

# Weekly Supply Monitor

## Euro, UK and US Supply Outlook

- **Europe:** Next week's bond supply comes from the Netherlands (min €5bn) and Italy (around €11bn). €7bn of coupon payments (a majority of which come from Belgium) and €23bn of redemption (from Belgium and Italy) will be eligible for reinvestment next week.
- **US:** We expect US Treasury to issue around \$109bn across the 2-, 5- and 7-year conventionals and 2yr floating rate bonds. \$4bn of coupon payments and \$71bn of redemptions will be eligible for reinvestment next week
- **UK:** The UK DMO will issue £0.9bn of linker '52 next Thursday. There are no gilt cash flows next week.
- **Spanish and Italian bill supply:** Italy will issue around €8.5bn of 6month bills next Thursday. There is no bill issuance from Spain next week.

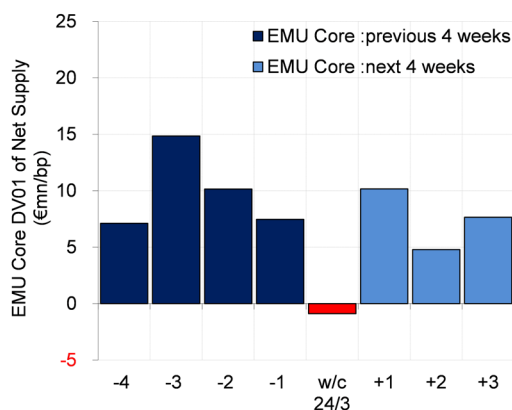
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Figure 1. Next week's is the only week in an eight week period where the net DV01 of core issuance is slightly negative



Source: DMO, Citi estimates

### See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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# Weekly Supply Monitor

## Provisional auction calendar for the next four weeks

Figure 2. Provisional Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (USD Millions)

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 \$million/bp	Approx. Number 10yr Futures TYM4 (UST) G M4 (Gilt) RXM4 (Bund)
24 Mar (Mon)	US	0.5 - 0.75	Outright Treasury Coupon Purchases: 15/11/2024 - 15/2/2031		-10k
24 Mar (Mon)	UK	1.4	Gilt APF Buyback: 7-15yrs		-12k
25 Mar (Tue)	Netherlands	5.0	New DSL Jul24 via DDA (issue confirmed, min €5bn)		39k
25 Mar (Tue)	US	32.0	2-Year		105k
25 Mar (Tue)	US	1 - 1.25	Outright Treasury Coupon Purchases: 15/2/2036 - 15/2/2044		-26k
26 Mar (Wed)	Italy	3.5	CTZ (estimated size)		6k
26 Mar (Wed)	US	35.0	5-year		192k
26 Mar (Wed)	US	13.0	2-Year FRN (re-opening)		42k
26 Mar (Wed)	US	2.25 - 2.75	Outright Treasury Coupon Purchases: 15/5/2021 - 15/2/2024		-24k
27 Mar (Thu)	UK	0.9	0.25% Index-linked Treasury Gilt 2052 (issue confirmed, estimated size)		35k
27 Mar (Thu)	US	29.0	7-year		227k
27 Mar (Thu)	US	3.75 - 4.5	Outright Treasury Coupon Purchases: 31/12/2018 - 30/11/2019		-23k
28 Mar (Fri)	Italy	5.8	BTP 5yr and 10yr (estimated tenor and size)		33k
28 Mar (Fri)	Italy	1.8	CCTeu (estimated size)		7k
28 Mar (Fri)	US	1 - 1.25	Outright Treasury Coupon Purchases : 15/2/2036 - 15/2/2044		-26k
<b>Weekly \$DV01 of Issuance</b>				<b>47.1</b>	
<b>Total Number of Futures Contracts</b>					<b>457k 23k 85k</b>

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 \$million/bp	Approx. Number 10yr Futures TYM4 (UST) G M4 (Gilt) RXM4 (Bund)
02 Apr (Wed)	Germany	3.0	Bobl Feb19 re-opening (issue and size confirmed)		12k
02 Apr (Wed)	UK	2.5	Conventional Long (estimated size)		25k
03 Apr (Thu)	France	8.0	OAT 10yr and 15yr (estimated tenors and size)		75k
03 Apr (Thu)	Spain	5.0	Bono 2yr and 5yr (estimated tenors and size)		11k
<b>Weekly \$DV01 of Issuance</b>				<b>19.9</b>	
<b>Total Number of Futures Contracts</b>					<b>0k 25k 98k</b>

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 \$million/bp	Approx. Number 10yr Futures TYM4 (UST) G M4 (Gilt) RXM4 (Bund)
08 Apr (Tue)	Austria	3.5	We believe that the auction will be replaced by a new 10yr syndication		27k
08 Apr (Tue)	Germany	1.0	Boblei/Bundei (estimated size)		8k
08 Apr (Tue)	Netherlands	2.5	DSL 5yr (estimated tenor and size)		10k
08 Apr (Tue)	UK	1.5	Index-linked (estimated size)		23k
08 Apr (Tue)	US	28.0	3-year		91k
09 Apr (Wed)	Germany	4.0	Schatz Mar16 re-opening (issue and size confirmed)		7k
09 Apr (Wed)	US	21.0	10-Year (re-opening)		233k
10 Apr (Thu)	US	13.0	30-year (re-opening)		297k
11 Apr (Fri)	Italy	7.0	BTP 3yr, 7yr and 30yr (estimated tenor and size)		45k
<b>Weekly \$DV01 of Issuance</b>				<b>66.9</b>	
<b>Total Number of Futures Contracts</b>					<b>622k 23k 96k</b>

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 \$million/bp	Approx. Number 10yr Futures TYM4 (UST) G M4 (Gilt) RXM4 (Bund)
16 Apr (Wed)	Germany	4.0	Bund Feb24 re-opening (issue and size confirmed)		31k
17 Apr (Thu)	France	9.7	OAT 2yr and 5yr, index-linked OAT (estimated tenors and size)		36k
17 Apr (Thu)	US	13.0	5-year TIPS		155k
<b>Weekly \$DV01 of Issuance</b>				<b>22.8</b>	
<b>Total Number of Futures Contracts</b>					<b>155k 0k 67k</b>

The next release of the tentative outright Treasury operation schedule will be at 3 p.m. on March 31, 2014. Therefore we have only included Fed buybacks up to March 31 in this calendar. Additional issue expected in Apr: Italy 15yr syndication (€5bn). It is not included in the table above as the timing of this supply events has not been announced.

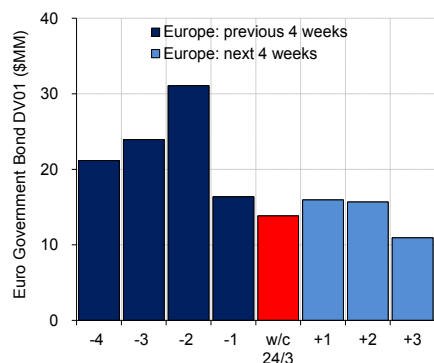
Source: DMOs, Citi Research

## Global Net Supply by Week (8 Week Period)

### DV01 of Supply: Historical & Projected EUR, USD & GBP Supply by Week

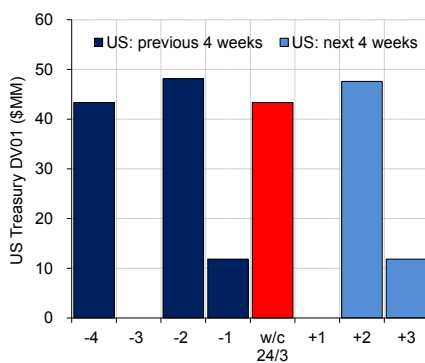
- Figure 3 and Figure 4 show the \$DV01 of projected issuance over the next four weeks and the previous four weeks. The DV01 of issuance in the week commencing 24 March is shown in red. The DV01 of next week's gilt issuance is the highest in the next four weeks (Figure 5).

Figure 3. Estimated \$DV01 of EMU Bond Issuance (weekly)



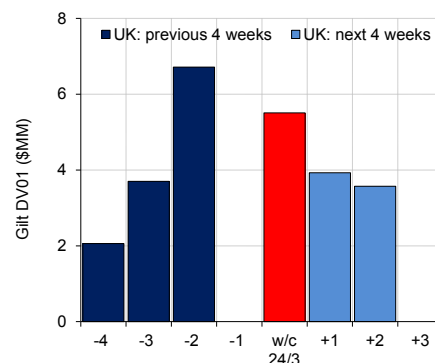
Source: DMOs, Citi Research

Figure 4. Estimated \$DV01 of US Treasury Issuance (weekly)



Source: US Treasury, Citi Research

Figure 5. Estimated \$DV01 of UK Gilt Issuance (weekly)



Source: DMO, Citi Research

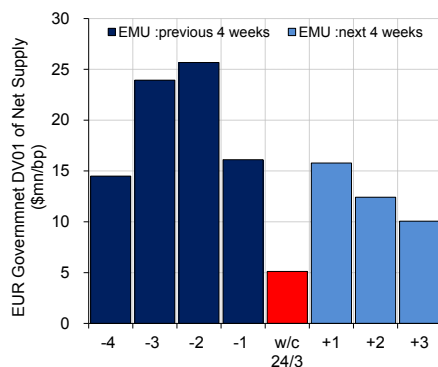
### DV01 of Net Supply (gross supply – coupons): EUR, USD & GBP Supply by Week

**Net Supply = Gross Issuance – Coupon Payments**

- Figure 6 and Figure 7 show the \$DV01 of projected net supply over the next four weeks and the previous four weeks.

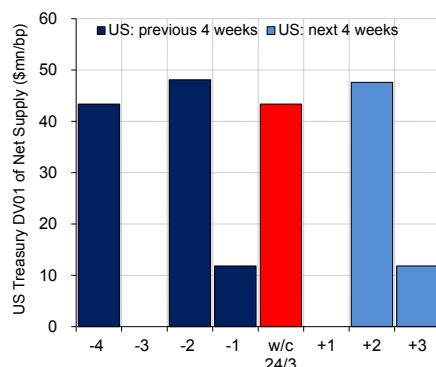
- The net DV01 of next week's euro issuance is the lowest in the previous four weeks and the next four weeks (Figure 6).

Figure 6. Estimated \$DV01 of Euro Bond Net Issuance (Previous 4 and Next 4 Weeks)



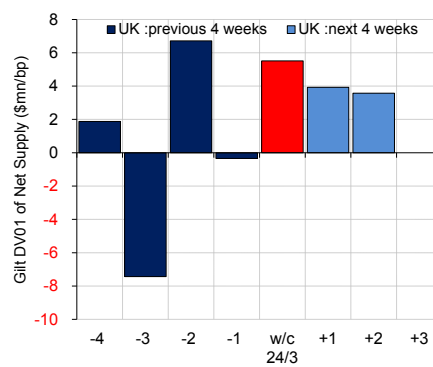
Source: DMOs, Citi estimates

Figure 7. Estimated \$DV01 of US Treasury Net Issuance (Previous 4 and Next 4 Weeks)



Source: US Treasury, Citi estimates

Figure 8. Estimated \$DV01 of UK Gilt Net Issuance (Previous 4 and Next 4 Weeks)



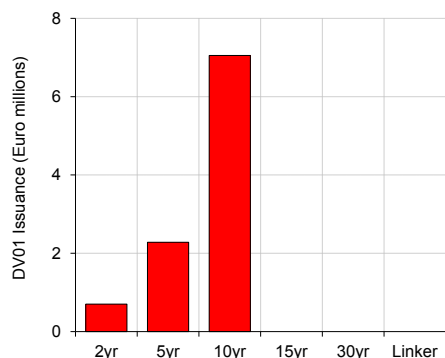
Source: DMO, Citi estimates

## Global Supply by Tenor (Next week)

### DV01 of EUR, USD and GBP Issuance by Maturity

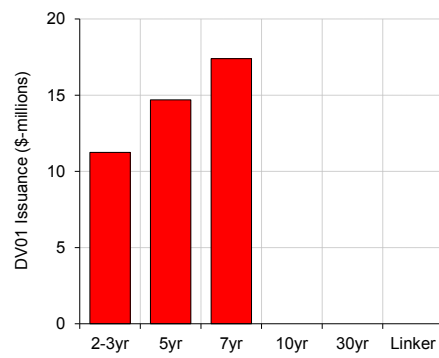
- The DV01 of the next week's euro issuance is light at around €10million/bp (Figure 9).
- The US Treasury is expected to issue around \$43million/bp across the 2-, 5- and 7-year conventionals and 2yr floating rate bonds (Figure 10).
- The UK DMO will issue around £3million/bp of linker '52 next Thursday (Figure 11).

Figure 9. EUR DV01: Split by Maturity (24 Mar – 30 Mar)



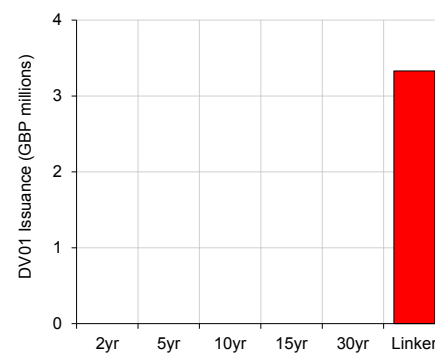
Source: DMOs, Citi Research

Figure 10. USD DV01: Split by Maturity (24 Mar – 30 Mar)



Source: US Treasury, Citi Research

Figure 11. GBP DV01: Split by Maturity (24 Mar – 30 Mar)

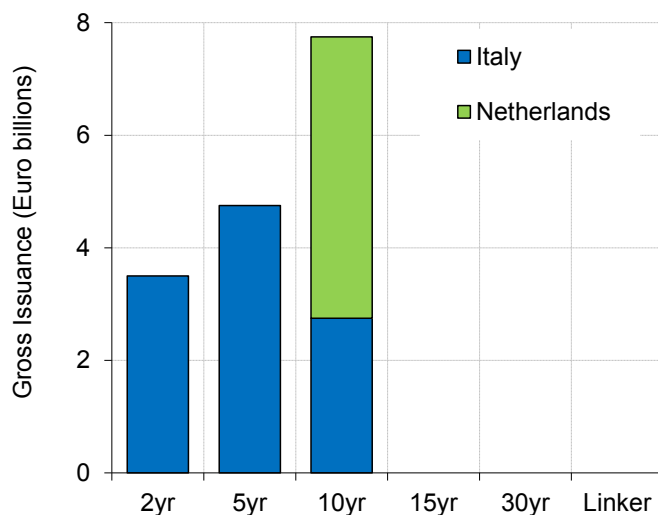


Source: DMO, Citi Research

### Euro Gross Supply and DV01 by Country & Maturity

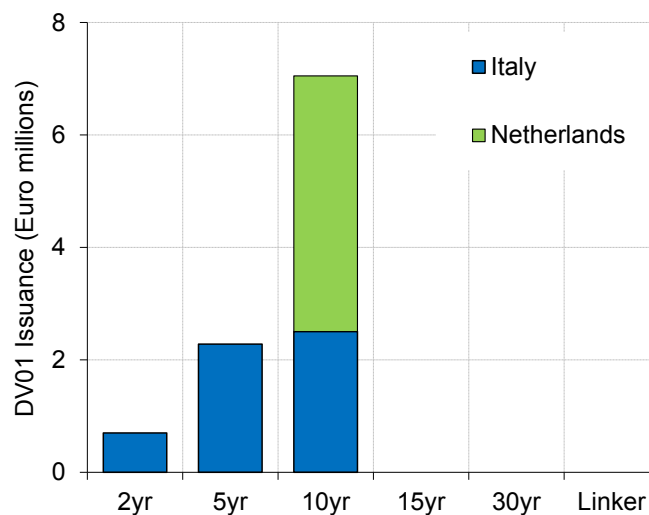
- In Europe, next week's supply comes from the Netherlands (min €5bn) and Italy (around €11bn) – Figure 12.
- Figure 13 shows the country and maturity split in DV01 terms. On this basis, 10yr sector accounts for around a half of total issuance (€10million/bp).

Figure 12. Euro Gross Issuance next week



Source: DMOs, Bloomberg, Citi Research

Figure 13. Euro DV01 Issuance next week

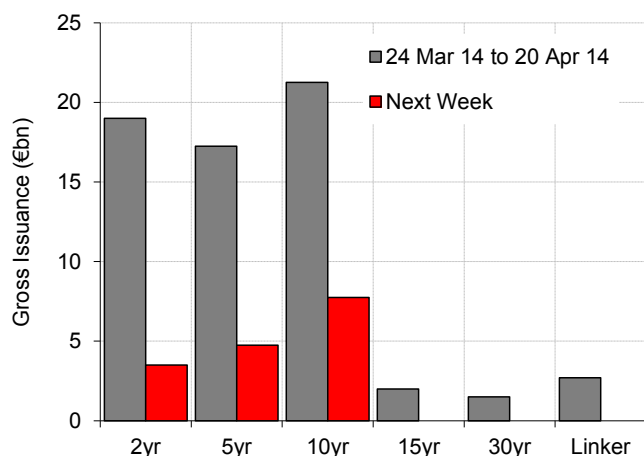


Source: DMOs, Bloomberg, Citi Research

## Expected Euro Issuance by Maturity for the Next 4 Weeks

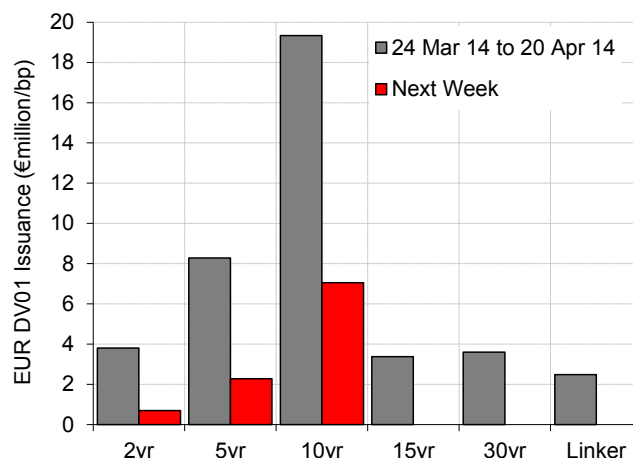
- Over the next four weeks, the 10yr sector is expected to account for around a third of total gross issuance (€64bn) - Figure 14.
- In DV01 terms, the 10yr sector is forecasted to account for around 47% of total issuance (€41million/bp) over the next four weeks (Figure 15).

Figure 14. Euro Gross Issuance over the Next Four Weeks



Source: DMOs, Bloomberg, Citi Research

Figure 15. Euro DV01 Issuance over the Next Four Weeks



Source: DMOs, Bloomberg, Citi Research

## Explanation of Trade-date and Settlement-date

Throughout the *Supply Monitor* section coupons and redemption payments are allocated on a trade date basis *except in the cash flow tables* shown above. In these cash flow tables; gross supply, coupons and redemptions are on a settlement date basis. This is to keep everything in line with US supply settling during the middle or end of the month instead of just T+3 as in Europe for example.

**Trade date basis:** In Europe if the coupon payment falls on Monday 3<sup>rd</sup> March, for example, it would be allocated to the previous week (the week commencing 24 March) as that would be when you would trade to use the money you know is coming in on Monday 3<sup>rd</sup> March. In other words, you don't wait for the money to hit your account to use it. Since we are trying to account for the impact of those payments we allocate them on a trade date basis, rather than settlement date.

**Settlement date basis:** The net cash requirement tables (Figure 20, Figure 21 and Figure 22) are on a settlement basis. In the US, conventional supply settles either during the middle of the month or at the end of the month. (If there is a Treasury auction during the last week of the month it will settle in the following week). Consequently, if you participate in the UST 3-year auction on 7 January the money would leave your account during the w/c 24 March. In addition, TIPS often settle during a different week from conventional supply.

## Global Cash Flows (Next 4 Weeks)

### Euro coupons and redemptions for the next four weeks

**EMU: €7bn of coupon payments and €23bn of redemptions (on a trade-date basis)**

- €7bn of coupon payments (a majority of which come from Belgium) and €23bn of redemption (from Belgium and Italy) will be eligible for reinvestment next week (Figure 16).

Figure 16. Euro Coupon Payments and Redemptions over the Next Four Weeks (EUR-Billions)\*

Week Commencing	Coupon Payments						Redemptions
	2yr	5yr	10yr	15yr	30yr	Linker	
24 Mar	2.4	1.0	0.6	1.6	1.5		23.4
31 Mar	0.6						0.6
07 Apr	1.8	0.4	0.7		0.3	0.7	19.0
14 Apr	0.5	0.5	0.3				1.3
<b>Total</b>	<b>5.2</b>	<b>1.9</b>	<b>1.5</b>	<b>1.6</b>	<b>1.8</b>	<b>0.7</b>	<b>42.4</b>

Source: Bloomberg, Citi Research

\*This table is on a trade-date basis

### US coupons and redemptions for the next four weeks

**US: \$4bn of coupon payments and \$71bn of redemptions (on a trade-date basis)**

- \$4bn of coupon payments and \$71bn of redemptions will be eligible for reinvestment next week (Figure 17).

Figure 17. UST Coupon Payments and Redemptions over the Next Four Weeks (USD-Billions)\*

Week Commencing	Coupon Payments						Redemptions
	2-3yr	5yr	7yr	10yr	30yr	Linker	
24 Mar	3.2	0.9					71.4
31 Mar							
07 Apr							
14 Apr	0.4					1.3	50.4
<b>Total</b>	<b>3.6</b>	<b>0.9</b>				<b>1.3</b>	<b>121.9</b>

Source: Bloomberg, Citi Research

\*This table is on a trade-date basis

### UK coupons and redemptions for the next four weeks

**UK: minimal cash flows over the next four weeks (on a trade-date basis)**

- There are minimal cash flows over the next four weeks (Figure 18).

Figure 18. UST Coupon Payments and Redemptions over the Next Four Weeks (USD-Billions)\*

Week Commencing	Coupon Payments						Redemptions
	2yr	5yr	10yr	15yr	30yr	Linker	
24 Mar							
31 Mar							
07 Apr							
14 Apr						0.2	0.2
<b>Total</b>						<b>0.2</b>	<b>0.2</b>

Source: Bloomberg, Citi Research

\*This table is on a trade-date basis

## Euro Coupons and Redemptions Split by Maturity & Country (Next 4 Weeks)

■ Figure 19 below shows a weekly breakdown of euro coupons and redemptions, split by sector and country over the next four weeks.

Figure 19. Euro Coupons and Redemptions by Maturity and Country for the Next 4 weeks (EUR Billions)

WEEK 1	Week Beginning 24 Mar (Mon)		Coupons	Redemptions	WEEK 2	Week Beginning 31 Mar (Mon)		Coupons	Redemptions
		Austria					Austria		
		Belgium	6.5	8.7			Belgium		
		Germany					Germany	0.6	
		Finland					Finland		
	Coupons	France				Coupons	France		
2yr	2.4	Greece			2yr	0.6	Greece		
5yr	1.0	Ireland			5yr		Ireland		
10yr	0.6	Italy	0.2	14.8	10yr		Italy		
15yr	1.6	Netherlands			15yr		Netherlands		
30yr	1.5	Portugal			30yr		Portugal		
Linker		Spain	0.3		Linker		Spain		
	7.0		7.0	23.4		0.6		0.6	0.0
WEEK 3	Week Beginning 07 Apr (Mon)		Coupons	Redemptions	WEEK 4	Week Beginning 14 Apr (Mon)		Coupons	Redemptions
		Austria					Austria	0.3	
		Belgium					Belgium		
		Germany	1.6	19.0			Germany		
		Finland	0.8				Finland		
	Coupons	France				Coupons	France		
2yr	1.8	Greece			2yr	0.5	Greece		
5yr	0.4	Ireland			5yr	0.5	Ireland	1.0	
10yr	0.7	Italy	0.8		10yr	0.3	Italy		
15yr		Netherlands	0.1		15yr		Netherlands		
30yr	0.3	Portugal	0.6		30yr		Portugal		
Linker	0.7	Spain			Linker		Spain		
	3.8		3.8	19.0		1.3		1.3	0.0

Source: Bloomberg, Citi Research

\*This table is on a trade-date basis

## Cash Flow Profile (Next 4 Weeks)

The three tables on this page show the upcoming gross and net supply, coupons and redemptions, and the resultant NCR, for each of the next four weeks. All three tables are on a settlement date basis.

### EMU cash flow profile over the next four weeks

EMU: non-supportive next week

- The euro NCR is non-supportive for bonds net week as €19.5bn of gross supply easily outweighs €6.5bn of coupon payments and €8.7bn of redemptions settling during that week (Figure 20).

Figure 20. Estimated Euro Weekly Cash Flow Profile for Next Four weeks, EUR Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	A - B - C NCR
24 Mar	19.5	6.5	13.0	8.7	4.4
31 Mar	14.0	0.5	13.5	14.8	-1.3
07 Apr	24.0	1.4	22.6	19.0	3.6
14 Apr	11.0	3.9	7.1		7.1
<b>Total</b>	<b>68.5</b>	<b>12.4</b>	<b>56.1</b>	<b>42.4</b>	<b>13.7</b>
<b>Average</b>	<b>17.1</b>	<b>3.1</b>	<b>14.0</b>	<b>10.6</b>	<b>3.4</b>

Source: DMOs, Citi Research, Bloomberg

*\*This table is on a settlement-date basis*

### US net cash requirement (NCR) over the next four weeks

US: non-supportive for bonds over the next two weeks

- The US NCR is non-supportive for bonds over the next two weeks as gross supply outweighs cash flows and buybacks settling in each of these weeks (Figure 21).

Figure 21. US Weekly Cash Flow Profile for Next Four weeks, USD Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	D Buybacks	A - B - C - D NCR
24 Mar	13.0		13.0		9.5	3.5
31 Mar	109.0	4.1	104.9	71.4	6.5	27.0
07 Apr					6.5	-6.5
14 Apr	62.0	1.7	60.3	50.4	6.5	3.4
<b>Total</b>	<b>184.0</b>	<b>5.8</b>	<b>178.2</b>	<b>121.9</b>	<b>29.0</b>	<b>27.3</b>
<b>Average</b>	<b>46.0</b>	<b>1.5</b>	<b>44.5</b>	<b>30.5</b>	<b>7.3</b>	<b>6.8</b>

Source: US Treasury, Citi Research, Bloomberg

*\*This table is on a settlement-date basis*

### UK cash-flow profile over the next two weeks

UK: slightly supportive next week

- The UK NCR profile is slightly supportive next week as gross supply is slightly less than cash flows and buybacks settling during this week (Figure 22).

Figure 22. UK Weekly Cash Flow Profile for Next Two weeks, GBP Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	D Buybacks	A - B - C - D NCR
24 Mar	0.9	0.2	0.7		1.4	-0.7
31 Mar	2.5		2.5			2.5
07 Apr	1.5		1.5			1.5
14 Apr		0.2	-0.2			-0.2
<b>Total</b>	<b>4.9</b>	<b>0.4</b>	<b>4.5</b>		<b>1.4</b>	<b>3.1</b>
<b>Average</b>	<b>1.2</b>	<b>0.1</b>	<b>1.1</b>		<b>0.4</b>	<b>0.8</b>

Source: DMO, Citi Research, Bloomberg

*\*This table is on a settlement-date basis*



## ESP and ITA Bill Issuance Projections

This page contains our projections for Spanish and Italian bill supply in 2014. Please note that this is the only page in this document (other than page 1) which refers to bills.

### Auction calendar for the next four weeks

Figure 23. Provisional Bill Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (EUR Million/bp)

Week	Date	Country	Issue Details	Total Size (€bn)
<b>Week 1</b>	27 Mar (Thu)	Italy	6 month (30 September 2014; issue confirmed, estimated size)	8.5
<b>Total Size in Week 1</b>				<b>8.5</b>
<b>Week 3</b>	10 Apr (Thu)	Italy	12 month (14 April 2015; issue confirmed, estimated size)	9
	10 Apr (Thu)	Spain	6month (17 October 2014) and 12month (new bill) - tenors confirmed, estimated issue and size	5.5
<b>Total Size in Week 3</b>				<b>14.5</b>

Italy announces issue size 3 business days before the auction

Spain announces issue details 1 business day before the auction

Source: DMOs, Citi Research

*This table is on a calendar-date basis*

### 2014 projections for bill supply

Figure 24. 2014 Italy and Spain Bill Supply – Citi Forecast (Euro Billion)

<b>SPAIN</b>	<b>3m</b>	<b>6m</b>	<b>9m</b>	<b>12m</b>	<b>18m</b>	<b>Gross Supply</b>	<b>Redemptions</b>	<b>NCR</b>
Jan	1.0	1.0	2.2	3.1		7	8	-1
Feb	0.9	0.9	2.2	3.6		8	11	-4
Mar	1.3	1.0	2.0	3.5		8	10	-2
Apr	0.9	1.5	3.0	4.0		9	12	-3
May	0.9	1.5	3.0	4.0		9	8	1
Jun	0.9	1.5	3.0	4.0		9	14	-5
Jul	0.8	1.5	3.0	4.0		9	8	2
Aug	0.8	1.5	3.0	4.0		9	8	2
Sep	0.8	1.5	3.0	4.0		9	7	2
Oct	0.8	1.5	3.0	3.8		9	9	
Nov	0.8	1.5	3.0	3.8		9	8	1
Dec	0.8	1.5	3.0	3.8		9	7	2
<b>Total</b>	<b>10.3</b>	<b>16.5</b>	<b>33.4</b>	<b>45.5</b>		<b>106</b>	<b>110</b>	<b>-5</b>
<b>ITALY</b>	<b>3m*</b>	<b>6m</b>	<b>9m</b>	<b>12m</b>	<b>Flexible BOT</b>	<b>Gross Supply</b>	<b>Redemptions</b>	<b>NCR</b>
Jan		8.1		9.3		17	20	-2
Feb		8.6		8.0		17	19	-3
Mar		9.0		7.6		17	16	
Apr	3.0	9.0		9.0		21	17	4
May		9.0		6.5	3.0	19	14	5
Jun		9.0		6.5		16	16	
Jul		9.0		6.5		16	18	-3
Aug		9.0		8.0		17	17	
Sep		8.5		8.0	3.0	20	19	1
Oct		8.5		8.0		17	19	-2
Nov		7.0		7.0		14	16	-2
Dec		7.0		6.0		13	15	-2
<b>Total</b>	<b>3.0</b>	<b>101.8</b>		<b>90.4</b>	<b>6.0</b>	<b>201</b>	<b>206</b>	<b>-5</b>

\*3month bills will be issued only for specific cash needs. In this case, auctions shall be held on the 12 month BOT auction dates

Source: DMOs, Bloomberg, Citi Research

*This table is on a calendar-date basis*

## EMU: Coupons & Redemptions (Next 3mths)

Figure 25. EMU-11 Bond Redemptions over the next three months (€bn)

Redemptions = €130bn											
Redemptions	DEU 34	FRA 21	NLD 0	ITA 47	ESP 15	BEL 9	AUT 0	FIN 0	PRT 4	GRC 0	IRL 0
(Fri) 28-Mar-14						8.7					
(Tue) 01-Apr-14				14.8							
(Fri) 11-Apr-14	19.0										
(Fri) 25-Apr-14		20.7									
(Wed) 30-Apr-14					15.4						
(Fri) 30-May-14				12.8							
(Sun) 01-Jun-14				19.4							
(Fri) 13-Jun-14	15.0										
(Mon) 16-Jun-14									4.4		

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

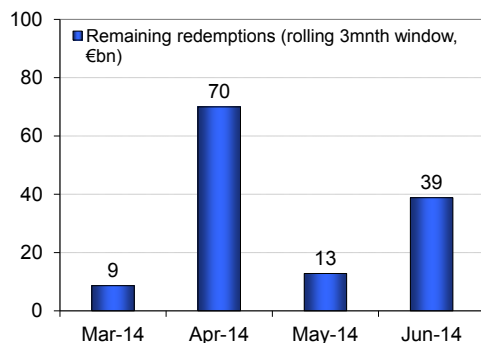
Figure 26. EMU-11 Coupon Payments over the next three months (€bn)

Coupons = €47bn											
Coupons	DEU 3	FRA 18	NLD 0	ITA 10	ESP 5	BEL 6	AUT 1	FIN 1	PRT 2	GRC 0	IRL 1
(Fri) 28-Mar-14						6.5					
(Mon) 31-Mar-14					0.3						
(Tue) 01-Apr-14				0.2							
(Mon) 07-Apr-14	0.1										
(Tue) 08-Apr-14	0.5										
(Thu) 10-Apr-14	0.4										
(Fri) 11-Apr-14	0.4										
(Sun) 13-Apr-14	0.0										
(Tue) 15-Apr-14	0.7		0.1	0.8				0.8	0.6		
(Fri) 18-Apr-14											1.0
(Sun) 20-Apr-14							0.3				
(Fri) 25-Apr-14		16.8									
(Wed) 30-Apr-14					5.0						
(Thu) 01-May-14				5.7							
(Thu) 15-May-14	0.3			0.8							
(Tue) 20-May-14											0.0
(Fri) 23-May-14							0.1				
(Sun) 25-May-14		1.5									
(Sun) 01-Jun-14				1.6							
(Sat) 14-Jun-14									0.5		
(Sun) 15-Jun-14				0.6					0.9		
(Mon) 16-Jun-14									0.2		
(Wed) 18-Jun-14							0.1				0.3
(Fri) 20-Jun-14	0.2						0.2				

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

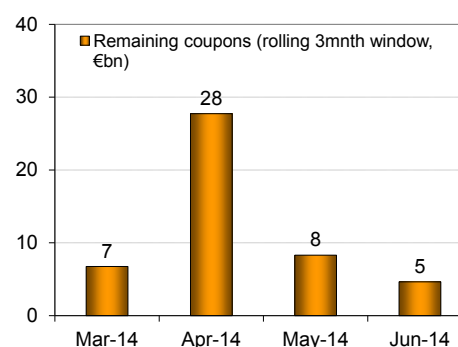
Figure 27. EMU-11 remaining redemptions over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

Figure 28. EMU-11 remaining coupons over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

## Appendix: EMU Core & Non-Core Net Supply (8 weeks)

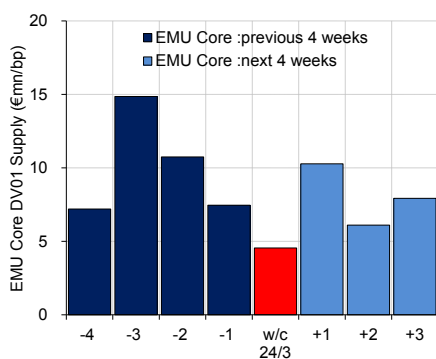
Figure 29 to Figure 31 show the projected EUR DV01 of core bond issuance, coupon payments and net issuance for the next four weeks and also the previous four weeks. Figure 32 to Figure 34 show the similar breakup for non-core issuance.

EMU core issuers = Germany, France, Netherlands, Austria, Finland & Belgium

**DV01 core: Germany, France, Netherlands, Austria, Finland & Belgium**

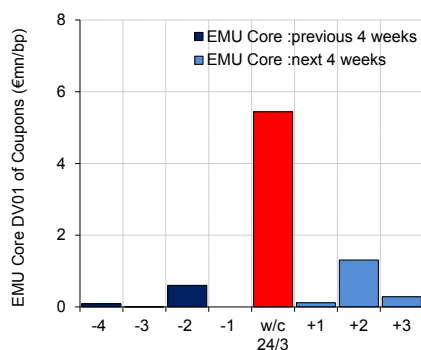
- There are heavy core coupon payments next week from Belgium (Figure 30).
- Next week is the only week in an eight week period where the net core DV01 is slightly negative (Figure 31)

Figure 29. Estimated €DV01 of Core Bond Issuance



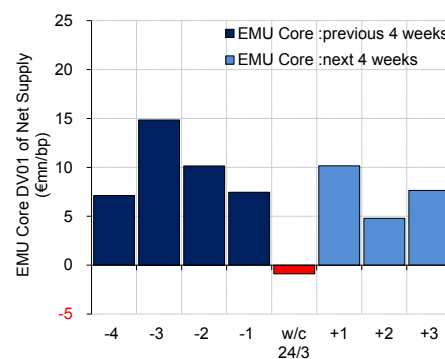
Source: DMOs, Citi estimates

Figure 30. Estimated €DV01 of Core Coupons (Trade-date basis)



Source: US Treasury, Citi estimates

Figure 31. Estimated €DV01 of Net Core Issuance



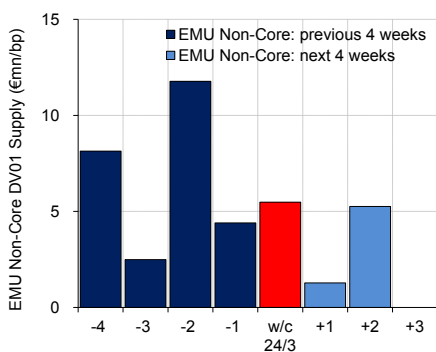
Source: DMO, Citi estimates

**DV01 non-core: Italy, Spain, Ireland & Portugal**

EMU non-core issuers = Italy, Spain, Ireland & Portugal

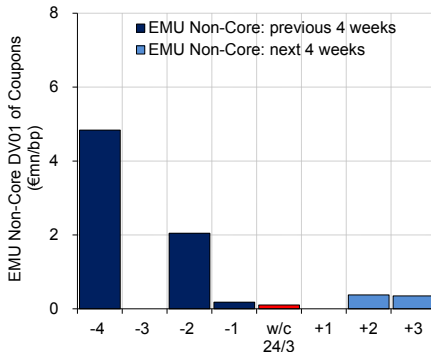
- There are negligible non-core coupon payments over the next four weeks (Figure 34).

Figure 32. Estimated €DV01 of Non-Core Bond Issuance



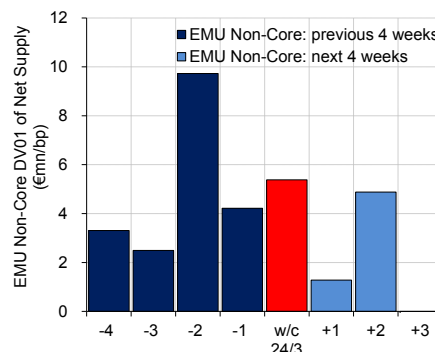
Source: DMOs, Citi estimates

Figure 33. Estimated €DV01 of Non-Core Coupons (Trade-date basis)



Source: US Treasury, Citi estimates

Figure 34. Estimated €DV01 of Net Non-Core Issuance



Source: DMO, Citi estimates

## Appendix: EMU Core & Non-Core Net Supply (Next Week)

Figure 35 and Figure 36 show the split by tenor of next week's core bond issuance, coupon payments and net issuance in both nominal and DV01 terms.

We have also included the equivalent number of 10yr Futures. Figure 35 and Figure 36 are on a trade-date basis.

EMU core issuers = Germany, France, Netherlands, Austria, Finland & Belgium

### EMU Core: Next week's Nominal Net Supply by Tenor

Figure 35. EMU core issuance, coupons and net supply by tenor for next week

EMU Core	2yr	5yr	10yr	15yr	30yr	Linkers	Total
Gross Supply			5.0				5.0
Coupons	1.9	0.9	0.6	1.6	1.5		6.5
Net Supply	-1.9	-0.9	4.4	-1.6	-1.5		-1.5

Source: DMOs, Bloomberg, Citi Research

This table is on a trade-date basis

### EMU Core: DV01 of Net Supply + Futures Equivalent

Figure 36. DV01 of EMU core issuance, coupons and net supply by tenor for next week

EMU Core	2yr	5yr	10yr	15yr	30yr	Linkers	Total		Number of 10yr Futures (x1000)	
							€DV01	\$DV01	RXM4	TYM4
DV01 of issuance			4.6				4.6	6.3	+39	+82
Coupons	0.4	0.4	0.5	2.7	3.6		7.6	10.5	+64	+137
Net Supply	-0.4	-0.4	4.0	-2.7	-3.6		-3.1	-4.2	-26	-55
Number of RX Futures (x1000)	-3	-4	+34	-23	-30					
Number of TY Futures (x1000)	-7	-8	+73	-49	-65					

Source: DMOs, Bloomberg, Citi Research

This table is on a trade-date basis

EMU non-core issuers = Italy, Spain, Ireland & Portugal

### EMU Non-Core: Next week's Nominal Net Supply by Tenor

Figure 37. EMU non-core issuance, coupons and net supply by tenor for next week

EMU Non-Core	2yr	5yr	10yr	15yr	30yr	Linkers	Total
Gross Supply	3.5	4.8	2.8				11.0
Coupons	0.5						0.5
Net Supply	3.0	4.8	2.8				10.5

Source: DMOs, Bloomberg, Citi Research

This table is on a trade-date basis

### EMU Non-Core: DV01 of Net Supply + Futures Equivalent

Figure 38. DV01 of EMU non-core issuance, coupons and net supply by tenor for next week

EMU Non-Core	2yr	5yr	10yr	15yr	30yr	Linkers	Total		Number of 10yr Futures (x1000)	
							€DV01	\$DV01	RXM4	TYM4
DV01 of issuance	0.7	2.3	2.5				5.5	7.6	+46	+99
Coupons	0.1						0.1	0.1	+1	+2
Net Supply	0.6	2.3	2.5				5.4	7.4	+46	+97
Number of RX Futures (x1000)	+5	+19	+21							
Number of TY Futures (x1000)	+11	+41	+45							

Source: DMOs, Bloomberg, Citi Research

This table is on a trade-date basis

## Appendix: US & UK Net Supply (Next Week)

### US: Next week's Nominal Net Supply by Tenor

- Figure 39 and Figure 40 show a breakdown of next week's US Treasury issuance, coupon payments and net issuance by tenor in both nominal and DV01 terms. These figures are on a trade-date basis.

Figure 39. US Treasury issuance, coupons and net supply by tenor

US	2-3yr	5yr	7yr	10yr	30yr	Linkers	Total
Gross Supply	45.0	35.0	29.0				109.0
Coupons							
Net Supply	45.0	35.0	29.0				109.0

Source: DMO, Bloomberg, Citi Research

This table is on a trade-date basis

### US: DV01 of Net Supply + Futures Equivalent

Figure 40. US Treasury DV01 of gross and net supply

US	2-3yr	5yr	7yr	10yr	30yr	Linkers	Total		Number of 10yr Futures (x1000)	
							€DV01	\$DV01	RXM4	TYM4
DV01 of issuance	11.3	14.7	17.4				31.4	43.4	+266	+566
Coupons										
Net Supply	11.3	14.7	17.4				31.4	43.4	+266	+566
Number of RX Futures (x1000)	+69	+90	+107							
Number of TY Futures (x1000)	+147	+192	+227							

Source: DMO, Bloomberg, Citi Research

This table is on a trade-date basis

### UK: Next week's Nominal Net Supply by Tenor

- Figure 41 and Figure 42 show a breakdown of next week's UK gilt issuance, coupon payments and net issuance by tenor in both nominal and DV01 terms. These figures are on a trade-date basis.

Figure 41. UK gilt issuance, coupons and net supply by tenor

UK	2yr	5yr	10yr	15yr	30yr	Linkers	Total
Gross Supply						0.9	0.9
Coupons							
Net Supply						0.9	0.9

Source: DMO, Bloomberg, Citi Research

This table is on a trade-date basis

### UK: DV01 of Net Supply + Futures Equivalent

Figure 42. UK gilt DV01 of gross and net supply

UK	2yr	5yr	10yr	15yr	30yr	Linkers	Total		Number of 10yr Futures (x1000)	
							€DV01	\$DV01	RXM4	TYM4
DV01 of issuance						1.3	1.6	2.1	+13	+28
Coupons										
Net Supply						1.3	1.6	2.1	+13	+28
Number of RX Futures (x1000)						+13				
Number of TY Futures (x1000)						+28				

Source: DMO, Bloomberg, Citi Research

This table is on a trade-date basis

**Figure 43. UK, US and EMU-11 Gross Supply – Citi forecasts**

**Gross Supply (£bn cash)**

	Auctions				Syndications			A	B	C = A - B	D	E	F = C - D - E
UK	Shorts	Mediums	Longs	Linkers	Long	Linker	Mini Tender	Gross Supply	Coupons	Net Supply	Redemptions	Buybacks	NCR
Apr-14	4.1	3.4	2.5	1.5	0.0	0.0	0.0	11	0	11	0		11
May-14			2.5	3.0				5	1	5			5
Jun-14	4.1	3.4		1.5	4.3			13	7	6			6
Jul-14	4.1	3.4	2.5	1.5			1.7	13	4	10			10
Aug-14	4.1		2.5	3.0		4.3		14	0	13			13
Sep-14		3.4	2.5	1.5				7	11	-3	41		-44
Oct-14	4.1	3.4	2.5	1.5	4.3			16	0	15			15
Nov-14			2.5	3.0			1.7	7	1	6			6
Dec-14	4.1	3.4		1.5				9	7	2			2
Jan-15	4.1	3.4	2.5	1.5		4.3		16	4	12	29		-17
Feb-15			2.5	1.5			1.7	6	0	5			5
Mar-15	4.1	3.4	2.5	1.5				11	10	2			2
Total	32.4	26.9	24.6	22.5	8.5	8.5	5.0	128	44	84	69		15

	Gross Supply (\$bn nominal)								A	B	C	D = A - B - C	E	F = D - E
US	FRN	2yr	3yr	5yr	7yr	10yr	30yr	TIPS	Gross Supply	Coupons	Fed Purchases	Net Supply	Redemptions	NCR
Jan-14	15	32	30	35	29	21	13	15	190	9	40	140	126	14
Feb-14	13	32	30	35	29	24	16	9	188	24	35	129	130	-0
Mar-14	13	32	30	35	29	21	13	13	186	5	30	152	103	48
Apr-14	15	30	28	35	29	21	13	13	184	6	30	148	123	26
May-14	13	30	28	35	29	24	16	13	188	22	25	141	130	10
Jun-14	13	30	28	35	29	21	13	7	176	4	20	152	105	46
Jul-14	15	28	26	33	29	21	13	15	180	9	15	156	130	26
Aug-14	13	28	26	33	29	24	16	12	181	23	10	148	133	15
Sep-14	13	28	26	33	29	21	13	13	176	4	5	167	108	59
Oct-14	15	25	26	32	29	21	13	20	181	5		176	109	67
Nov-14	13	25	26	32	29	24	16	13	178	21		157	138	19
Dec-14	13	25	26	32	29	21	13	12	171	4		167	111	56
Total	164	345	330	405	348	264	168	155	2179	135	210	1834	1447	387

(for fixed rate government bonds and index-linked notes)

				(per latest government deficit and most latest notes)				
Gross Supply	2012	2013	2014	Gross Supply (€bn)	2012	2013	2014	Tickers used in our supply estimates
EMU-10 (€bn)	829	853	878	Germany	184	183	173	Schatz, Bobl, Bund, Bundel, Boblei
				France	201	192	200	OAT, BTAN, BTAni, OATi, OATei
Gross Supply	2012	2013	2014	Italy	205	213	236	BTP, BTPei, CCT, CTZ
US (\$bn)	2153	2140	2179	Spain	98	126	133	Bono, Obligaciones
				Netherlands	60	52	49	DSL
Gross Supply *	12/13	13/14	14/15	Belgium	43	40	32	OLO
UK (€bn)	165.1	153.7	128.4	Austria	21	22	22	RAGB
				Finland	11	12	11	RFGB
				Ireland	5	8	8	IRLD
				Portugal		6	11	OT
				Greece			3	HELX
				Total	829	853	878	

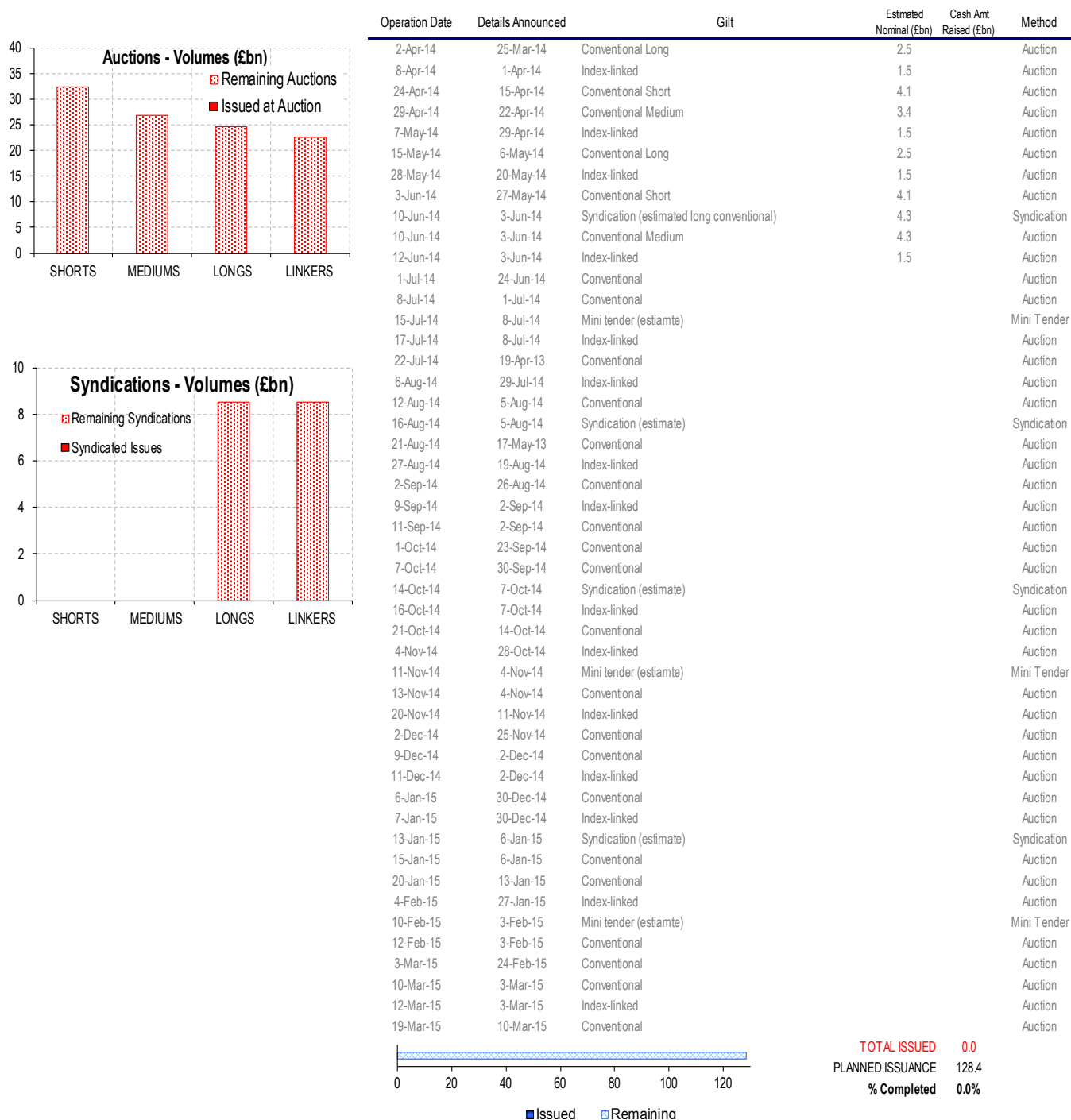
*\*UK supply forecasts on financial year basis (cash amt)*

Source: DMOs, Bloomberg, Citi Research

*This table is on a calendar-date basis*

## UK Gilt Remit and Progress for FY2014/15

Figure 44. UK Gilt Remit and Progress for FY2014/15



Source: DMO, Bloomberg, Citi Research

# EMU 2014 Supply, Coupons & Redemptions

Figure 45. 2014 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

EMU-11	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	21.4	27.5	37.5	9.2	4.8	4.2	105	35	69	94	-24
Feb	14.3	27.9	19.4	9.1	11.2	3.7	85	11	75		75
Mar	21.5	17.6	18.4	13.5	3.3	7.0	81	11	70	38	32
Apr	20.5	20.8	28.5	7.8	7.8	3.7	89	33	56	55	1
May	19.0	22.0	18.5	5.5	4.3	7.7	77	4	73	32	40
Jun	21.3	20.3	17.6	5.5	6.0	3.7	74	5	70	33	36
Jul	17.5	22.2	16.2	10.0	4.9	4.7	75	41	34	118	-84
Aug	13.5	14.3	5.8	3.0	1.5	1.0	39	8	31		31
Sep	20.5	24.3	16.5	5.8	5.9	5.5	78	9	69	79	-10
Oct	19.3	19.6	20.7	5.7	4.8	3.7	74	33	40	76	-36
Nov	18.3	21.3	18.6	3.0	4.5	3.7	69	3	67	27	40
Dec	8.5	10.3	7.2	4.5			31	1	30	29	1
Total	215	248	225	83	59	49	878	194	684	583	102

GERMANY	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.0	5.0	5.0			1.0	15	11	4	24	-20
Feb	5.0	4.0	5.0		3.0	1.0	18	2	16		16
Mar	4.0	4.0	4.0			1.0	13		13	15	-2
Apr	4.0	3.0	4.0			1.0	12	2	10	19	-9
May	5.0	5.0	5.0		2.0	3.0	20		20		20
Jun	4.0	4.0	5.0			1.0	14		14	15	-1
Jul	4.0	4.0	4.0			1.0	13	11	2	25	-23
Aug	5.0	3.0	4.0				12		12		12
Sep	4.0	5.0	5.0			1.0	15	1	14	15	-1
Oct	4.0	4.0	9.0		2.0	1.0	20	1	19	17	2
Nov	5.0	4.0	4.0			1.0	14		14		14
Dec	4.0	3.0					7		7	14	-7
Total	52.0	48.0	54.0		7.0	12.0	173	29	144	144	0

FRANCE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	2.5	8.9	6.2		1.8	1.9	21	1	20	21	-1
Feb	2.6	5.4	4.7	4.8		1.6	19	1	18		18
Mar	4.3	3.7	4.5	4.7		1.5	19		19		19
Apr	4.0	5.5	12.0	3.3	1.3	1.7	28	17	11	21	-10
May	4.5	4.3				1.7	10	1	9		9
Jun	3.8	6.0	5.0	2.3	2.3	1.7	21		21		21
Jul	4.0	5.0	4.5	3.5		1.7	19	5	14	26	-12
Aug											
Sep	4.5	4.5	5.0		2.3	2.5	19		19	15	4
Oct	4.0	5.0	5.3	2.7		1.7	19	16	3	21	-18
Nov	4.0	6.8	4.3		2.3	1.7	19		19		19
Dec		2.0	3.0	1.5			7		7		7
Total	38.1	57.0	54.4	22.8	9.8	17.7	200	42	158	104	54

ITALY	CTZ/3yr	5yr/CCT	7yr	10yr	15/30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	7.7	6.9	2.9	3.5	2.0	1.3	24	10	14	14	-1
Feb	4.3	8.0	2.9	4.3	1.7	1.2	22	6	16		16
Mar	7.1	4.8	2.0	2.3	2.6	4.5	23	2	21	15	6
Apr	6.5	5.3	2.0	3.5	6.5	1.0	25	6	19		19
May	6.5	4.0	1.8	3.5	1.5	1.0	18	2	16	32	-16
Jun	7.5	6.3	1.8	2.5	1.8	1.0	21	1	20	14	6
Jul	6.5	4.0	1.8	3.5	1.8	1.0	19	9	10	27	-17
Aug	6.5	3.8	1.8	3.0	1.5	1.0	18	7	10		10
Sep	7.0	3.8	1.8	5.0	1.5	1.0	20	2	18	33	-14
Oct	6.5	3.5	1.5	3.0	1.5	1.0	17	6	11		11
Nov	6.5	3.0	4.5	3.0	1.5	1.0	20	2	17	27	-9
Dec	4.5	1.5	1.5	3.0			11	1	10	15	-5
Total	77.1	54.6	26.0	40.0	23.7	14.9	236	55	181	177	4

Given that the majority of Italian redemptions occur on the 1st of the month and the Italian Treasury conducts an end-month BTP auction, the coupons & redemptions in the table above are on a trade-date basis (e.g. the redemption on 1 Aug will appear in July). In our view, this is a better representation of the monthly net cash requirement.

Source: DMOs, Bloomberg, Citi Research

All the numbers in this table except the Italian cash flows are on a calendar-date basis



Figure 46. 2014 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

SPAIN	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	2.8	3.5	10.0	5.8			22	8	14	14	-1
Feb	2.4	6.3	2.3		0.8		12		12		12
Mar	3.3	4.5	1.3	1.5	0.8		11		11		11
Apr	6.0	3.5	2.5				12	5	7	15	-8
May	3.0	3.0	7.0	1.5		2.0	16		16		16
Jun	3.0	2.0	3.5				9		9		9
Jul	3.0	3.5	1.8	3.0		1.0	12	8	4	16	-12
Aug	2.0	3.5					6		6		6
Sep	5.0	3.5	2.0	0.8		1.0	12		12		12
Oct	2.0	3.5	2.0		0.8		8	6	2	22	-20
Nov		5.0	2.0				7		7		7
Dec		3.0	2.0				5		5		5
Total	32.4	44.9	36.4	12.5	2.3	4.0	133	28	104	68	36

NETHERLANDS	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.4						5	4	1	16	-15
Feb		2.3			3.7		6		6		6
Mar	2.9		5.0				8		8		8
Apr		2.5	2.5				5		5		5
May		2.0	2.5				5		5		5
Jun	3.0	1.0			0.8		5		5		5
Jul			2.0				2	5	-3	14	-17
Aug											
Sep		5.0	1.0		0.8		7		7		7
Oct	2.8						3		3		3
Nov	2.8		2.0				5		5		5
Dec											
Total	15.8	12.8	15.0		5.7		49	9	40	30	10

BELGIUM	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			5.0				5		5		5
Feb		1.1	1.5		1.4		4		4		4
Mar				5.0			5	6	-1	9	-10
Apr		1.0	1.0	1.0			3		3		3
May		1.0	1.0	0.5	0.8		3		3		3
Jun		1.0	1.0	0.8			3	1	1		1
Jul		1.0	1.0		0.6		3		3		3
Aug											
Sep		1.0	1.0		0.6		3	4	-1	10	-12
Oct		1.0	1.0				2		2		2
Nov		1.0	1.0				2		2		2
Dec											
Total		8.1	13.5	7.3	3.4		32	12	20	19	2

AUSTRIA	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			0.7		0.6		1	1		1	-1
Feb		0.8					1		1		1
Mar		0.7	0.6				1	1			
Apr			3.5				4		3		3
May		0.7	0.7				1		1		1
Jun			0.9		0.8		2		1		1
Jul		3.5			2.5		6	2	4	10	-5
Aug											
Sep		0.8			0.8		2	1			
Oct		0.8	0.7				2	1	1	11	-10
Nov			0.8		0.8		2		1		1
Dec		0.8	0.7				2		2		2
Total		8.0	8.5		5.8		22	7	15	22	-7

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

Figure 47. 2014 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

<b>FINLAND</b>	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			4.0				4		4		4
Feb											
Mar											
Apr			1.0				1	1			
May											
Jun			0.5		0.5		1		1		1
Jul								1	-1		-1
Aug		4.0					4		4		4
Sep								1	-1	7	-7
Oct		0.5			0.5		1		1		1
Nov											
Dec											
Total		4.5	5.5		1.0		11	2	9	7	2

<b>IRELAND</b>	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			3.8				4		4	3	1
Feb											
Mar			1.0				1	1			
Apr								1	-1		-1
May		0.5	0.5				1		1		1
Jun											
Jul		0.5	0.5				1		1		1
Aug											
Sep											
Oct		0.5	0.5				1	2	-1		-1
Nov											
Dec											
Total		1.5	6.3				8	4	3	3	1

<b>PORTUGAL</b>	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan		3.3					3		3		3
Feb			3.0				3	1	2		2
Mar											
Apr								1	-1		-1
May											
Jun								2	-2	4	-6
Jul		0.7	0.7				1		1		1
Aug											
Sep		0.7	0.7				1		1		1
Oct		0.8	0.7				1	2		5	-5
Nov											
Dec											
Total		5.4	5.1				11	4	6	10	-4

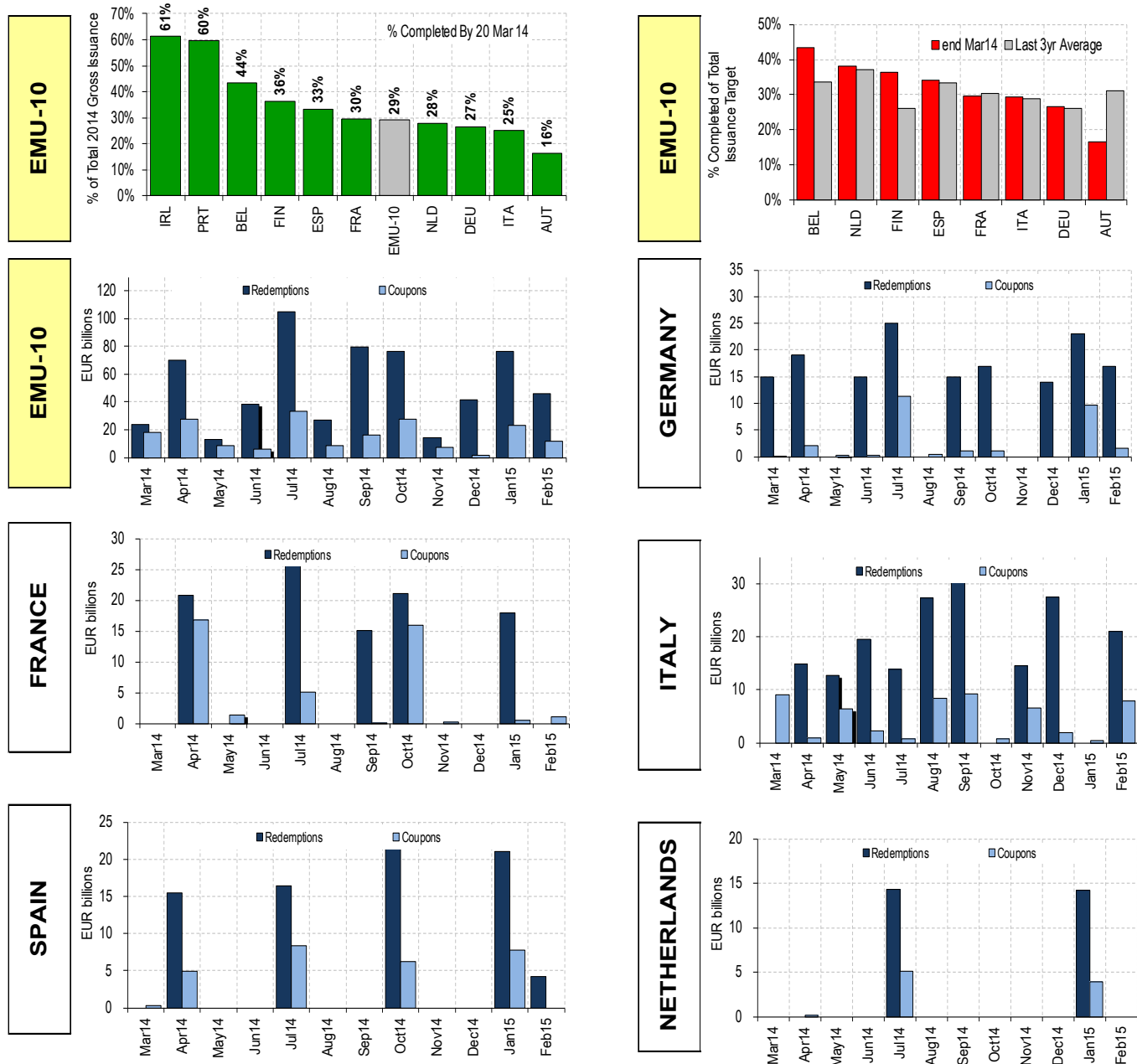
<b>GREECE</b>	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb								1	-1		-1
Mar											
Apr											
May		1.5					2		2		2
Jun											
Jul											
Aug											
Sep											
Oct											
Nov		1.5					2		2		2
Dec											
Total		3.0					3	1	2		2

Only tradable GGBs are included in our redemption and coupon calculations (therefore GGB May14 is not included in the redemption table)

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

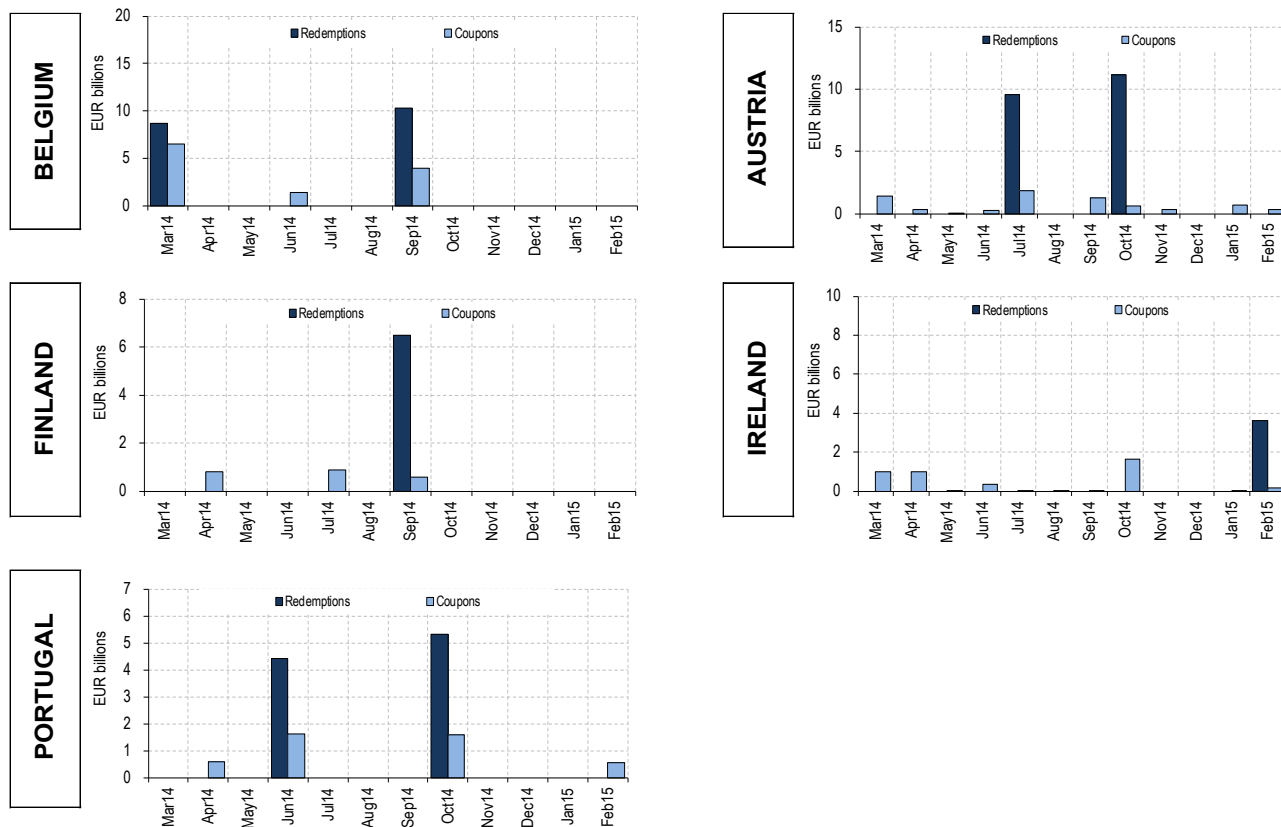
Figure 48. 2014 EMU Issuance Progress and Cash flow profile – Citi Forecasts (Euro in Billions)



Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

Figure 49. 2014 EMU Issuance Progress and Cash flow profile – Citi Forecasts (Euro in Billions)



	Sector					
	2yr	5yr	10yr	15yr	30yr	Total
Germany	460	278	190	83	87	1098
France	459	323	276	140	114	1311
Netherlands	125	70	62	23	32	312
Italy	596	354	291	154	98	1492
Spain	280	144	120	54	46	645
Belgium	93	70	64	38	36	301
Austria	63	50	47	10	20	191
Finland	29	17	26	4	3	79
Ireland	14	51	21	0	1	87
Portugal	28	42	21	0	7	97

	S&P		Moody's		Fitch	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
Germany	AAA	Stable	Aaa	Stable	AAA	Stable
France	AA	Stable	Aa1	-ve	AA+	Stable
Netherlands	AA+	Stable	Aaa	Stable	AAA	-ve
Italy	BBB	-ve	Baa2	Stable	BBB+	-ve
Spain	BBB-	Stable	Baa2	+ve	BBB	Stable
Belgium	AA	Stable	Aa3	Stable	AA	Stable
Austria	AA+	Stable	Aaa	Stable	AAA	Stable
Finland	AAA	Stable	Aaa	Stable	AAA	Stable
Ireland	BBB+	+ve	Baa3	+ve	BBB+	Stable
Portugal	BB	-ve	Ba3	Stable	WD	-ve

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

## Appendix A-1

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