European Rates Supply Preview: Week ahead

EGB supply pressures fall, for three weeks

EGBs: Belgium, Finland, Germany + EU

This week, the volume of gross EGB auctions will decrease to c.€11bn with Belgium, Finland and Germany in the market. In addition, the EU will auction bonds for €4bn. On the other hand, France, Greece and Ireland will disburse €33bn in coupons and redemptions.

We are entering a 3 week period where the net DV01 supplied to private investors will be low/negative (Exhibit 3). This is key in the current context of heightened volatility.

On Monday, Belgium will tap the BGB Jun27, Jun33 and Apr39 for up to €3bn. The EU will tap the EU Oct27 and Jul32 for €2bn each.

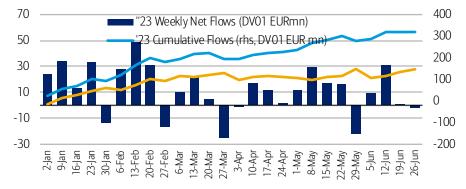
On Tuesday, Finland will tap the RFGB Sep28 for €1bn and Apr36 for €500mn. Germany will tap the Green DBR Oct27 for up to €1.5bn.

On Wednesday, Germany will tap the 10y DBR Feb33 for €5bn.

Bills: Cyprus, France, Germany, Holland and Austria

On Monday, **Cyprus** offers 3m bils (amount offered TBA). Also on Monday, **France** offers the three 3m lines and one 9m for up to €6bn. On the same day **Germany** offers the 12m line for €5bn and the **Netherlands** offer two 3m lines for €2bn each. On Tuesday, **Austria** offers the 3m and 6m line for €1bn,

Exhibit 3: Weekly DV01 of gross issuance net of reinvestment flows (from privates and ECB) In March, net supply in DV01 terms accelerates further vs 2022



Source: ECB, Treasuries, Own calcs

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UK: UKT Jul53 and UKT Jan27

In the UK, the DMO taps UKT Jul53 for £2bn (Tue) & UKT Jan27 for £3.5bn (Wed).

US: 20y Bond and 10y Note

In the US, the Treasury conduct a 20y tap for \$12bn and sell 10y TIPS for \$15bn.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

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Refer to important disclosures on page 7 to 9.

Timestamp: 19 March 2023 08:15PM EDT

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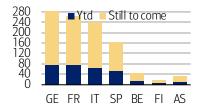
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See Team Page for List of Analysts

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

28% 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

Global bond supply/redemptions next two weeks

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

Significant flows of redemptions with a smaller gross supply lead to a negative net supply of €17.6bn

	Date	Settle	Country	Sector	Amount (bn)	Bond	Туре	Date	Coun try		Amt (bn)		Туре
	20-Mar	22-Mar	EU	4y	2.0	EU 2% 10/27	Тар	20-Mar	IR	-	7.0	IRISH 3.9% 03/23	R
	20-Mar	22-Mar	EU	9y	2.0	EU 1% 07/32	Тар	20-Mar	IR	-	0.3	IRISH 3.9% 03/23	C
	20-Mar	22-Mar	BE	4y		BGB 0.8% 06/27	Тар	20-Mar	GR	27y	0.2	GGB 3.25% 03/50	C
	20-Mar	22-Mar	BE	10y	2.0-3.0(e)	BGB 3% 06/33	Тар	25-Mar	FR	-	25.1	OAT 0% 03/23	R
	20-Mar	22-Mar	BE	16y		BGB (G) 2.75% 04/39	Тар						
	21-Mar	23-Mar	FI	5y	1.0	RFGB 0.5% 09/28	Тар						
	21-Mar	23-Mar	FI	13y	0.5	RFGB 0.125% 04/36	Тар						
	21-Mar	23-Mar	GE	4y	1.5	DBR (G) 1.30% 10/27	Тар						
	22-Mar	24-Mar	GE	9y	5.0	DBR 2.30% 02/33	Тар						
Europe													
						Total week	€14.0-15.0(e)					Total week	€32.6
	28-Mar	30-Mar	GE	2y	5.5	BKO 2.50% 03/25	Тар	28-Mar	BE	3-18y	3.8	BGB/BELG/BE:G FLOAT	С
	28-Mar	30-Mar	NE	TBA	2.0-3.0(e)	DSL	Тар	28-Mar- 1-Apr	IT	0-30y	1.0	BTPS/ITALIA/ITALIA FLoat	С
	28-Mar	30-Mar	IT	TBA on 23-Mar	3.0-5.0(e)	BTPShort, BTP€I	TBA on 23-Mar	· '					
	30-Mar	03-Apr	IT	TBA on 27-Mar	7.0-9.0(e)	5y BTPS, 10y BTPS, CCTeu	TBA on 27-Mar						
	31-Mar	04-Apr	BE	TBA on 30-Mar	0.5-0.7(e)	ORI Facility	ORI						
						Total week	€18.0-23.2(e)	1				Total week	€4.8
							•						
	21-Mar	22-Mar	UK	30y	2.0	UKT 3.75% 07/53	Тар	22-Mar	UK	1-50y	0.9	UKTI	С
	22-Mar	23-Mar	UK	3y	3.5	UKT 4.125% 01/27	Тар						
				j		Total week	£5.5	1				Total week	£0.9
ž													
						Total week	£0.0					Total week	£0.0
	21-Mar	31-Mar	US	20y	12.0	T	Тар						
	23-Mar	31-Mar	US	10y	15.0	TIPS	Тар	4					
						Total week	\$27.0					Total week	\$0.0
NS	27-Mar	31-Mar	US	2y	TBA on 23-Mar	Т	New	31-Mar	US	-	41.2	T	R
_	28-Mar	31-Mar	US	5y	TBA on 23-Mar	T	New	31-Mar	US	-	70.8	T	R
	29-Mar	31-Mar	US	2y	TBA on 23-Mar	FRN	Тар	31-Mar	US	-	34.7	Т	R
	29-Mar	31-Mar	US	7y	TBA on 23-Mar	Т	New	31-Mar	US	0-6y	11.3	Т	С
						Total week	TBA on 23-Mar					Total week	\$158.0

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

Source: Treasuries, BofA Global Research.

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For a complete list of our open trade recommendations, as well as our trade recommendations closed over the last 12 months, see latest <u>Global Rates Weekly.</u>

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 12	20-Mar	CY	-	3m	23-Jun-23
	20-Mar	FR	0-0.4	3m	14-Jun-23
	20-Mar	FR	2.1-2.5	3m	21-Jun-23
	20-Mar	FR	1.2-1.6	3m	23-Aug-23
	20-Mar	FR	1.1-1.5	9m	21-Feb-24
	20-Mar	GE	5.0	12m	20-Mar-24
	20-Mar	NE	2.0	3m	29-Jun-23
	20-Mar	NE	2.0	3m	30-Aug-23
	21-Mar	AS	1.0	3m	27-Jul-23
	21-Mar	AS	1.0	6m	27-Oct-23

Source: Treasuries, BofA Global Research.



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

	EZ total	AS	BE	FI	FR***	GE	GR*	CY	IR	IT**	NE	PO	SP
Issued week 13 Mar	39.9	-	-	-	12.0	7.5	-		-	12.1	2.0	-	6.3
Issued YTD, Gross	325.4	9.6	12.5	4.8	76.9	73.7	3.5		4.8	64.1	16.5	5.1	54.0
As% of 2023	28%	28%	28%	27%	29%	25%			68%	27%	33%	25%	33%
Difference vs 22	5%	1%	5%	5%	5%	6%			4%	2%	-3%	-14%	0%
Gross supply left	825.3	24.2	32.5	13.2	187.1	225.3	3.5		2.3	176.9	33.5	14.9	112.0
Redemptions (bn) **	633.0	28.1	21.3	10.8	140.3	148.5			7.0	180.3	17.5	9.7	69.5
Net supply left	192.3	-3.9	11.2	2.4	46.8	76.8	3.5		-4.8	-3.4	16.0	5.2	42.5

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

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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 year

2023	Austria	Belgium	Finland	France	Germany	Greece	Ireland	Italy	Netherlands	Portugal	Spain	Totals
EUR fixed coupon bonds (1)	34	45	18	264	303	7	7	241	50	20	166	1155
Change versus 2021	1	2	0	4	81	1	0	17	6	8	22	141
Other Bonds (EUR linkers/floaters/zero cpn) (2)	0	0	0	26	7	0	0	70	0	0	7	110
Gross Bond Issuance (3) = (1)+(2)	34	45	18	290	310	7	7	311	50	20	173	1265
Change versus 2022	1	1	0	4	81	-1	0	40	6	8	22	161
Total Redemptions* (4)	28	21	11	156	189	5	7	266	30	10	92	815
Net Bond issuance (*inc. Buybacks)	6	23	7	116	121	4	0	45	20	10	81	433
Change versus 2022	-1	7	0	-7	60	0	5	4	7	6	-2	78
Net Bill issuance (6)	6	1	1	3	42	1	0	0	4	4	-5	57
Net Total (5)+(6)	12	24	8	120	163	4	0	45	24	14	76	489

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 Supply through the year

	Jan	Feb	Mar (est.)	Apr (est.)	May (est.)	Jun (est.)	Jul (est.)	Aug (est.)	Sep (est.)	Oct (est.)	Nov (est.)	Dec (est.)	2023
Austria	6	2	6	1	6	2	1	1	5	2	1	1	34
Belgium	7	6	3	5	5	5	4	2	5	3	0	0	45
Finland	4	0	1	1	4	1	0	3	1	1	2	0	18
France	27	30	28	25	32	28	31	14	30	25	17	3	290
Germany	28	32	32	25	32	19	25	29	27	25	29	8	310
Greece	4	0	0	1	1	0	1	0	0	1	0	0	7
Ireland	4	0	1	0	1	0	0	0	1	0	0	0	7
Italy	31	31	28	28	25	32	23	12	29	27	31	16	311
Netherlands	6	8	6	3	5	6	3	0	6	3	4	0	50
Portugal	3	1	2	5	2	1	0	0	2	2	2	0	20
Spain	20	17	16	14	14	23	15	7	19	15	8	5	173
Total	139	127	122	108	126	117	102	69	126	103	94	33	1265

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



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

Monthly supply through the year

	<u>Jan</u>	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2023
Austria	6	2	5	-4	5	2	-7	1	5	-9	1	1	8
Belgium	7	6	0	5	5	-8	4	2	5	-5	0	0	21
Finland	4	0	1	-3	4	1	0	3	-3	1	2	0	9
France	27	16	6	7	-15	28	8	14	30	-21	14	4	118
Germany	26	12	19	-7	13	7	22	10	14	10	30	-6	150
Greece	-2	00	00	11	11	0	11	00	00	11	0	0	00
Ireland	4	0	-6	0	1	0	0	0	1	0	0	0	0
Italy	14	27	-11	17	-13	13	10	-27	0	-6	-3	3	24
Netherlands	-8	9	6	3	6	6	-12	0	6	3	4	0	22
Portugal	3	0	2	4	1	1	0	0	2	-8	2	0	7
Spain	-5	17	15	11	-6	22	-10	7	18	-8	1	4	67
Total	76	87	37	35	3	71	15	10	78	-41	51	6	428

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

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Eurozone bond supply/redemption quarterly

Exhibit 10: Euro-area government bond auctions (incl. fixed coupons, IL, CTZ, CCT), coupons and redemptions (only EUR) for Q1 2023 Flows through the quarter

Auctions	Date	Ctry	Amt	Sector(s)		Date	Country	Amount	Туре
Syndication									
	Mar	AS	2.0-3.0 e)	15/20y					
Wk 1	4-Jan	GE	5.0	BKO 2.20%12/24	Wk 1	1-Jan	IT	0.3	С
	5-Jan	FR	9.0-10.0(e)	>8y OAT		4-Jan	GE	4.8	C
Wk 2	10-Jan	AS	1.0-2.0(e)	RAGB					
	10-Jan	NE	2.5-3.5	DSL					
	11-Jan	GE	5.0	DBR 2/33					
	12-Jan	IT	5.0-7.0(e)	3y BTPS, 7y BTPS, >10y BTPS					
	12-Jan	SP	4.0-5.0(e)	SPGB/SPGB€I					
Wk3	17-Jan	FI	1.0-1.5	RFGB	Wk3	15-Jan	NE	12.5	R
	17-Jan	GE	5.0	OBL 4/28		15-Jan	IT	15.4	R
	18-Jan	GE	1.5	DBR 1.80%8/53		15-Jan	NE	0.8	C
	19-Jan	SP	4.0-5.0(e)	SPGB		18-Jan	CY	0.2	R
	19-Jan	FR	9.0-10.0(e)	2-8y OAT/OAT€i					
Wk 4	24-Jan	NE	2.0-3.0(e)	DSL	Wk 4	26-Jan	AS	0.1	С
	25-Jan	GE	1.5	DBR 1.00%5/38		,			
	26-Jan	ΙΤ	3.0-5.0(e)	BTPShort, BTP€I					
Wk 5					Wk 5	30-Jan	GR	4.4	R
	31-Jan	GE	6.0	BKO 3/25		30-Jan	GR	1.1	C
	31-Jan	IT	5.0-7.0(e)	5y BTPS, 10y BTPS, CCTeu		31-Jan	SP	4.5	C
	,	Total Jan	up to €69.5-86(e)			,	Total Jan	€ 48.0	
Wk 5	1-Feb	GE	5.0	DBR 2/33	Wk 5	1-Feb	IT	4.0	С
	2-Feb	SP	5.0-6.0(e)	SPGB/SPGB€I					
	2-Feb	FR	10.0-11.0(e)	>8v OAT					
	3-Feb	BE	0.5-0.7(e)	ORI Facility					
Wk6	7-Feb	AS	1.0-2.0(e)	RAGB					
	7-Feb	NE	4.0-6.0	DSL 2.50% 07/33					
	8-Feb	GE	4.0	DBR 2.10%11/29					
Wk7	14-Feb	IT	7.0-9.0(e)	3y BTPS, 7y BTPS, >10y BTPS	Wk 7	15-Feb	GE	20.5	R
	15-Feb	GE	1.5	DBR 0.00%8/52		15-Feb	GE	1.3	C
	15-Feb	GE	1.0	DBR 1.25% 08/48		15-Feb	GR	0.1	Č
	16-Feb	SP	5.0-6.0(e)	SPGB		15-Feb	IT	0.3	C
	16-Feb	FR	10.0-11.0(e)	2-8y OAT/OAT€i		15-Feb	PO	0.9	C
	10100		10.0 11.0(0)	2 0, 0,11,0,11.6.		18-Feb	IR	0.2	Č
Wk8	20-Feb	BE	2.0-3.0(e)	BGB	Wk8	20-Feb	AS	0.4	С
	21-Feb	GE	5.0	OBL 4/28		24-Feb	GR	0.1	R
	22-Feb	GE	5.0	DBR 2/33		25-Feb	FR	10.0	R
	22-Feb	IT	3.0-5.0(e)	BTPShort. BTP€I		25-Feb	FR	0.2	C
	24-Feb	iT	7.0-9.0(e)	5y BTPS, 10y BTPS, CCTeu		20100		5.2	C
	21100		7.0 3.0(0)	5, 5 11 5, 10, 5 11 5, cc1cu					



Exhibit 10: Euro-area government bond auctions (incl. fixed coupons, IL, CTZ, CCT), coupons and redemptions (only EUR) for Q1 2023 Flows through the quarter

Auctions	Date	Ctry	Amt	Sector(s)		Date	Country	Amount	Type
Wk9	28-Feb	GE	6.0	BKO 3/25					
	28-Feb	NE	2.0-3.0(e)	DSL					
		Total Feb	up to €83.0-98.2(e)				Total Feb	€ 38.1	
Wk9	1-Mar	GE	1.5	DBR 1.00%5/38	Wk 9	1-Mar	ΙΤ	15.5	R
	2-Mar	SP	5.0-6.0(e)	SPGB/SPGB€I		1-Mar	IT	7.9	C
	2-Mar	FR	10.0-11.0(e)	>8y OAT					
Wk 10	7-Mar	AS	1.0-2.0(e)	RAGB	Wk 10	10-Mar	GE	16.0	R
Wk 11	14-Mar	GE	5.0	OBL 4/28	Wk 11	12-Mar	GR	0.2	С
	14-Mar	NE	2.0-3.0(e)	DSL		13-Mar	IR	0.6	C
	14-Mar	ΙΤ	7.0-9.0(e)	3y BTPS, 7y BTPS, >10y BTPS		15-Mar	ΙΤ	14.9	R
	15-Mar	GE	1.5	DBR 1.80%8/53		15-Mar	IT	1.4	C
	16-Mar	SP	5.0-6.0(e)	SPGB		15-Mar	AS	1.1	C
	16-Mar	FR	10.0-11.0(e)	2-8y OAT/OAT€i		18-Mar	IR	0.4	C
Wk 12	20-Mar	BE	2.0-3.0(e)	BGB	Wk 12	20-Mar	IR	7.0	R
	21-Mar	FI	1.0-1.5	RFGB		20-Mar	IR	0.3	C
	21-Mar	GE	1.5	DBR Oct-27 (Green)		20-Mar	GR	0.2	C
	22-Mar	GE	5.0	DBR 2/33		25-Mar	FR	26.3	R
Wk 13	28-Mar	GE	5.5	BKO 3/25	Wk 13	28-Mar	BE	3.8	С
	28-Mar	NE	2.0-3.0(e)	DSL					
	28-Mar	IT	3.0-5.0(e)	BTPShort, BTP€I					
	30-Mar	IT	7.0-9.0(e)	5y BTPS, 10y BTPS, CCTeu					
	31-Mar	BE	0.5-0.7(e)	ORI Facility					
		Total Mar	up to €74.0-88.7(e)				Total Mar	€ 95.5	

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, Ra redemption

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Exhibit 11: Common acronyms/abbreviations used in our Europe Economics Research reportsThis list is subject to change

Definition Acronym/Abbreviation Acronym/Abbreviation Definition 1H First Half ΙT Italy Second Half 2H Jan January 1Q First Quarter Jul July 2Q Second Quarter lun lune 3Q Third Quarter lhs left-hand side 4Q Fourth Quarter month ann annualized MA Moving Average APP Asset Purchase Programme Mar March MBM Apr April Meeting-by-meeting AS Austria mom month-on-month Aug August Mon Monday MPC Banque de France (Bank of France) Monetary Policy Committee BdF MWh BE Belgium 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 Bol Banca d'Italia (Bank of Italy) NSA Non-seasonally Adjusted OAT BoJ Bank of Japan Obligations assimilables du Trésor BoS Banco de España (Bank of Spain) OBR Office for Budget Responsibility Oct October bp basis point Buoni Poliennali del Tesoro BTP OECD Organisation for Economic Co-operation and Development Buba Bundesbank ONS Office for National Statistics preliminary/flash print р CA Current Account PBoC People's Bank of China CPI Consumer Price Index PFPP Pandemic Emergency Purchase Programme **CSPP** Corporate Sector Purchase Programme PMI Purchasing Managers' Index PSPP d day Public Sector Purchase Programme

PT

Portugal



GE

Germany

Exhibit 11: Common acronyms/abbreviations used in our Europe Economics Research reportsThis list is subject to change

Acronym/Abbreviation	n Definition	Acronym/Abbreviation	Definition
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	У	year
IP	Industrial Production	yoy	year-on-year
IR	Ireland	ytd	year-to-date
PCA	Principal Component Analysis	EGB	Eurozone Governmeny Bond

Source: BofA Global Research



Disclosures

Important Disclosures

Due to the nature of the market for derivative securities, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

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