

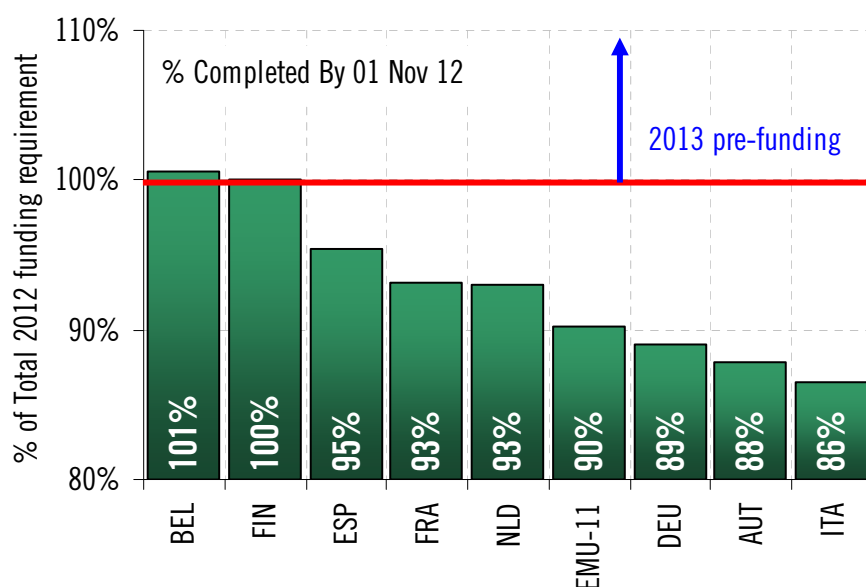
Euro Rates Strategy

EMU-11: Profile of Supply to end-2012

- **€91bn of issuance in November and December:** We forecast €91bn of gross supply for the remainder of this year (or 53% of 4Q12 total issuance). The DV01 of issuance in both November (€31million/bp) and December (€18million/bp) is considerably lower than the 2012 average (€47million/bp).
- **Little support from coupons (€8bn):** Coupon payments are extremely light over the next two months. Italy accounts for virtually all coupons payments during this period.
- **Redemptions (€72bn):** €72bn of redemptions during the next two months, from Germany, Italy, Belgium and France
- **Net cash requirement:** The NCR (-€16bn) is supportive for Italy with €7bn of coupons and €44bn of redemptions easily outweighing €35bn of gross supply. The NCR is extremely non-supportive for Spanish bonds (+€12bn) due to the absence of coupons and redemptions.

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Figure 1. Issuance progress (% of 2012 funding requirement)



Source: Citi Research

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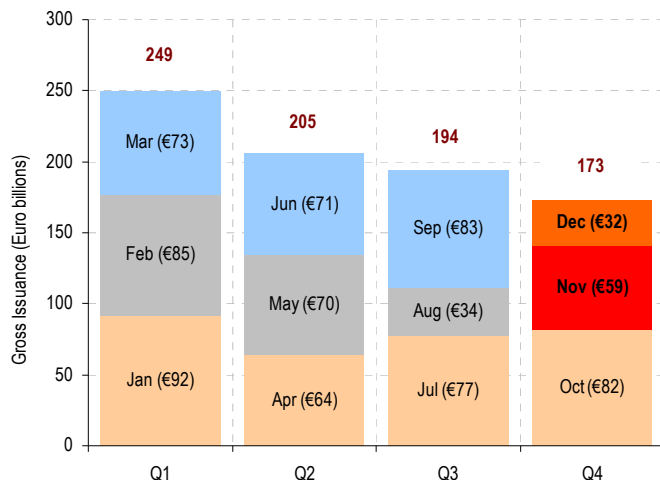
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EMU-11: Profile for the rest of 2012

November and December issuance forecasts

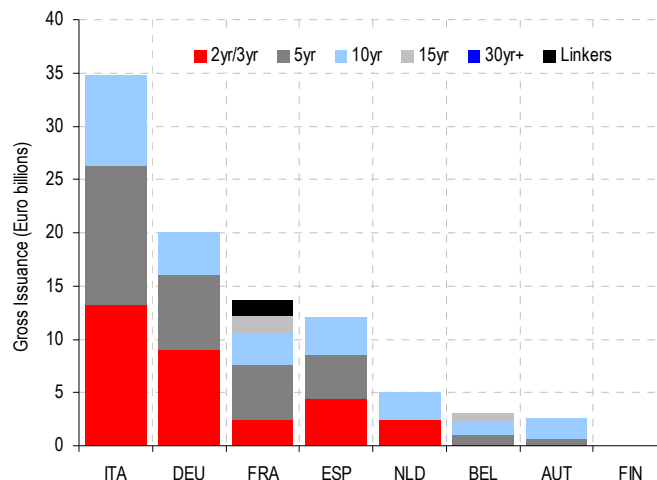
- **Gross:** We forecast €91bn of gross supply for the remainder of this year (Figure 2), which represents only 53% of total issuance in 4Q12.
- 59% of issuance during the next two months comes from Italy (€35bn) and Germany (€20bn) – Figure 3. We expect issuance from all non-programme countries.

Figure 2. Euro Government Gross Supply by Quarter, 2012F



Source: DMOs, Citi Research

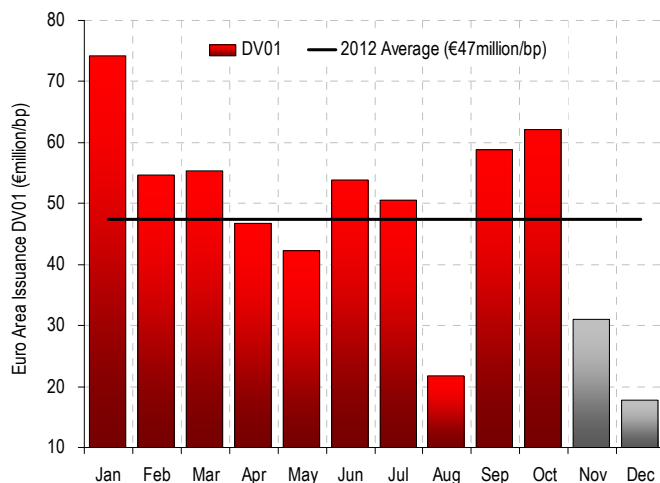
Figure 3. November & December Gross Supply by Country & Tenor



Source: DMOs, Citi Research

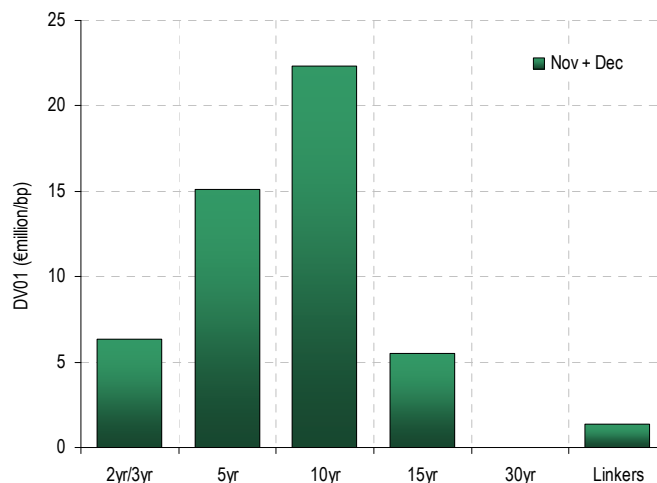
- **DV01:** Figure 4 shows the DV01 of issuance in each of the next two months along with the 2012 monthly average. The DV01 of issuance in both November (€31million/bp) and December (€18million/bp) is considerably lower than the 2012 average (€47million/bp).
- Within conventional issuance, the 10yr sector accounts for 47% of total issuance in November at €22million/bp (Figure 5).

Figure 4. DV01 of Euro Government Supply, 2012F (€million/bp)



Source: DMOs, Citi Research

Figure 5. DV01 of Issuance by Maturity to end-2012 (€million/bp)



Source: DMOs, Citi Research

Remaining Coupons (€8bn) & Redemptions (€72bn)

- Coupon payments are extremely light over the two months. Italy accounts for virtually all coupons payments during this period (€5bn in November and €3bn in December).
- There will be a €13bn redemption from Italy in November and €59bn of redemptions in December from Germany, Italy, Belgium and France (Figure 6).

Figure 6. Redemptions to year-end (€bn)

Country	Bond	Redemption Date	Amount (€bn)
ITA	CCT-3MIB+30-11/01/12	01-Nov-12	13.5
DEU	BUNS-1.000-12/14/12	14-Dec-12	17.0
ITA	BTP-2.000-12/15/12	15-Dec-12	18.7
BEL	OLOB #12-8.000-12/24/12	24-Dec-12	5.9
FRA	FFRG-8.500-12/26/12	26-Dec-12	5.5
ITA	CTZ-0.000-12/31/12	31-Dec-12	11.5
Total			72

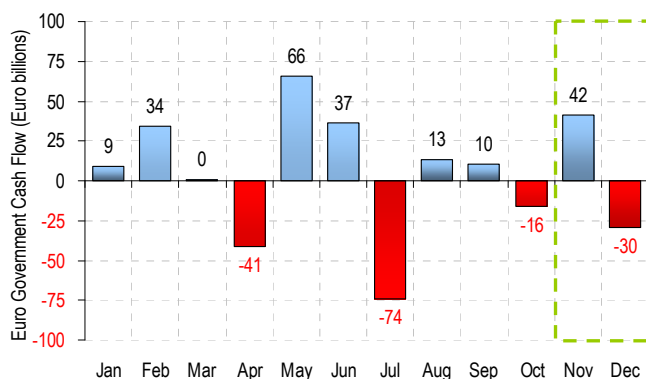
Source: Citi Research, Bloomberg

Net Cash Requirement (+€11bn) over the next two months

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

- The November NCR is the second highest (€40bn) in 2012. The NCR is non-supportive for bonds in November as €59bn of gross supply easily outweighs €5bn of coupon payments and €13bn of redemptions (Figure 7 and Figure 9).
- Figure 8 splits the euro NCR for the remainder of this year by country. The NCR is non-supportive for the majority of all the active issuers (i.e. gross supply outweighs coupon payments and redemptions).
- **Italy:** The NCR (-€16bn) is supportive for Italian yields during the next two months as €7bn of coupons and €44bn of redemptions easily offsets €35bn of gross supply.
- **Spain:** The NCR is extremely non-supportive for Spanish bonds (+€12bn) during the next two months due to the absence of coupon payments and redemptions.

Figure 7. Euro Government NCR, 2012E (€bn)



Source: DMOs, Citi Research, Bloomberg

Figure 8. Euro Government NCR, November and December 2012E (€bn)

EMU-11	Gross Supply	Coupons	Net Supply	Redemptions	NCR
ITA	35	7.0	28	44	-16
DEU	20	0.2	20	17	3
FRA	14	0.5	13	5	8
ESP	12		12		12
NLD	5		5		5
BEL	3	0.5	3	6	-3
AUT	3	0.2	2		2
IRL					
PRT					
FIN					
GRC					

Source: DMOs, Citi Research, Bloomberg

Appendix: 2012 EMU-11 Supply

Figure 9. 2012 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	22.3	26.9	26.8	3.1	10.5	2.3	92	29	63	54	9
Feb	19.7	25.1	34.9		1.5	3.2	85	13	72	38	34
Mar	24.5	17.8	15.6	2.3	8.2	4.6	73	17	56	56	
Apr	19.6	16.8	17.3	1.7	5.4	3.6	64	30	34	75	-41
May	22.0	21.3	19.6	3.8		3.6	70	5	66		66
Jun	18.4	20.9	19.4	2.7	6.3	3.1	71	5	66	29	37
Jul	20.2	26.8	22.9	2.1	3.0	2.3	77	40	37	112	-74
Aug	9.7	9.0	13.6		1.0	0.8	34	9	25	12	13
Sep	23.2	20.5	26.3	5.5	2.9	4.5	83	17	66	56	10
Oct	20.4	25.7	21.7	1.5	8.0	4.6	82	28	54	69	-16
Nov	19.3	21.5	15.6	0.8		1.5	59	5	53	13	40
Dec	12.5	9.3	9.2	1.5			32	3	29	59	-30
Total	232	242	243	25	47	34	822	201	621	572	49

GERMANY	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.0	4.0	5.0		3.0		16	13	3	25	-22
Feb	5.0	4.0	9.0				18	1	17		17
Mar	5.0	4.0				2.0	11	0	11	19	-8
Apr	5.0	4.0	5.0		3.0		17	3	14	16	-2
May	5.0	5.0	5.0			1.5	17		17		17
Jun	5.0	5.0	5.0			1.0	16	1	15	19	-4
Jul	5.0	4.0	5.0		3.0	1.0	18	13	5	27	-22
Aug	5.0	4.0	4.0				13		13		13
Sep	5.0	5.0	10.0			1.0	21	1	20	18	2
Oct	5.0	4.0	4.0		2.0	1.5	17	2	14	16	-2
Nov	5.0	7.0	4.0				16		16		16
Dec	4.0						4		4	17	-13
Total	58.0	50.0	56.0		11.0	8.0	183	35	148	157	-9

FRANCE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.9	4.3	4.8		3.6	1.7	19	3	16	15	2
Feb	3.4	6.7	8.5			1.7	20	1	19		19
Mar	4.0	5.5	6.1	2.3		1.6	20		20		20
Apr	5.3	4.0	4.7	1.7	1.2	2.5	19	18	2	20	-18
May	4.1	6.6	5.9	1.9		1.4	20		20		20
Jun	4.3	7.5	3.5	2.0	0.7	1.4	19		19		19
Jul	1.8	7.1	9.4			1.3	20	8	12	29	-17
Aug											
Sep	3.3	7.0	3.9	3.8		2.0	20		19	12	7
Oct	2.5	10.0	10.1		3.9	2.1	29	16	13	20	-7
Nov	2.5	4.5				1.5	9		9		9
Dec		0.6	3.0	1.5			5		5	5	-1
Total	36.0	63.8	59.8	13.1	9.5	17.1	199	46	154	102	52

ITALY	CTZ/3yr	5yr/CCT	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	9.4	6.4	3.5			0.6	20	1	19		19
Feb	7.6	4.9	4.7			1.5	19	10	9	36	-28
Mar	8.7	4.8	4.4			1.0	19	8	11	27	-16
Apr	5.9	3.6	5.1			1.0	16	2	14	27	-14
May	7.0	4.4	3.9	0.6		0.8	17	5	12		12
Jun	6.4	2.9	5.9			0.6	16	2	14		14
Jul	8.0	2.5	4.1				15	1	14	17	-3
Aug	3.5	3.8	4.5			0.8	13	9	3	12	-8
Sep	8.2	5.3	3.4	1.7		1.5	20	8	12	10	2
Oct	7.3	5.8	3.0	0.8		1.0	18	2	16	18	-2
Nov	6.8	6.5	4.5				18	5	13	13	-1
Dec	6.5	6.5	4.0				17	2	15	30	-15
Total	85.3	57.3	51.0	3.1		8.8	206	54	151	192	-41

Source: DMOs, Citi Research, Bloomberg

Figure 10. 2012 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		11.5	5.3				17	7	10		10
Feb	3.6	4.6	5.3				14		13	1	12
Mar	4.0	3.5					8		8		8
Apr	2.2	1.0	1.9				5	4	1	12	-11
May	2.6	2.9					5		5		5
Jun	2.6	1.6	0.6				5		5		5
Jul	2.6	2.1	1.3				6	8	-2	13	-15
Aug	1.3	1.2	1.0				4		4		4
Sep	6.7	1.6	0.9				9		9		9
Oct	5.7	2.5	1.9				10	4	6	15	-9
Nov	2.5	2.5	2.0				7		7		7
Dec	2.0	1.5	1.5				5		5		5
Total	35.9	36.5	21.7				94	24	70	41	29

*Spain will complete its 2012 funding requirement in November, in our view. We expect Spain to pre-fund for 2013 this year.

NETHERLANDS	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.1				1.5		6	4	2	14	-13
Feb		4.0	6.0				10		10		10
Mar	2.8				4.2		7		7		7
Apr	1.1	3.5			1.1		6		6		6
May	3.3		2.9				6		6		6
Jun			2.2		1.7		4		4		4
Jul	3.8	6.0		0.9			11	6	4	15	-11
Aug											
Sep			2.1		2.2		4		4		4
Oct		2.6					3		3		3
Nov	2.5		2.5				5		5		5
Dec											
Total	17.6	16.0	15.6	0.9	10.7		61	10	51	30	21

BELGIUM*	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			4.5				5		5		5
Feb		1.0	1.4		1.5		4		4		4
Mar			4.0		4.0		8	7	1	4	-3
Apr											
May		0.7	1.4	1.3			3		3		3
Jun		0.9	1.5	0.8			3		3		3
Jul		1.3	1.7	1.2			4		4		4
Aug											
Sep		1.0	5.5		0.7		7	5	2	9	-7
Oct		0.9	1.3	0.7	0.8		4		4		4
Nov		1.0	1.3	0.8			3		3		3
Dec										6	-6
Total		6.7	22.4	5.0	7.3		41	12	29	19	10

*Belgium has completed its 2012 funding requirement in our view. Given favourable market conditions we would expect the sovereign to pre-fund (in Nov 12) for next year

GREECE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar											
Apr											
May											
Jun											
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total								0	0	0	-0

Source: DMOs, Citi Research, Bloomberg

Figure 11. 2012 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

AUSTRIA	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan		0.7	3.7		2.0		6	1	6		6
Feb											
Mar			1.1				1	1			
Apr		0.7	0.6				1		1		1
May		0.7	0.6				1	1	1		1
Jun		3.0	0.7		2.4		6		6		6
Jul								2	-2	10	-13
Aug											
Sep		0.6	0.7				1	1			
Oct			0.6		0.8		1	1			
Nov			1.3				1		1		1
Dec		0.7	0.7				1		1		1
Total		6.3	9.8		5.2		21	7	14	10	4

FINLAND*	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan				3.0			3		3		3
Feb											
Mar											
Apr								1	-1		-1
May		1.0					1		1		1
Jun					1.5		2		2		2
Jul								1	-1		-1
Aug			4.0				4		4		4
Sep								1	-1	6	-7
Oct			1.0		0.5		2		2		2
Nov											
Dec											
Total		1.0	5.0	3.0	2.0		11	2	9	6	3

PORTUGAL	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar											
Apr								1	-1		-1
May											
Jun								2	-2	10	-12
Jul											
Aug											
Sep											
Oct								2	-2		-2
Nov											
Dec											
Total								5	-5	10	-15

IRELAND	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar								1	-1	6	-6
Apr								1	-1		-1
May											
Jun											
Jul	-1.0	3.9	1.3				4		4		4
Aug					1.0		1		1		1
Sep											
Oct								1	-1		-1
Nov											
Dec											
Total	-1.0	3.9	1.3	0.1	1.0		5	4	1	6	-5

Source: DMOs, Citi Research, Bloomberg

Appendix A-1

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