
| EMOT                 | Economic Mood Tracker                                 | SAFE                 | Survey on the access to finance of enterprises         |
| EP                   | European Parliament                                   | Sat                  | Saturday   |
| SP                   | Spain   | Sep                  | September  |
| ESI                  | Economic Sentiment Indicator                          | SMA                  | Survey of Monetary Analysts                            |
| ESM                  | European Stability Mechanism                          | SNB                  | Swiss National Bank                                    |
| EU                   | European Union  | SPF                  | Survey of Professional Forecasters                     |
| f                    | final print   | Sun                  | Sunday   |
| Feb                  | February  | SURE                 | Support to mitigate Unemployment Risks in an Emergency |
| Fed                  | Federal Reserve                                       | S&P                  | Standard & Poor's                                      |
| FR                   | France  | Thu                  | Thursday   |
| Fri                  | Friday  | TLTRO                | Targeted Longer-term Refinancing Operations            |
| GC                   | Governing Council                                     | TPI                  | Transmission Protection Instrument                     |
| GDP                  | Gross Domestic Product                                | TTF                  | Title Transfer Facility                                |
| GNI                  | Gross National Income                                 | Tue                  | Tuesday  |
| GR                   | Greece  | UK                   | United Kingdom   |
| HICP                 | Harmonised Index of Consumer Prices                   | US                   | United States  |
| HMT                  | His Majesty's Treasury                                | WDA                  | Work-day Adjusted                                      |
| IMF                  | International Monetary Fund                           | Wed                  | Wednesday  |
| INSEE                | National Institute of Statistics and Economic Studies | y                    | year   |
| IP                   | Industrial Production                                 | yoy                  | year-on-year   |
| IR                   | Ireland   | ytd                  | year-to-date   |
| PCA                  | Principal Component Analysis                          | EGB                  | Eurozone Government Bond                               |
| ORI                  | Optional Reverse Inquiry                              | C&R                  | Coupons and redemptions                                |
| DV01                 | Dollar Value of one basis points change               |                      |  |

**Exhibit 12: Common acronyms/abbreviations used in our reports**  
This list is subject to change

| Acronym/Abbreviation         | Definition | Acronym/Abbreviation | Definition           |
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