

MNI EGB Issuance, Redemption and Cash Flow Matrix - W/C January 16, 2023

13 January 2023 - By Tim Davis

THE WEEK AHEAD:

Slovakia, Germany, Finland, Spain and France are all due to hold auctions next week while we also pencil in a Greek syndication. We look for **gross nominal issuance at first round operations of E30.5bln** for these deals, down from E51.5bln this week.

- The week ahead should be a little quieter for syndications. We see a good chance of a **Greek syndication**. We do not have a strong conviction on what maturity will be on offer but think it would be unlikely to see a new 10-year GGB with a maturity in 2033 given that there is already over E12bln of debt servicing costs in that year (and the PDMA at present is keeping debt servicing costs below E13bln per year). In contrast there is plenty of scope to reopen the 1.75% Jun-32 GGB that was launched in June 2022 with just E3.7bln outstanding and only around E9bln of debt servicing costs due in 2032 at present. MNI also thinks there is a chance that a new 2034 bond is launched in 2023 (although the launch of this could be delayed to January 2024).
- In terms of auctions, **Slovakia** will kick off on Monday with the 4-year 0.125% Jun-27 SlovGB (ISIN: SK4000017380), the 4.00% 10-year Oct-32 SlovGB (ISIN: SK4000021986), the 15-year 0.375% Apr-36 SlovGB (ISIN: SK4000018958) and the 25-year 2.00% Oct-47 SlovGB (ISIN: SK4120013400) all on offer.
- On Tuesday, **Germany** will look to launch the new Apr-28 Bobl (ISIN: DE000BU25000) via auction for E5bln. The coupon will be confirmed on Monday but is expected to be at least 2%.
- Also Tuesday, **Finland** will look to sell up to E750mln of each of the 5-year 1.375% Apr-27 RFGB (ISIN: FI4000527551) and the 10-year 1.50% Sep-32 RFGB (ISIN: FI4000523238).
- **Germany** will return to the market on Wednesday to hold the first of its dual-line 30-year Bund auctions. On offer will be E1.0bln of the 0% Aug-50 Bund (ISIN: DE0001102481) and E1.5bln of the 1.80% Aug-53 Bund (ISIN: DE0001102614).
- **Spain** will come to the market on Thursday with the following Oblis on offer: the 0% Jan-28 Obli (ISIN: ES0000012108), the 0.50% Apr-30 Obli (ISIN: ES0000012F76) and the 4.90% Jul-40 Obli (ISIN: ES00000120N0). The auction size will be confirmed on Monday.
- Also Thursday, **France** will look to sell E9-10bln of MT OATs. On offer will be last year's 3-year 0% Feb-25 OAT (ISIN: FR0014007TY9), the 5-year 0.75% Feb-28 OAT (ISIN: FR001400AIN5) and the off-the-run 0.50% May-29 OAT (ISIN: FR0013407236).
- **France** will then conclude issuance for the week with its linker auction with a combined E1.25-1.75bln on offer of the 0.10% Mar-29 OATeI (ISIN: FR0013410552), the 0.10% Jul-36 OATeI (ISIN: FR0013327491) and the 0.10% Mar-32 OATi (ISIN: FR0014003N51).

NET NOMINAL FLOWS: The upcoming week sees the first redemptions of 2023 with a total of E31.9bln due. E15.2bln of this is a formerly 3-year BTP, E12.5bln is Dutch (E4.3bln of a formerly 15y DSL and E8.2bln of a formerly 30-year DSL), E4.0bln of an originally 8-year EFSF bond and E0.2bln of a Cypriot bond. In addition there will be coupon payments of E4.7bln due (of which E4.0bln are Portuguese). With gross nominal issuance of E30.5bln **we look for net flows of negative -E6.1bln in the week ahead**, down from this week's positive E51.4bln of net issuance.

For a calendar of all announced EGB/EU/ESM/EFSS auctions [see the MNI EZ/UK Bond Supply Calendar here.](#)

RECAP:

The EU, the Netherlands, Austria, Germany, Spain and Italy have all held auctions this week. We have also seen syndications from the EFSF, Belgium, Italy and Latvia. We pencil in **gross nominal issuance at first round operations of E51.5bln** for these deals. In gross nominal terms, **this week's issuance is in the top five amounts since the beginning of 2019.**

- The **EU** kicked off the week's auctions on Monday selling E2.796bln (against a limit of E3.0bln) of the 0.80% Jul-25 EU NGEU (ISIN: EU000A3K4DJ5) and E1.885bln (against a limit of E2.0bln) of the 0.45% Jul-41 EU NGEU (ISIN: EU000A3KT6B1). This auction marked another step up in auction size to a combined E5bln on offer.
- The **EFSF** held a dual-tranche 3/10-year syndication on Monday selling E2bln of the new 2.75% Aug-26 EFSF (ISIN: EU000A2SCAF5) and E4bln of the new 2.875% Feb-33 EFSF (ISIN: EU000A2SCAG3).
- **Belgium** launched its new 10-year 3.00% Jun-33 OLO (ISIN: BE0000357666) on Tuesday via syndication for E7bln – the largest Belgian syndication since March 2020. Demand was very strong with books closing in excess of E51bln.
- **Italy** held a syndication on Tuesday, launching its new 20-year 4.45% Sep-43 BTP (ISIN: IT0005530032) for E7bln with books of E26.5bln.
- **Latvia** also held a syndication Tuesday, selling a new 5-year 3.50% Jan-28 bond for E750mln with books of E3.7bln.
- In terms of Tuesday auctions, the **Netherlands** sold E3.485bln of the 3-year 0% Jan-26 DSL (ISIN: NL0015000QL2), the top of the target range. The full 15% non-competitive allotment was taken up, increasing the issue size to E4.0bln.
- Also Tuesday, **Austria** sold a combined E1.15bln (E1.00bln allotted) of 3.5/25-year RAGBs: E460mln (E400mln allotted) of the 3.5-year 2.00% Jul-26 RAGB (ISIN: AT0000A308C5) and E690mln (E600mln allotted) the 25-year 1.50% Feb-47 RAGB (ISIN: AT0000A1K9F1).
- Tuesday saw the first linker auction of the year in a technically uncovered auction with **Germany** offering E500mln of the 0.10% Apr-33 ILB (ISIN: DE0001030583) but only receiving bids of E463mln and allotting E308mln.
- On Wednesday, **Germany** launched its new 10-year 2.30% Feb-33 Bund (ISIN: DE000BU2Z007) for E5bln (E4.507bln allotted) via auction. This was the first 10-year Bund to see a coupon exceed 2% in a decade and was a strong auction. There have only been two 10y Bund auctions with higher volumes of bids since February 2021.
- On Thursday, **Spain** held its largest auction since June 2020, raising E6.428bln – close to the top of the E5.5-6.5bln target range of nominal Bonos/Oblis. It launched E2.864bln of its new 3-year 2.80% May-26 Bono (ISIN: ES0000012L29) and reopened E2.088bln of the 7-year 0.80% Jul-29 Obli (ISIN: ES0000012K53) and E1.475bln of the 23-year 2.90% Oct-46 Obli (ISIN: ES00000128C6). Also sold was E507mln (close to the middle of the target range) of the 10-year 0.70% Nov-33 Obli-Ei (ISIN: ES0000012C12).
- Finally on Thursday, **Italy** held its mid-month auction, selling at the top of the target range for both the 3-year and 7-year BTPs: E3.5bln of each of the 3-year 3.50% Jan-26 BTP (ISIN: IT0005514473) and the 7-year 3.85% Dec-29 BTP (ISIN: IT0005519787). The 15-50-year part of the auction was not held due to Tuesday's 20-year BTP syndication. A further E700mln of each was sold in the second round.

NET NOMINAL FLOWS: This week saw no redemptions and only negligible coupon payments. **We therefore saw net flows of E51.4bln this week.**

MNI Eurozone Net Cash Flow Matrix

Week beginning 16-Jan-2023

2023 Redemption Payments				
Maturity	Country	Issue	Coupon	Amount (Ebn)
15-Jan	Italy	BTP	0.05	15.22
15-Jan	Netherlands	DSL	3.75	4.26
15-Jan	Netherlands	DSL	7.50	8.24
18-Jan	Cyprus	CYPGB	3.25	0.22
20-Jan	EFSF	EFSF	0.50	3.97
30-Jan	Greece	GGB	3.50	4.36
31-Jan	Spain	Obli	5.40	21.67
10-Feb	ESM	ESM	0.00	3.00
10-Feb	EU	EU	2.00	0.05
15-Feb	Germany	Bund	1.50	20.50
24-Feb	Greece	GGB Step	4.30	0.13
25-Feb	France	OAT	0.00	10.01
28-Feb	Slovakia	SLOVGB	3.00	2.97
28-Feb	Lithuania	LITHGB	4.10	0.12
01-Mar	Italy	BTP	0.95	15.52
10-Mar	Germany	Schatz	0.00	16.00
15-Mar	Italy	BTP	0.95	15.37
20-Mar	Ireland	IGB	3.90	7.01
20-Mar	Greece	GGB	2.90	0.00
25-Mar	France	OAT	0.00	26.33
29-Mar	Italy	Italy EMTN - FC, fixed	0.89	0.18
31-Mar	Slovenia	SLOREP	0.20	1.10
01-Apr	Lithuania	LITHGB	0.10	0.77
14-Apr	Germany	Bobl	0.00	18.50
14-Apr	Latvia	Latvia - EUR, fixed	0.13	1.00
15-Apr	Finland	RFGB	1.50	5.00
15-Apr	Germany	IL Bund	EU CPI+10	20.59
20-Apr	Austria	RAGB	0.00	6.19
20-Apr	Italy	BTP Italia	IT CPI+50	9.71
24-Apr	EFSF	EFSF	0.00	3.00
25-Apr	France	OAT	8.50	10.61
30-Apr	Spain	Bono	0.00	21.80
01-May	Italy	BTP	4.50	17.66
02-May	Austria	Austria EMTN - EUR, float	Floating	0.10
02-May	Austria	Austria Int - CPI	FR CPI+275	0.00
05-May	Malta	MALTA	0.50	0.13
10-May	Slovenia	Slovenia Int	5.85	0.12
12-May	Latvia	LATVGB	0.25	0.27
15-May	Germany	Bund	1.50	22.50
15-May	Italy	BTPei	EU CPI+10	11.93
22-May	Italy	BTP Italia	IT CPI+45	8.90
23-May	EFSF	EFSF	1.88	5.00
25-May	France	OAT	1.75	41.70
15-Jun	Italy	BTP	0.60	12.28
16-Jun	Germany	Schatz	0.00	16.00
22-Jun	Belgium	OLO	2.25	12.68
22-Jun	Belgium	Belgium EMTN - EUR, Float	Floating	0.11
29-Jun	Lithuania	LITHGB	0.60	0.17
01-Jul	Cyprus	CYPGB	6.00	0.00
06-Jul	Malta	MALTA	5.50	0.08
10-Jul	Luxembourg	LGB	2.13	2.00
15-Jul	Austria	RAGB	0.00	9.79
15-Jul	Netherlands	DSL	1.75	17.51
15-Jul	Italy	CCTEU	EURIBOR 6m +70	11.73
17-Jul	EFSF	EFSF	0.00	3.00
25-Jul	France	OATI	FR CPI+210	22.47
26-Jul	Cyprus	Cyprus - EUR, fixed	3.75	1.00
30-Jul	Spain	Bono	0.35	21.18
31-Jul	ESM	ESM	0.10	4.00
01-Aug	Italy	BTP	4.75	21.83
15-Aug	Germany	Bund	2.00	22.50
15-Aug	Italy	BTP	0.30	16.29
16-Aug	Lithuania	LITHGB	0.40	0.70
08-Sep	ESM	ESM USD Bond	0.25	1.85
15-Sep	Germany	Schatz	0.00	16.00
15-Sep	Finland	RFGB	0.00	5.78
15-Sep	Italy	BTPei	EU CPI+260	24.28
27-Sep	Italy	Italy Eurobond - FX, fixed	6.88	3.24
01-Oct	Italy	BTP	2.45	16.50
13-Oct	Germany	Bobl	0.00	18.50
15-Oct	Italy	BTP	0.65	17.23
16-Oct	Slovakia	Slovakia Int - FC	2.13	0.17
17-Oct	EFSF	EFSF	0.13	5.00
20-Oct	Austria	RAGB	1.75	11.95
22-Oct	Belgium	OLO	0.20	8.61
25-Oct	France	OAT	4.25	44.92
25-Oct	Portugal	PGB	4.95	10.03
31-Oct	Spain	Obli	4.40	21.07
01-Nov	Italy	BTP	9.00	11.98
02-Nov	Latvia	LATVGB	0.50	0.25
04-Nov	EU	EU	0.63	3.50
11-Nov	Malta	MALTA	1.40	0.15
13-Nov	Slovakia	SLOVGB	0.00	1.43
20-Nov	Italy	BTP Italia	IT CPI+25	7.37
20-Nov	ESM	ESM	2.13	3.99
29-Nov	Italy	BTP Short Term	0.00	13.11
30-Nov	Spain	Bono-i	EU CPI+15	6.46
15-Dec	Germany	Schatz	0.00	18.00
15-Dec	Italy	CCTEU	EURIBOR 6m +55	9.06
22-Dec	Italy	BTP	8.50	3.10
31-Dec	Malta	MALTA	7.00	0.00

* Amounts include estimations of inflation uplifts
* Amount is converted to euros for foreign currency issues

Eurozone Govt Supply

Date	Country	Issue	Amount
16-Jan	Slovakia	0.125% Jun-27 SlovGB	
16-Jan	Slovakia	4.00% Oct-32 SlovGB	
16-Jan	Slovakia	0.375% Apr-36 SlovGB	
16-Jan	Slovakia	2.00% Oct-47 SlovGB	
17-Jan	Germany	Apr-28 Bobl	E5bn
17-Jan	Finland	1.375% Apr-27 RFGB	E750m
17-Jan	Finland	1.50% Sep-32 RFGB	E750m
18-Jan	Germany	0% Aug-50 Bund	E1.0bn
18-Jan	Germany	1.80% Aug-53 Bund	E1.5bn
19-Jan	Spain	0% Jan-28 Obli	TBA 16-Jan
19-Jan	Spain	0.50% Apr-30 Obli	TBA 16-Jan
19-Jan	Spain	4.90% Jul-40 Obli	TBA 16-Jan
19-Jan	France	0% Feb-25 OAT	E9-10bn
19-Jan	France	0.75% Feb-28 OAT	Shared
19-Jan	France	0.50% May-29 OAT	Shared
19-Jan	France	0.10% Mar-29 OATei	E1.25-1.75bn
19-Jan	France	0.10% Jul-36 OATei	Shared
19-Jan	France	0.10% Mar-32 OATI	Shared

Weekly supply

E27.5bn



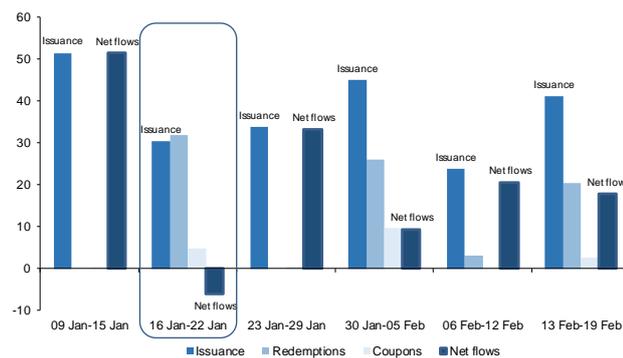
Upcoming Coupon Payments

Country	Amount (Ebn)
Total w/c 9-Jan	0.0
...largest payments	
Total w/c 16-Jan	4.7
...largest payments	
Portugal	4.0
Italy	0.4
Total w/c 23-Jan	0.5
...largest payments	
Belgium	0.1
Total w/c 30-Jan	9.6
...largest payments	
Austria	4.5
Italy	4.0
Total w/c 6-Feb	0.1
...largest payments	
Total w/c 13-Feb	2.7
...largest payments	
Germany	1.3
Portugal	0.9

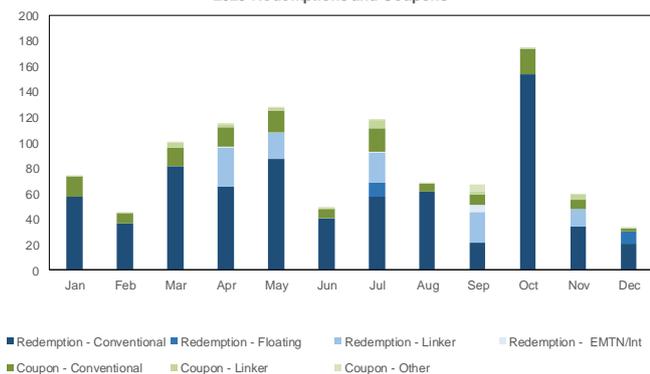
Net Cash Flow Matrix (Ebn)

	09 Jan-15 Jan	16 Jan-22 Jan	23 Jan-29 Jan	30 Jan-05 Feb	06 Feb-12 Feb	13 Feb-19 Feb
Issuance*	51.5	30.5	33.8	45.0	23.8	41.0
Redemptions		31.9		26.0	3.1	20.5
Coupons	0.0	4.7	0.5	9.6	0.1	2.7
Net Flows	51.4	-6.1	33.3	9.4	20.6	17.8

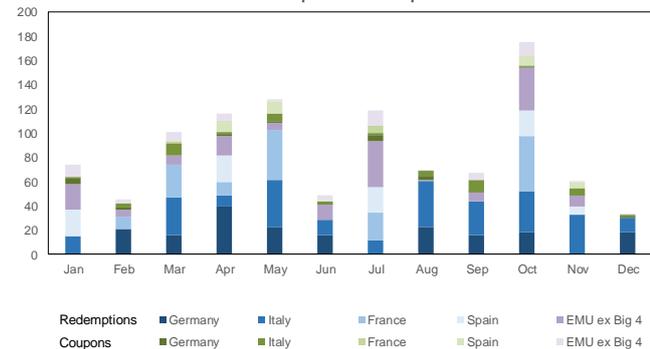
Weekly Net Cash Flows (Ebn)



2023 Redemptions and Coupons



2023 Redemptions and Coupons



mni Eurozone Issuance Profile

2023 Issuance

	Austria	Belgium	Finland	France	Germany	Greece	Ireland	Italy	Neth.	Portugal	Slovakia	Slovenia	Spain	EU	EFSF	ESM	Total	Other
YTD Issuance	6.2	7.0	0.0	15.0	10.5	0.0	3.5	15.4	4.0	3.0	0.0	1.5	6.9	4.7	6.0	0.0	83.7	0.8
YTD Cash Proc.	5.9	7.0	0.0	12.2	10.6	0.0	3.4	15.4	3.7	2.9	0.0	1.5	6.6	3.8	6.0	0.0	79.1	0.8
2022 Target	45.0	47.0	17.5	270.0	305.0	7.0	9.0	315.0	50.0	19.8	8.0	5.0	172.5	158.0	20.0	8.0	1456.8	
YTD Cash % Trgt	13.2	14.9	0.0	4.5	3.5	0.0	38.3	4.9	7.4	14.8	0.0	29.5	3.8	2.4	29.8	0.0	5.4	
Cash Proceeds:																		
<3.5 YR	-	-	-	-	5.0	-	-	4.2	3.7	-	-	-	2.9	2.7	-	-	18.4	0.0
3.5 - 5.5 YR	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.4	-
5.5 - 8 YR	-	-	-	-	-	-	-	4.2	-	-	-	-	1.8	-	-	-	6.1	0.1
8 - 11 YR	5.0	7.0	-	7.4	5.0	-	-	-	-	-	-	1.2	-	4.0	-	-	29.6	-
11 - 16 YR	-	-	-	1.8	-	-	-	-	-	2.9	-	-	-	-	-	-	4.8	-
16 - 21 YR	-	-	-	-	-	-	3.4	7.0	-	-	-	-	-	1.2	-	-	11.6	-
21 - 26 YR	0.5	-	-	-	-	-	-	-	-	-	-	0.2	1.4	-	-	-	2.1	-
26 - 32 YR	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-
32 YR +	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-
Total conv	5.9	7.0	-	12.2	10.0	-	3.4	15.4	3.7	2.9	-	1.5	6.0	3.8	6.0	-	77.9	0.1
CCTeu / FRN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
< 6 YR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 - 11 YR	-	-	-	-	0.6	-	-	-	-	-	-	-	0.6	-	-	-	1.2	-
11 - 21 YR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 32 YR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total linker	-	-	-	-	0.6	-	-	-	-	-	-	-	0.6	-	-	-	1.2	-
EMTN/Fgn Debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7

2023 Issuance: Nominal

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<3.5 YR	18.9	-	-	-	-	-	-	-	-	-	-	-	18.9
3.5 - 5.5 YR	2.5	-	-	-	-	-	-	-	-	-	-	-	2.5
5.5 - 8 YR	6.3	-	-	-	-	-	-	-	-	-	-	-	6.3
8 - 11 YR	30.2	-	-	-	-	-	-	-	-	-	-	-	30.2
11 - 16 YR	5.3	-	-	-	-	-	-	-	-	-	-	-	5.3
16 - 21 YR	12.4	-	-	-	-	-	-	-	-	-	-	-	12.4
21 - 26 YR	2.4	-	-	-	-	-	-	-	-	-	-	-	2.4
26 - 32 YR	3.2	-	-	-	-	-	-	-	-	-	-	-	3.2
32 YR +	1.6	-	-	-	-	-	-	-	-	-	-	-	1.6
Total conv	82.8	-	-	-	-	-	-	-	-	-	-	-	82.8
CCTeu / FRN	-	-	-	-	-	-	-	-	-	-	-	-	-
< 6 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
6 - 11 YR	1.0	-	-	-	-	-	-	-	-	-	-	-	1.0
11 - 21 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 32 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
Total linker	1.0	-	-	-	-	-	-	-	-	-	-	-	1.0
EMTN/Fgn Debt	0.8	-	-	-	-	-	-	-	-	-	-	-	0.8
Total	84.5	-	-	-	-	-	-	-	-	-	-	-	84.5

2023 Issuance: Cash Proceeds

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<3.5 YR	18.5	-	-	-	-	-	-	-	-	-	-	-	18.5
3.5 - 5.5 YR	2.4	-	-	-	-	-	-	-	-	-	-	-	2.4
5.5 - 8 YR	6.1	-	-	-	-	-	-	-	-	-	-	-	6.1
8 - 11 YR	29.6	-	-	-	-	-	-	-	-	-	-	-	29.6
11 - 16 YR	4.8	-	-	-	-	-	-	-	-	-	-	-	4.8
16 - 21 YR	11.6	-	-	-	-	-	-	-	-	-	-	-	11.6
21 - 26 YR	2.1	-	-	-	-	-	-	-	-	-	-	-	2.1
26 - 32 YR	1.8	-	-	-	-	-	-	-	-	-	-	-	1.8
32 YR +	1.2	-	-	-	-	-	-	-	-	-	-	-	1.2
Total conv	78.0	-	-	-	-	-	-	-	-	-	-	-	78.0
CCTeu / FRN	-	-	-	-	-	-	-	-	-	-	-	-	-
< 6 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
6 - 11 YR	1.2	-	-	-	-	-	-	-	-	-	-	-	1.2
11 - 21 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
21 - 32 YR	-	-	-	-	-	-	-	-	-	-	-	-	-
Total linker	1.2	-	-	-	-	-	-	-	-	-	-	-	1.2
EMTN/Fgn Debt	0.7	-	-	-	-	-	-	-	-	-	-	-	0.7
Total	79.9	-	-	-	-	-	-	-	-	-	-	-	79.9

2022 Issuance: Nominal

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<3.5 YR	19.4	18.4	15.2	20.5	24.4	13.7	15.5	19.3	17.5	18.6	10.7	8.5	201.7
3.5 - 5.5 YR	22.7	24.6	17.6	15.8	22.2	15.6	11.4	17.6	26.6	22.8	16.9	1.3	215.0
5.5 - 8 YR	12.2	7.4	21.6	5.8	13.0	18.0	18.2	7.4	8.2	22.7	12.4	3.5	150.4
8 - 11 YR	46.7	26.2	38.0	30.3	26.5	28.7	32.5	16.0	27.3	21.1	30.9	4.1	328.3
11 - 16 YR	7.0	2.2	5.4	2.9	7.4	5.7	1.6	3.4	9.9	4.4	6.6	8.2	64.6
16 - 21 YR	7.7	2.1	2.0	12.4	5.7	5.6	3.0	-	15.5	7.6	2.0	1.1	64.6
21 - 26 YR	3.2	2.9	2.5	2.0	2.0	5.0	4.2	0.5	2.5	0.4	1.8	1.1	28.0
26 - 32 YR	17.0	20.9	6.4	5.4	12.6	9.7	7.9	1.5	12.7	11.6	5.8	1.8	113.3
32 YR +	2.0	-	0.2	2.1	2.2	-	-	0.2	0.2	1.2	-	0.5	8.6
Total conv	137.9	104.6	108.8	97.2	116.1	102.0	94.3	65.8	120.3	110.4	87.0	30.0	1174.6
CCTeu / FRN	1.7	0.8	5.0	1.5	1.4	1.2	2.4	1.3	0.2	2.2	-2.0	-	15.8
< 6 YR	2.1	1.0	-	1.2	-	-1.0	0.5	0.7	1.1	0.9	-1.2	-	5.0
6 - 11 YR	1.4	1.6	1.3	1.2	3.5	9.4	2.8	0.4	1.3	1.8	14.1	-	38.7
11 - 21 YR	1.2	5.3	3.3	1.1	4.8	1.0	0.5	0.7	1.0	1.2	-	-	20.2
21 - 32 YR	3.0	0.2	0.2	0.4	-	0.2	0.4	-	0.4	0.3	0.4	-	5.7
Total linker	7.6	8.1	4.8	3.9	8.3	9.7	4.1	1.7	3.8	4.2	13.3	-	69.5
EMTN/Fgn Debt	1.0	-0.5	0.4	0.4	0.8	0.1	0.1	0.2	0.1	3.2	-	-	5.6
Total	148.3	113.1	119.0	103.0	126.6	112.9	100.9	68.9	124.4	120.0	98.3	30.0	1265.5

2022 Issuance: Cash Proceeds

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<3.5 YR	19.5	18.3	15.1	20.3	24.3	13.6	15.3	19.1	17.5	18.0	10.5	8.4	200.0
3.5 - 5.5 YR	22.8	24.4	17.6	15.4	21.5	15.1	11.5	17.6	25.5	21.2	16.2	1.2	210.0
5.5 - 8 YR	12.2	7.3	21.4	5.7	12.9	16.6	17.8	7.2	7.4	21.4	12.0	3.6	145.5
8 - 11 YR	46.3	25.4	36.6	29.5	24.2	26.4	31.8	16.1	25.4	19.8	28.9	3.4	313.7
11 - 16 YR	7.0	2.3	5.2	2.4	7.3	4.8	1.5	3.3	9.3	3.4	5.7	7.7	60.1
16 - 21 YR	7.5	1.9	1.8	12.2	4.8	4.2	2.1	-	15.5	7.6	1.4	0.8	59.7
21 - 26 YR	3.2	2.7	3.6	2.4	2.1	4.9	3.3	0.6	2.5	0.3	1.9	1.2	28.7
26 - 32 YR	16.5	20.0	5.8	4.9	10.2	6.9	5.3	1.6	11.5	7.9	4.7	1.3	96.6
32 YR +	1.8	-	0.2	1.4	1.7	-	-	0.2	0.2	0.9	-	0.5	6.8
Total conv	136.8	102.3	107.3	94.3	108.9	92.5	88.6	65.7	114.8	100.5	81.3	28.1	1121.2
CCTeu / FRN	1.7	0.8	5.0	1.5	1.4	1.1	2.3	1.2	0.2	2.2	-2.1	-	15.4
< 6 YR	2.4	1.3	-	1.3	-	-0.5	0.5	1.0	1.2	0.9	-1.2	-	6.9
6 - 11 YR</													

Eurozone 2023 Coupons and Redemptions

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2023	
EMU															
Redemptions	Conventional	57.9	36.8	81.3	65.9	87.3	41.1	57.6	61.3	21.8	153.8	34.5	21.1	720.4	
	Floating	-	-	-	-	-	-	11.7	-	-	-	-	9.1	20.8	
	Linker	-	-	-	30.3	20.8	-	22.4	-	24.3	-	-	13.8	-	111.6
	EMTN/Int - EUR	-	-	-	1.0	0.1	0.1	1.0	-	-	-	-	-	-	2.2
	EMTN/Int - FX	-	-	0.2	-	0.1	-	-	-	5.2	0.2	-	-	-	5.6
	Total		57.9	36.8	81.5	97.1	108.3	41.2	92.7	61.3	51.2	154.0	48.3	30.2	860.6
Coupons	Conventional	15.6	7.8	14.7	15.3	17.0	7.0	18.4	7.1	8.1	19.7	7.1	2.4	140.2	
	Floating	0.1	0.1	0.0	0.3	-	0.1	0.1	0.1	0.0	0.3	-	0.1	1.2	
	Linker	-	-	3.8	2.5	1.9	0.2	6.4	-	2.4	0.3	4.0	0.2	21.5	
	EMTN/Int - EUR	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.1	0.3	0.2	0.2	0.1	2.8	
	EMTN/Int - FX	0.0	0.0	0.3	0.2	0.2	0.1	0.0	0.1	5.3	0.4	0.1	0.1	6.9	
	Total		16.0	8.1	19.2	18.5	19.3	7.6	25.4	7.4	16.1	20.9	11.3	2.8	172.6
Redemp+Coup Total		73.9	44.9	100.7	115.7	127.6	48.8	118.1	68.7	67.4	174.9	59.6	33.0	1033.2	
Germany															
Redemptions	Conventional	-	20.5	16.0	18.5	22.5	16.0	-	22.5	16.0	18.5	-	18.0	168.5	
	Linker	-	-	-	20.6	-	-	-	-	-	-	-	-	20.6	
	Total		-	20.5	16.0	39.1	22.5	16.0	-	22.5	16.0	18.5	-	18.0	189.1
Coupons	Conventional	4.8	1.3	-	-	0.8	0.0	5.8	3.0	0.1	0.4	0.2	0.2	16.6	
	Linker	-	-	-	2.1	-	-	-	-	-	-	-	-	2.1	
	Total	4.8	1.3	-	2.1	0.8	0.0	5.8	3.0	0.1	0.4	0.2	0.2	18.7	
Redemp+Coup Total	4.8	21.8	16.0	18.5	23.3	16.0	5.8	25.5	16.1	18.9	0.2	18.2	185.1		
Italy															
Redemptions	Conventional	15.2	-	30.9	-	17.7	12.3	-	38.1	-	33.7	25.1	3.1	176.1	
	Floating	-	-	-	-	-	-	11.7	-	-	-	-	9.1	20.8	
	Linker	-	-	-	9.7	20.8	-	-	-	24.3	-	7.3	-	62.1	
	EMTN/Int - EUR	-	-	-	-	-	-	-	-	-	-	-	-	0.0	
	EMTN/Int - FX	-	-	0.2	-	-	-	-	-	3.3	-	-	-	3.5	
	Total	15.2	-	31.1	9.7	38.5	12.3	11.7	38.1	27.6	33.7	32.4	12.2	262.5	
Coupons	Conventional	0.6	4.0	7.5	0.5	4.6	1.8	0.6	4.0	7.3	0.6	4.2	1.8	37.4	
	Floating	0.1	0.1	0.0	0.3	-	0.0	0.1	0.1	0.0	0.3	-	0.0	1.1	
	Linker	-	-	2.4	0.4	1.9	0.2	-	-	2.4	0.3	1.7	0.2	9.3	
	EMTN/Int - EUR	0.1	0.0	0.1	0.0	0.1	0.1	0.3	0.0	0.1	-	0.0	0.1	0.9	
	EMTN/Int - FX	-	0.0	0.1	0.1	0.1	0.1	-	0.1	0.1	0.1	0.1	0.1	0.8	
	Total	0.8	4.1	10.1	1.3	6.6	2.2	1.0	4.1	10.0	1.3	6.0	2.1	49.6	
Redemp+Coup Total	16.0	4.1	41.2	11.0	45.1	14.4	12.8	42.3	37.5	35.0	38.4	14.3	312.1		
France															
Redemptions	Conventional	-	10.0	26.3	10.6	41.7	-	-	-	-	44.9	-	-	133.6	
	Linker	-	-	-	-	-	-	22.4	-	-	-	-	-	22.4	
	Total	-	10.0	26.3	10.6	41.7	-	22.4	-	-	44.9	-	-	156.0	
Coupons	Conventional	-	-	-	0.3	0.1	-	-	-	-	0.3	0.1	-	0.8	
	Linker	-	-	1.4	-	-	-	6.3	-	-	-	-	-	7.8	
	Total	-	-	1.4	0.3	0.1	-	6.3	-	-	0.3	0.1	-	8.6	
Redemp+Coup Total	-	10.0	27.8	10.9	41.8	-	28.8	-	-	45.2	0.1	-	164.6		
Spain															
Redemptions	Conventional	21.7	-	-	21.8	-	-	21.2	-	-	21.1	-	-	85.7	
	Linker	-	-	-	-	-	-	-	-	-	-	6.5	-	6.5	
	EMTN/Int - EUR	-	-	-	-	-	-	-	-	-	-	-	-	0.0	
	EMTN/Int - FX	-	-	-	-	-	-	-	-	-	-	-	-	0.0	
	Total	21.7	-	-	21.8	-	-	21.2	-	-	21.1	6.5	-	92.2	
Coupons	Conventional	-	0.2	-	9.2	9.8	0.6	-	-	-	8.3	2.1	-	30.3	
	Linker	-	-	-	-	-	-	-	-	-	-	2.3	-	2.3	
	EMTN/Int - EUR	-	-	-	-	0.0	-	-	-	-	-	-	-	0.0	
	EMTN/Int - FX	-	-	-	0.0	-	0.0	-	-	-	-	-	0.0	0.0	
	Total	-	0.2	-	9.2	9.8	0.6	-	-	-	8.3	4.5	0.0	32.7	
Redemp+Coup Total	21.7	0.2	-	31.0	9.8	0.6	21.2	-	-	29.4	10.9	0.0	124.9		
EMU ex Big 4															
Redemptions	Conventional	21.0	6.3	8.1	15.0	5.4	12.9	36.4	0.7	5.8	35.6	9.4	0.0	156.5	
	Floating	-	-	-	-	-	-	-	-	-	-	-	-	0.0	
	Linker	-	-	-	-	-	-	-	-	-	-	-	-	0.0	
	EMTN/Int - EUR	-	-	-	1.0	0.1	0.1	1.0	-	-	-	-	-	2.2	
	EMTN/Int - FX	-	-	-	-	0.1	-	-	-	1.9	0.2	-	-	2.2	
	Total	21.0	6.3	8.1	16.0	5.6	13.0	37.4	0.7	7.6	35.8	9.4	0.0	160.9	
Coupons	Conventional	10.3	2.3	7.2	5.3	1.6	4.5	12.0	0.1	0.7	10.1	0.5	0.4	55.0	
	Floating	0.0	-	-	-	-	0.1	0.0	-	-	-	-	0.1	0.1	
	Linker	-	-	-	0.0	-	0.0	0.0	-	-	-	-	-	0.0	
	EMTN/Int - EUR	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	1.8	
	EMTN/Int - FX	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	5.2	0.3	0.0	0.0	6.0	
	Total	10.4	2.4	7.6	5.6	1.9	4.8	12.2	0.2	6.1	10.6	0.6	0.5	63.0	
Redemp+Coup Total	31.4	8.7	15.7	21.6	7.5	17.7	49.5	0.9	13.8	46.4	10.0	0.5	223.8		

Eurozone 2023 Coupons and Redemptions



		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2023
Austria														
Redemptions	Conventional				6.2			9.8			11.9			27.9
	EMTN/Int - EUR					0.1								0.1
	EMTN/Int - FX													0.0
	Total				6.2	0.1		9.8			11.9			28.0
Coupons	Conventional	4.5			2.9			8.7			7.5			23.7
	EMTN/Int - EUR	0.0	0.0		0.0	0.0		0.0	0.0		0.0			0.1
	EMTN/Int - FX				0.0	0.0	0.0				0.0	0.0	0.0	0.0
	Total	4.6	0.0		2.9	0.0	0.0	8.7	0.0		7.5	0.0	0.0	23.8
Redemp+Coup Total	4.6	0.0		9.1	0.1	0.0	18.5	0.0		19.5	0.0	0.0	51.8	
Belgium														
Redemptions	Conventional						12.7				8.6			21.3
	Linker													0.0
	EMTN/Int - EUR							0.1						0.1
	EMTN/Int - FX													0.0
Total							12.8				8.6			21.4
Coupons	Conventional	0.1	0.4	1.2	0.1	0.2	0.3	0.7		0.1	0.7	0.0		3.8
	Coupon - Linker						0.0	0.0						0.0
	Coupon - Int - EUR	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.1
	EMTN/Int - FX	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.1
Total	0.1	0.4	1.2	0.1	0.2	0.3	0.7	0.7		0.2	0.7	0.1	0.0	4.0
Redemp+Coup Total	0.1	0.4	1.2	0.1	0.2	13.1	0.7	0.7		0.2	9.3	0.1	0.0	25.4
EFSF														
Redemptions	Conventional	4.0			3.0	5.0		3.0			5.0			20.0
	Total	4.0			3.0	5.0		3.0			5.0			20.0
Coupons	Conventional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Redemp+Coup Total	4.0	0.0	0.0	3.0	5.0	0.0	3.0	0.0	0.0	0.0	5.0	0.0	0.0	20.1
ESM														
Redemptions	Conventional		3.0					4.0				4.0		11.0
	EMTN/Int - FX									1.9				1.9
	Total		3.0					4.0		1.9		4.0		12.9
Coupons	Conventional	0.1	0.3	0.1	0.2	0.3	0.2	0.3		0.2	0.0		0.1	1.9
	EMTN/Int - FX			0.0						0.0				0.0
	Total	0.1	0.3	0.1	0.2	0.3	0.2	0.3		0.2	0.0		0.1	1.9
EU														
Redemptions	Conventional		0.1									3.5		3.6
	Floating													0.0
	Total		0.1									3.5		3.6
Coupons	Conventional	0.0		0.1	0.0	0.1	0.1	0.0		0.1	0.1	0.2	0.2	1.0
	Floating													0.0
	Total	0.0		0.1	0.0	0.1	0.1	0.0		0.1	0.1	0.2	0.2	1.0
Greece														
Redemptions	Conventional	4.4	0.1											4.5
	Floating													0.0
	Linker													0.0
	EMTN/Int - EUR													0.0
Total	4.4	0.1											4.5	
Coupons	Conventional	1.2	0.2	0.8	0.2		0.2	0.1	0.1	0.1	0.0	0.1		2.8
	Floating													0.0
	Linker							0.0						0.0
	EMTN/Int - EUR				0.0			0.1						0.1
Total	1.2	0.2	0.8	0.2		0.2	0.2	0.1	0.1	0.1	0.0	0.1	2.9	
Redemp+Coup Total	5.5	0.3	0.8	0.2		0.2	0.2	0.1	0.1	0.1	0.0	0.1		7.4
Ireland														
Redemptions	Conventional			7.0										7.0
	Floating													0.0
	EMTN/Int - EUR													0.0
Total			7.0										7.0	
Coupons	Conventional				0.4			0.5		0.2				1.2
	Floating						0.1						0.1	0.1
	EMTN/Int - EUR			0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0
	Total			0.0	0.5	0.0	0.1	0.5		0.2		0.0	0.1	1.3
Redemp+Coup Total			7.0	0.5	0.0	0.1	0.5		0.2		0.0	0.1		8.4
Netherlands														
Redemptions	Conventional	12.5						17.5						30.0
	Total	12.5						17.5						30.0
Coupons	Conventional	0.0	0.2	1.3	0.0	0.9		0.0		0.0	0.0			2.4
	Total	0.0	0.2	1.3	0.0	0.9		0.0		0.0	0.0			2.4
Redemp+Coup Total	12.5	0.2	1.3	0.0	0.9		17.5		0.0	0.0				32.4
Portugal														
Redemptions	Conventional										10.0			10.0
	Floating													0.0
	EMTN/Int - EUR													0.0
	EMTN/Int - FX													0.0
Total											10.0			10.0
Coupons	Conventional	4.0	0.9		1.1		0.2	1.6			1.4			9.3
	Floating	0.0						0.0						0.0
	EMTN/Int - EUR		0.1											0.1
	EMTN/Int - FX				0.1						0.1			0.1
Total	4.1	1.0		1.2		0.2	1.6			1.5			9.5	
Redemp+Coup Total	4.1	1.0		1.2		0.2	1.6			11.5				19.5

Eurozone 2023 Coupons and Redemptions



		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2023
Cyprus														
Redemptions	Conventional	0.2						0.0						0.2
	EMTN/Int - EUR							1.0						1.0
	Total	0.2						1.0						1.2
Coupons	Conventional					0.0						0.0		0.0
	EMTN/Int - EUR	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.3
	Total	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.3
Redemp+Coup	Total	0.3	0.0		0.0	0.0	0.0	1.0		0.0	0.0	0.0	0.0	1.5
Finland														
Redemptions	Conventional				5.0						5.8			10.8
	EMTN/Int - EUR													0.0
	EMTN/Int - FX													0.0
Total				5.0						5.8				10.8
Coupons	Conventional			3.7	0.3		3.5				0.1			7.6
	EMTN/Int - EUR													0.0
	Coupon - Int - FC		0.0			0.0			0.0			0.0		0.0
Total		0.0	3.7	0.3	0.0	3.5			0.0		0.1	0.0		7.6
Redemp+Coup	Total		0.0	3.7	5.3	0.0	3.5		0.0	5.8	0.1	0.0		18.4
Latvia														
Redemptions	Conventional					0.3						0.3		0.5
	EMTN/Int - EUR				1.0									1.0
	EMTN/Int - FX													0.0
Total				1.0	0.3							0.3		1.5
Coupons	Conventional		0.0		0.0	0.0	0.0	0.0	0.0			0.0		0.0
	EMTN/Int - EUR	0.0	0.0	0.0	0.1	0.0	0.0			0.0	0.0	0.0	0.0	0.2
	EMTN/Int - FX													0.0
Total	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Redemp+Coup	Total	0.0	0.0	0.0	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.7
Lithuania														
Redemptions	Conventional		0.1		0.8		0.2		0.7					1.8
	EMTN/Int - EUR													0.0
	EMTN/Int - FX													0.0
Total		0.1		0.8		0.2		0.7						1.8
Coupons	Conventional		0.0	0.0		0.0		0.0	0.0					0.1
	EMTN/Int - EUR	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	1.0
	EMTN/Int - FX													0.0
Total	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	1.1
Redemp+Coup	Total	0.0	0.2	0.1	0.9	0.1	0.3	0.1	0.8	0.1	0.2	0.1	0.1	2.9
Luxembourg														
Redemptions	Conventional							2.0						2.0
	Total							2.0						2.0
Coupons	Conventional		0.0											0.0
	Total		0.0											0.0
Redemp+Coup	Total		0.0					2.0						2.0
Malta														
Redemptions	Conventional					0.1		0.1				0.1	0.0	0.4
	EMTN/Int - EUR													0.0
	Total					0.1		0.1				0.1	0.0	0.4
Coupons	Conventional	0.0						0.0					0.0	0.0
	EMTN/Int - EUR													0.0
	Total	0.0						0.0					0.0	0.0
Redemp+Coup	Total	0.0				0.1		0.1			0.1	0.0		0.4
Slovakia														
Redemptions	Conventional		3.0									1.5		4.5
	EMTN/Int - EUR													0.0
	EMTN/Int - FX										0.2			0.2
Total		3.0								0.2	1.5			4.7
Coupons	Conventional	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
	EMTN/Int - EUR		0.0											0.0
	EMTN/Int - FX			0.0							0.0			0.0
Total	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Redemp+Coup	Total	0.0	3.0	0.0		0.0	0.0	0.0	0.0	0.0	0.2	1.5	0.0	4.7
Slovenia														
Redemptions	Conventional			1.1										1.1
	EMTN/Int - FX					0.1								0.1
	Total			1.1		0.1								1.2
Coupons	Conventional	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0		0.3	0.1		1.0
	EMTN/Int - FX		0.0			0.0			0.0					0.0
	Total	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0		0.3	0.1	1.0
Redemp+Coup	Total	0.2	0.2	1.2	0.0	0.2	0.0	0.0	0.0		0.3	0.1		2.2