

## Euro Rates Strategy

### EMU 10: April Supply Outlook

#### ■ Forecast gross issuance of €73bn in April

- €10bn lower than March
- France, Italy and Germany account for 70% of gross issuance
- The 30-year sector accounts for a third of the DV01 of issuance

#### ■ Coupons (€28bn) and Redemptions (€98bn) – second highest in 2013

- Coupons: €17bn comes from France on 25 April
- Redemptions: Italy, Germany, France, Spain and Ireland

#### ■ EMU-10 coupons and redemptions are significantly higher than gross issuance

- €73bn of gross supply vs €28bn of coupons and €99bn of redemptions

#### ■ Net cash requirement most supportive for France, least supportive for Belgium

- Coupons and redemptions outweigh gross issuance by €21bn in France
- Gross issuance outweighs coupons and redemptions by €4bn in Belgium

**Nishay Patel**

+44-20-7986-1007

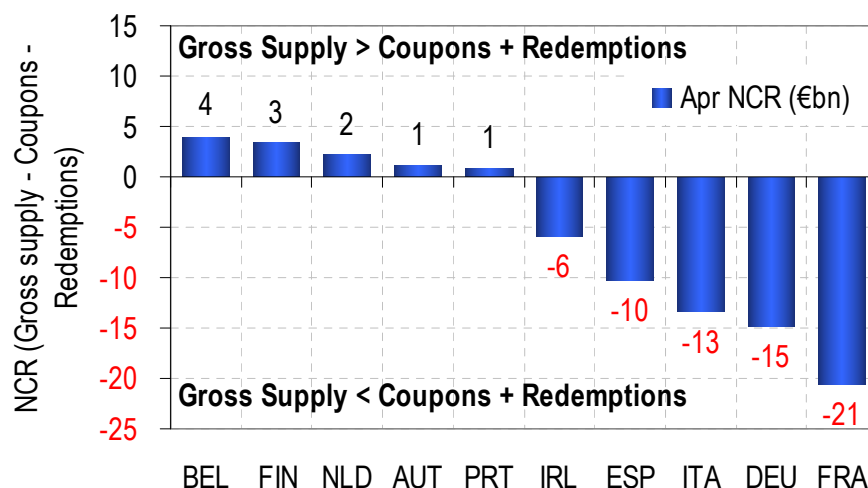
nishay.patel@citi.com

**Mohit Aggarwal**

+91-22-4277-5022

mohit1.aggarwal@citi.com

Figure 1. Net cash requirement most supportive of France (€bn)



Source: DMOs, Bloomberg, Cit Research

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

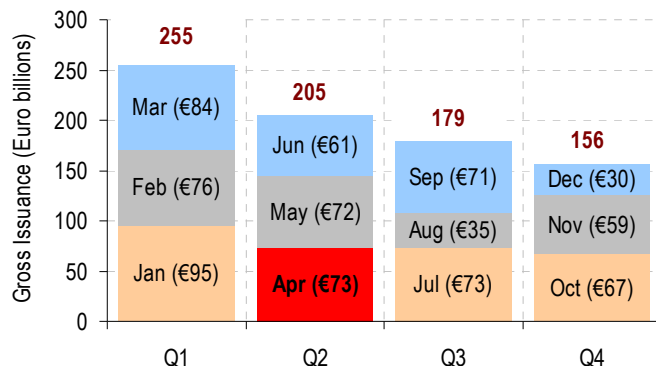
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# EMU-10: April Supply Outlook

## Gross Issuance in April (€73bn)

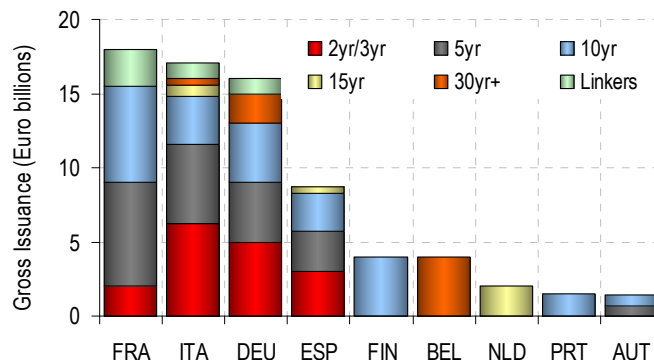
- We forecast €73bn of gross supply in April (Figure 2), €11bn lower than March but €7bn higher than the 2013 monthly average.
- 70% of total issuance in April comes from France (€18bn), Italy (€17bn) and Germany (€16bn) – Figure 3. Almost all active issuers are expected to issue in April.

Figure 2. Euro Government Gross Supply by Quarter, 2013F (€bn)



Source: DMOs, Citi Research

Figure 3. April Gross Issuance by Country and Maturity (€bn)

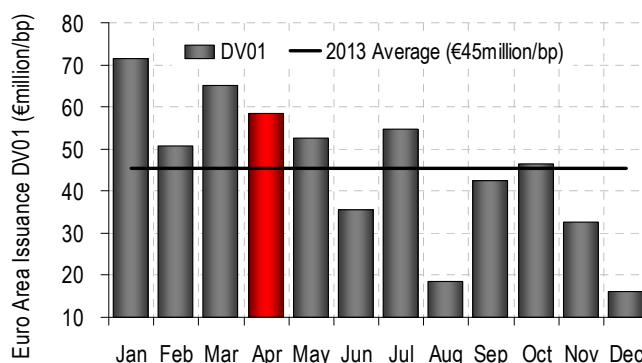


Source: DMOs, Citi Research

## DV01 of Issuance by Maturity for April

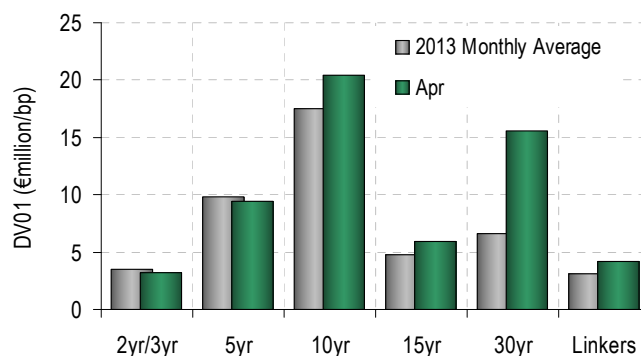
- Figure 4 shows the DV01 of issuance for April and the 2013 monthly average. The projected DV01 of issuance in April is €14million/bp higher than the 2013 average (€45million/bp).
- Within conventional issuance, the 10-year sector accounts for 35% of total issuance at €20million/bp. The DV01 of 30yr issuance in April (€16million/bp) is much higher than the 2013 monthly average of €7million/bp (Figure 5).

Figure 4. DV01 of Euro Government Supply, 2013F (€million/bp)



Source: DMOs, Citi Research

Figure 5. Monthly DV01 of Issuance by Maturity (€million/bp)



Source: DMOs, Citi Research

## April Coupons (€28bn) and Redemptions (€98bn)

- April has the second highest coupon payments (€28bn) and redemptions (€98bn) in 2013 (Figure 18). 60% of coupon payments in April come from France on 25 April - these are almost equally distributed across the curve. A split of the €28bn of coupon payments by tenor and date can be found in Figure 6.

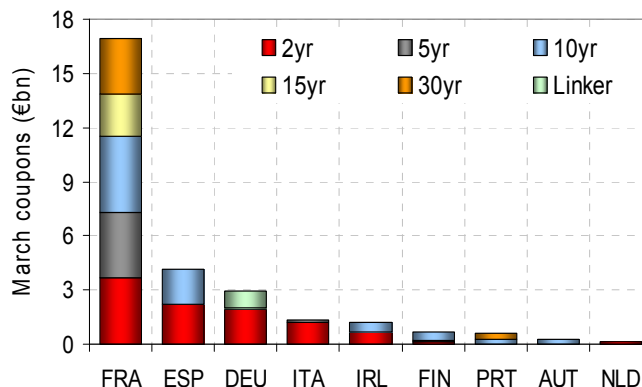
- €98bn of redemptions in April comes from Italy (€16.7bn on 15 April and €12.4bn on 30 April), Germany (€17bn on 12 April and €11bn on 15 April), France (€21.6bn on 25 April), Spain (€14.9bn on 30 April) and Ireland (€4.6bn on 18 April).

Figure 6. April Coupons by Country, Date and Tenor (€bn)

Date	Country	Coupons					
		2yr	5yr	10yr	15yr	30yr	Linker
01-Apr	Italy	0.2					
07-Apr	Germany		0.1				
08-Apr	Germany	0.5					
10-Apr	Germany	0.4					
11-Apr	Germany	0.4					
12-Apr	Germany	0.6					
15-Apr	Germany						0.9
15-Apr	Finland	0.1	0.1	0.4			
15-Apr	Italy	1.0	0.2				
15-Apr	Netherlands	0.1					
15-Apr	Portugal			0.3		0.3	
18-Apr	Ireland	0.7		0.5			
20-Apr	Austria			0.3			
25-Apr	France	3.7	3.6	4.2	2.4	3.0	
30-Apr	Spain	2.2		2.0			
Total		9.9	3.9	7.7	2.4	3.3	0.9

Source: DMOs, Citi Research, Bloomberg

Figure 7. April Coupons by Country and Tenor (€bn)



Source: DMOs, Citi Research, Bloomberg

## April NCR (-€54bn) - second lowest in 2013

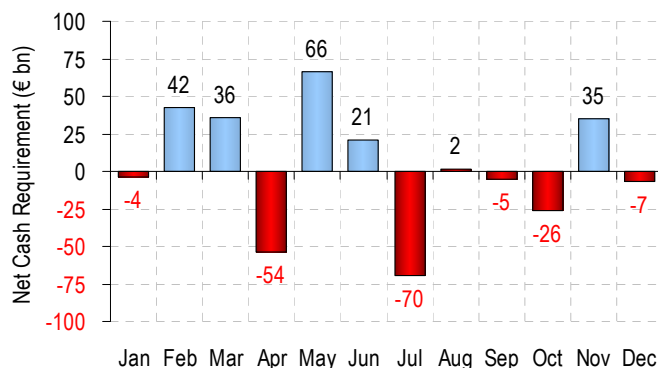
**Net Cash Requirement (NCR) = gross supply minus coupon payments and redemptions**

**All things being equal, positive NCR is non-supportive for bonds and a negative NCR is supportive for bonds.**

- The April NCR is strongly supportive for bonds (-€54bn) in 2013 as €73bn of gross supply is easily outweighed by €28bn of coupon payments and €98bn of redemptions (Figure 8 and Figure 18).

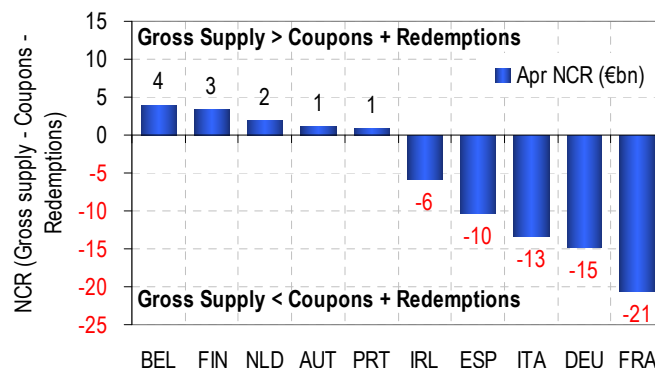
- Figure 9 splits the euro April NCR by country. The NCR is supportive for bonds in France, Germany, Italy, Spain and Ireland (i.e. where gross supply is outweighed by coupon payments and redemptions).

Figure 8. Euro Government NCR, 2013F (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 9. Euro Government NCR, April (€bn)



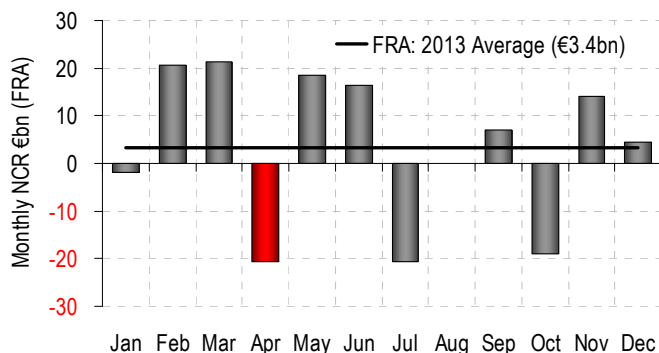
Source: DMOs, Citi Research, Bloomberg

## France NCR (-€21bn) - lowest in 2013

All things being equal, positive NCR is non-supportive for bonds and a negative NCR is supportive for bonds.

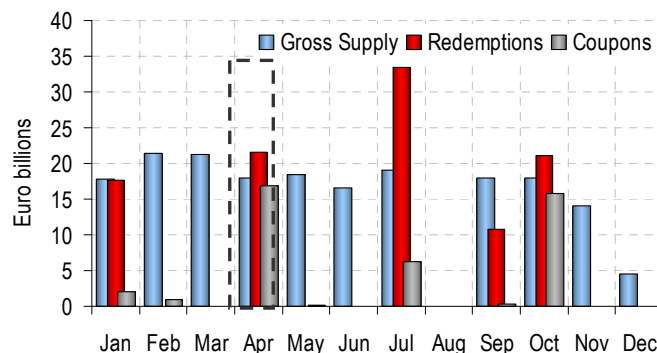
- The NCR for France in April (-€21bn) is strongly supportive for OATs as €18bn of gross supply is easily outweighed by €17bn of coupon payments and €22bn of redemptions (Figure 10 and Figure 18).
- The NCR will sharply change from being supportive for bonds in April (-€21bn) to non-supportive in May (€18bn) - Figure 10.

Figure 10. France: Monthly Net Cash Requirement 2013F (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 11. France: Supply, Redemptions & Coupons by Month (€bn)

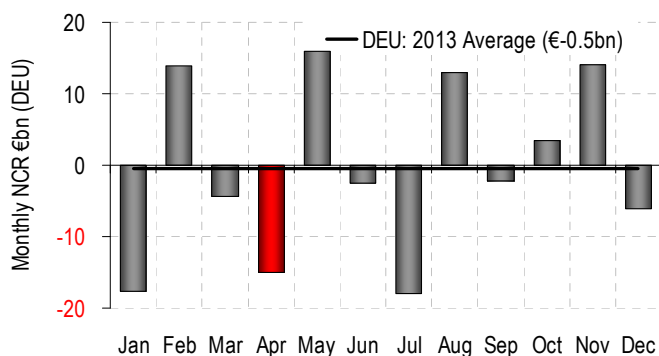


Source: DMOs, Citi Research, Bloomberg

## Germany NCR (-€15bn)

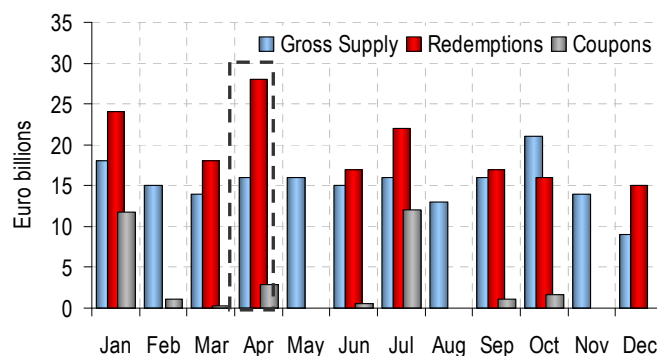
- The April NCR for Germany (-€15bn) is strongly supportive for bonds as €16bn of gross supply is easily outweighed by €3bn of coupon payments and €28bn of redemptions (Figure 12 and Figure 18).
- The NCR will sharply change from being supportive for bonds (-€15bn) in April to non-supportive (€16bn) in May (Figure 12 and Figure 13).

Figure 12. Germany: Monthly Net Cash Requirement 2013F (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 13. Germany: Supply, Redemptions & Coupons by Month (€bn)

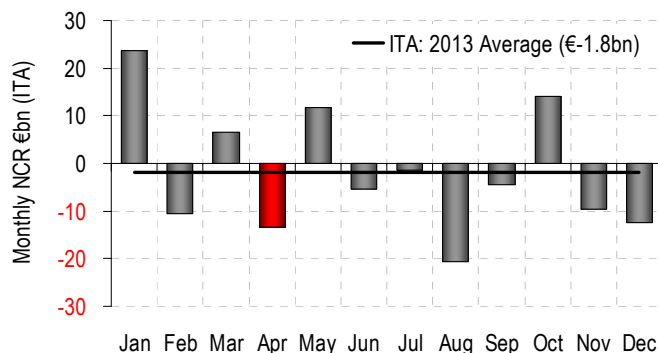


Source: DMOs, Citi Research, Bloomberg

## Italy NCR (-€13bn)

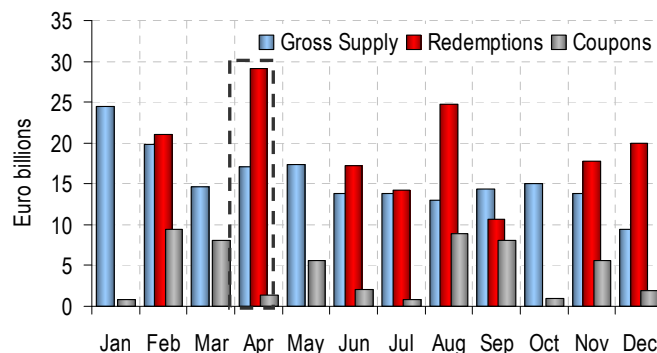
- The NCR for Italy in April (-€13bn) is strongly supportive for bonds as €17bn of gross supply is easily outweighed by €1bn of coupon payments and €29bn of redemptions (Figure 14 and Figure 18).
- The NCR will sharply change from being supportive (-€13bn) in April to non-supportive (€12bn) in May (Figure 14 and Figure 15).

Figure 14. Italy: Monthly Net Cash Requirement 2013F (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 15. Italy: Supply, Redemptions & Coupons by Month (€bn)

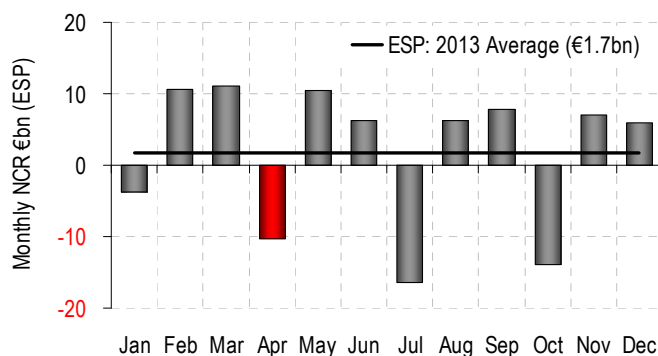


Source: DMOs, Citi Research, Bloomberg

## Spain NCR (-€10bn)

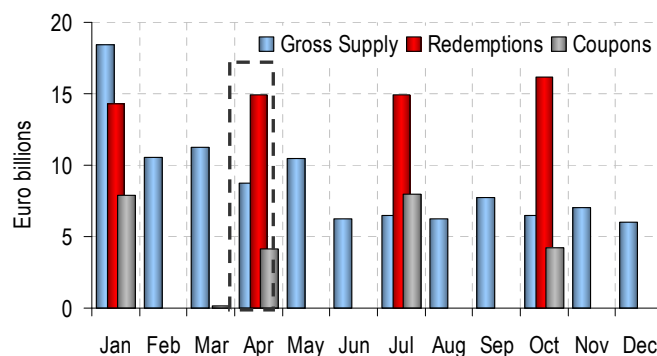
- The NCR for Spain in April (-€10bn) is supportive for bonds as €9bn of gross supply is easily outweighed by €4bn of coupon payments and €15bn of redemptions (Figure 16 and Figure 19).
- The NCR will sharply change from being supportive (-€10bn) in April to non-supportive (€11bn) in May (Figure 16 and Figure 17).

Figure 16. Spain: Monthly Net Cash Requirement 2013F (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 17. Spain: Supply, Redemptions & Coupons by Month (€bn)



Source: DMOs, Citi Research, Bloomberg

## Appendix: 2013 EMU-10 Supply

Figure 18. 2013 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

EMU-10	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	25.1	25.7	25.2	8.7	4.6	5.8	95	27	68	71	-4
Feb	17.4	27.5	19.4	5.7	1.0	4.6	76	12	63	21	42
Mar	20.1	19.9	29.4	4.9	5.4	3.5	83	17	66	31	35
Apr	16.3	19.8	22.5	3.5	6.5	4.5	73	28	45	98	-54
May	15.8	21.9	24.6	2.0	4.0	4.0	72	6	67		67
Jun	20.0	17.8	16.5	1.5	0.8	4.0	61	5	55	34	21
Jul	15.8	25.3	19.0	3.5	5.3	4.0	73	36	37	107	-70
Aug	12.8	11.8	10.0	0.8			35	9	26	25	2
Sep	21.0	24.5	19.3		2.3	4.0	71	16	55	60	-5
Oct	16.0	20.5	21.7	2.0	2.8	4.0	67	27	40	66	-26
Nov	20.3	18.7	16.2	0.5	0.8	2.5	59	6	53	18	35
Dec	10.3	11.4	7.7	1.0			30	2	28	35	-7
Total	211	245	231	34	33	41	795	192	603	566	37

GERMANY	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	5.0	5.0	5.0		2.0	1.0	18	12	6	24	-18
Feb	5.0	4.0	5.0			1.0	15	1	14		14
Mar	5.0	4.0	4.0			1.0	14		14	18	-4
Apr	5.0	4.0	4.0		2.0	1.0	16	3	13	28	-15
May	5.0	5.0	5.0			1.0	16		16		16
Jun	5.0	4.0	5.0			1.0	15	1	14	17	-3
Jul	5.0	4.0	4.0		2.0	1.0	16	12	4	22	-18
Aug	5.0	4.0	4.0				13		13		13
Sep	5.0	5.0	5.0			1.0	16	1	15	17	-2
Oct	5.0	4.0	9.0		2.0	1.0	21	2	19	16	3
Nov	5.0	4.0	4.0			1.0	14		14		14
Dec	5.0	4.0					9		9	15	-6
Total	60.0	51.0	54.0		8.0	10.0	183	31	152	157	-5

FRANCE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	2.4	7.3	5.2	1.2		1.8	18	2	16	18	-2
Feb	2.0	7.6	5.6	4.0		2.3	21	1	21		21
Mar	5.0	5.5	3.6	1.8	4.0	1.5	21		21		21
Apr	2.0	7.0	6.5			2.5	18	17	1	22	-21
May	2.5	6.0	6.0	2.0		2.0	19		18		18
Jun	4.0	6.5	4.0			2.0	17		17		17
Jul	3.0	6.0	6.0	2.0		2.0	19	6	13	33	-21
Aug											
Sep	3.5	7.0	4.0		1.5	2.0	18		18	11	7
Oct	3.3	6.3	6.5			2.0	18	16	2	21	-19
Nov	4.0	4.5	4.0			1.5	14		14		14
Dec		1.0	2.5	1.0			5		5		5
Total	31.6	64.5	53.8	11.9	5.5	19.6	187	42	145	105	40

ITALY	CTZ/3yr	5yr/CCT	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	7.6	4.5	3.5	6.0		2.9	25	1	24		24
Feb	6.8	4.5	5.2	1.0	1.0	1.3	20	9	10	21	-11
Mar	4.8	3.9	3.0	2.0		1.0	15	8	7		7
Apr	6.3	5.3	3.3	0.8	0.5	1.0	17	1	16	29	-13
May	5.3	3.8	3.3		4.0	1.0	17	6	12		12
Jun	5.3	3.8	3.3	0.5		1.0	14	2	12	17	-5
Jul	5.3	3.8	3.3		0.5	1.0	14	1	13	14	-1
Aug	5.3	3.8	3.3	0.8			13	9	4	25	-21
Sep	5.3	3.8	4.3			1.0	14	8	6	11	-4
Oct	5.3	5.0	3.3	0.5		1.0	15	1	14		14
Nov	6.3	3.8	3.3	0.5			14	6	8	18	-10
Dec	2.8	3.5	3.3				10	2	8	20	-12
Total	65.9	49.5	42.0	12.0	6.0	11.2	187	54	133	155	-22

Source: DMOs, Citi Research, Bloomberg

Figure 19. 2013 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

EMU-10	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	25.1	25.7	25.2	8.7	4.6	5.8	95	27	68	71	-4
Feb	17.4	27.5	19.4	5.7	1.0	4.6	76	12	63	21	42
Mar	20.1	19.9	29.4	4.9	5.4	3.5	83	17	66	31	35
Apr	16.3	19.8	22.5	3.5	6.5	4.5	73	28	45	98	-54
May	15.8	21.9	24.6	2.0	4.0	4.0	72	6	67		67
Jun	20.0	17.8	16.5	1.5	0.8	4.0	61	5	55	34	21
Jul	15.8	25.3	19.0	3.5	5.3	4.0	73	36	37	107	-70
Aug	12.8	11.8	10.0	0.8			35	9	26	25	2
Sep	21.0	24.5	19.3		2.3	4.0	71	16	55	60	-5
Oct	16.0	20.5	21.7	2.0	2.8	4.0	67	27	40	66	-26
Nov	20.3	18.7	16.2	0.5	0.8	2.5	59	6	53	18	35
Dec	10.3	11.4	7.7	1.0			30	2	28	35	-7
Total	211	245	231	34	33	41	795	192	603	566	37

GERMANY	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	5.0	5.0	5.0		2.0	1.0	18	12	6	24	-18
Feb	5.0	4.0	5.0			1.0	15	1	14		14
Mar	5.0	4.0	4.0			1.0	14		14	18	-4
Apr	5.0	4.0	4.0		2.0	1.0	16	3	13	28	-15
May	5.0	5.0	5.0			1.0	16		16		16
Jun	5.0	4.0	5.0			1.0	15	1	14	17	-3
Jul	5.0	4.0	4.0		2.0	1.0	16	12	4	22	-18
Aug	5.0	4.0	4.0				13		13		13
Sep	5.0	5.0	5.0			1.0	16	1	15	17	-2
Oct	5.0	4.0	9.0		2.0	1.0	21	2	19	16	3
Nov	5.0	4.0	4.0			1.0	14		14		14
Dec	5.0	4.0					9		9	15	-6
Total	60.0	51.0	54.0		8.0	10.0	183	31	152	157	-5

FRANCE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	2.4	7.3	5.2	1.2		1.8	18	2	16	18	-2
Feb	2.0	7.6	5.6	4.0		2.3	21	1	21		21
Mar	5.0	5.5	3.6	1.8	4.0	1.5	21		21		21
Apr	2.0	7.0	6.5			2.5	18	17	1	22	-21
May	2.5	6.0	6.0	2.0		2.0	19		18		18
Jun	4.0	6.5	4.0			2.0	17		17		17
Jul	3.0	6.0	6.0	2.0		2.0	19	6	13	33	-21
Aug											
Sep	3.5	7.0	4.0		1.5	2.0	18		18	11	7
Oct	3.3	6.3	6.5			2.0	18	16	2	21	-19
Nov	4.0	4.5	4.0			1.5	14		14		14
Dec		1.0	2.5	1.0			5		5		5
Total	31.6	64.5	53.8	11.9	5.5	19.6	187	42	145	105	40

ITALY	CTZ/3yr	5yr/CCT	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	7.6	4.5	3.5	6.0		2.9	25	1	24		24
Feb	6.8	4.5	5.2	1.0	1.0	1.3	20	9	10	21	-11
Mar	4.8	3.9	3.0	2.0		1.0	15	8	7		7
Apr	6.3	5.3	3.3	0.8	0.5	1.0	17	1	16	29	-13
May	5.3	3.8	3.3		4.0	1.0	17	6	12		12
Jun	5.3	3.8	3.3	0.5		1.0	14	2	12	17	-5
Jul	5.3	3.8	3.3		0.5	1.0	14	1	13	14	-1
Aug	5.3	3.8	3.3	0.8			13	9	4	25	-21
Sep	5.3	3.8	4.3			1.0	14	8	6	11	-4
Oct	5.3	5.0	3.3	0.5		1.0	15	1	14		14
Nov	6.3	3.8	3.3	0.5			14	6	8	18	-10
Dec	2.8	3.5	3.3				10	2	8	20	-12
Total	65.9	49.5	42.0	12.0	6.0	11.2	187	54	133	155	-22

Source: DMOs, Citi Research, Bloomberg

Figure 20. 2013 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

<b>FINLAND</b>	<b>2yr/3yr</b>	<b>5yr</b>	<b>10yr</b>	<b>15yr</b>	<b>30yr</b>	<b>Linkers</b>	<b>Gross Supply</b>	<b>Coupons</b>	<b>Net Supply</b>	<b>Redemptions</b>	<b>NCR</b>
Jan				1.0			1		1		1
Feb											
Mar											
Apr			4.0				4	1	3		3
May											
Jun			1.0				1		1		1
Jul								1	-1	6	-7
Aug											
Sep		4.0					4	1	3		3
Oct											
Nov		1.0					1		1		1
Dec											
<b>Total</b>		<b>5.0</b>	<b>5.0</b>	<b>1.0</b>			<b>11</b>	<b>2</b>	<b>9</b>	<b>6</b>	<b>3</b>

<b>IRELAND</b>	<b>2yr/3yr</b>	<b>5yr</b>	<b>10yr</b>	<b>15yr</b>	<b>30yr</b>	<b>Linkers</b>	<b>Gross Supply</b>	<b>Coupons</b>	<b>Net Supply</b>	<b>Redemptions</b>	<b>NCR</b>
Jan		2.5					3		2		2
Feb											
Mar			5.0				5	1	4		4
Apr								1	-1	5	-6
May		0.7	0.7				1		1		1
Jun											
Jul											
Aug											
Sep		0.6	0.6				1		1		1
Oct								2	-2		-2
Nov											
Dec											
<b>Total</b>		<b>3.8</b>	<b>6.3</b>				<b>10</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>1</b>

<b>PORTUGAL</b>	<b>2yr/3yr</b>	<b>5yr</b>	<b>10yr</b>	<b>15yr</b>	<b>30yr</b>	<b>Linkers</b>	<b>Gross Supply</b>	<b>Coupons</b>	<b>Net Supply</b>	<b>Redemptions</b>	<b>NCR</b>
Jan		2.5					3		3		3
Feb											
Mar											
Apr			1.5				2	1	1		1
May											
Jun								1	-1		-1
Jul											
Aug											
Sep										6	-6
Oct								2	-2		-2
Nov											
Dec											
<b>Total</b>		<b>2.5</b>	<b>1.5</b>				<b>4</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>-6</b>

Source: DMOs, Citi Research, Bloomberg

## Appendix A-1

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