

Euro Rates Strategy

How 'open-ended' is QE really?

- In this short note, we compare the market size of eligible government bonds for QE (25% of 2-30yr) with assumed QE purchases based on the capital key. This is just a snapshot based on current market prices, although we do adjust for estimated net supply within the 2-30yr bucket over the QE period.
- The numbers are presented at the country level, but for EMU-11 as a whole we estimate that there will be around €1.5trn eligible bonds (market value) of which the ECB will buy just under €800bn. This implies that there will be around €750bn of eligible bonds remaining at the end of September 2016. However, for some countries, including Germany, there won't be much left to buy in any future extension of QE, and certainly not according to the capital key.
- This raises doubts over exactly how 'open-ended' QE is in reality. The ECB could change the terms of QE or simply buy other assets (see [Euro Economics Weekly - QE\(1\) Is Here — What Else Could The ECB Do?](#)). But, this does suggest that QE, in the current form, is unlikely to be extended beyond September 2016.
- We also present updated net cash requirement (NCR) tables to compare net supply with QE purchases by country and by calendar month for the remainder of 2015. The QE adjustment makes the NCR negative for nearly all the EMU-11 issuers in 2015. For some countries, like France and Italy, the NCR will still be quite varied on a monthly basis, but for Germany it is consistently supportive.

Aman Bansal
+44-20-7986-1007
aman.bansal@citi.com

Jamie Searle
+44-20-7986-9493
jamie.searle@citi.com

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Eligible bonds vs QE purchases

Figure 1. Eligible bonds (€bn)

	A				B		C = A + B	25% of C
Country	0-2yrs	2-30yrs	30yr+	Total (€bn)	Net supply 2-30yr in QE*	Total 2-30yr during QE	Eligible outstanding (€bn)	Eligible market value (€bn)
Germany	323	782	7	1112	120	903	226	276
France	254	1058	39	1351	167	1225	306	378
Netherlands	72	242	5	319	4	246	62	75
Italy	366	1235	7	1607	90	1325	331	396
Spain	165	540	1	706	130	670	168	207
Belgium	45	251	5	301	-4	247	62	80
Austria	25	160	3	188	0	160	40	50
Finland	12	67	0	79	2	69	17	20
Ireland	10	84	0	95	12	97	24	30
Portugal	13	79	0	92	3	82	20	24
Greece	0	34	0	34	12	46	12	7
Total	1284	4533	68	5885	538	5071	1268	1543

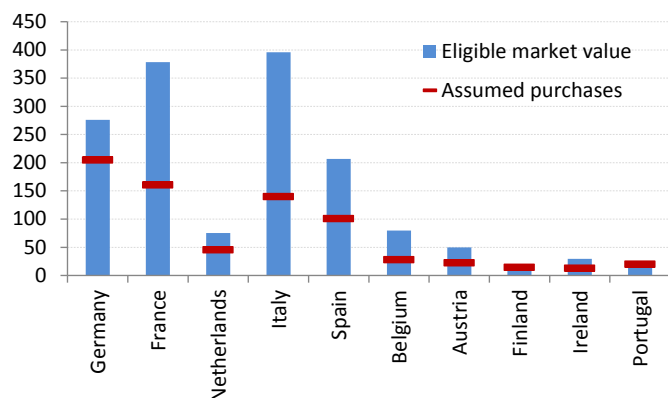
Source: Citi Research, Bloomberg. * Gross supply in 2-30yrs during Mar 2015 – Sep 2016 net of bonds dropping below 2yrs of maturity.

Figure 2. Eligible bonds vs assumed QE purchases (snapshot of market value, €bn)

Country	Capital keys	Assumed QE purchases*	Eligible market value (25% of 2-30yrs)	Excess eligible amount	Total market value**	Issuer Limit (33% of mkt value)
Germany	25.6%	215	276	61	1316	434
France	20.1%	169	378	210	1792	591
Netherlands	5.7%	48	75	28	400	132
Italy	17.5%	147	396	249	1929	637
Spain	12.6%	106	207	101	935	308
Belgium	3.5%	29	80	50	386	127
Austria	2.8%	23	50	26	237	78
Finland	1.8%	15	20	5	96	32
Ireland	1.6%	13	30	16	123	41
Portugal	2.5%	21	24	3	122	40
Greece	2.9%	2	7	6	22	7
Total	96.9%	788	1543	755	7358	2428

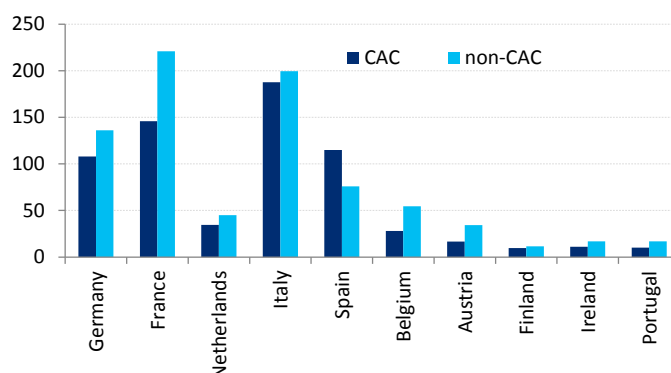
Source: Citi Research, Bloomberg. * Assuming €43bn/month of government bond purchases. We expect Greek purchases of around €1-2bn, the rest of EMU-11 according to the capital key **Adjusted for issuance/redemptions during QE.

Figure 3. Potential QE buying vs eligible bonds (€bn)



Source: Citi Research, Bloomberg

Figure 4. Split of eligible bonds over QE period with and without CAC (outstanding amount, €bn)



Source: Citi Research, Bloomberg

Net cash requirement adjusted for QE

Figure 5 shows EMU-11 net cash requirement over 2015, adjusted for assumed ECB purchases. The QE adjustment makes the net cash requirement negative for all the EMU-11 issuers in 2015, except Greece. Germany stands out as having the most supportive cash flow profile at -€136bn, followed by Italy (-€87bn).

Figure 5. EMU-11 net cash requirement for 2015 adjusted for QE purchases (€bn)*

	A	B	A - B	C	A - B - C	D	A - B - C - D
Country	Gross Supply	Coupons	Net Supply	Redemptions	NCR	Assumed Purchases	NCR net of QE
DEU	159	27	132	155	-23	113	-136
FRA	214	41	173	118	56	89	-33
NLD	48	9	39	37	2	25	-23
ITA	243	56	187	197	-10	77	-87
ESP	142	29	113	84	29	56	-27
BEL	33	11	21	22	-1	15	-17
AUT	18	7	11	13	-2	12	-14
FIN	10	2	8	5	3	8	-5
IRL	14	4	9	2	7	7	-0
PRT	14	4	9	6	4	11	-7
GRC	6	1	5	0	5	1	4
EMU-11	900	191	709	639	70	415	-345

Source: Citi Research, DMOs, Bloomberg. *2015 purchases are estimated at €430bn across the whole EMU-19, €415bn of which are assumed to be in EMU-11

On a monthly basis, the resulting net cash requirement (NCR, assuming country purchases in line with the capital keys) is very supportive for Bunds for most of 2015 (Figure 6). In contrast, the NCR is very unsupportive for France in four months in 2015 and for Italy in three months.

Figure 6. Net cash requirement of EMU-11 on a monthly basis (€bn, absolute changes greater than €10bn highlighted)*

Month	DEU	FRA	ITA	ESP	NLD	BEL	AUT	FIN	PRT	IRL	GRC
Jan	-15	6	-3	-10	-9	5	0	4	6	4	0
Feb	-4	21	3	11	9	4	4	0	0	-1	-1
Mar	-16	12	15	0	1	-15	-2	-1	-0	-1	2
Apr	-15	-23	-11	-19	-10	1	-0	-1	-1	-1	-0
May	-1	9	12	5	2	1	-0	-1	-1	-1	2
Jun	-15	12	-20	9	2	-0	-0	-1	-2	-0	0
Jul	-28	-30	-32	-24	-16	2	-15	-7	-0	0	1
Aug	1	-9	-14	1	-3	-2	-1	3	-1	-1	-0
Sep	-10	10	15	7	1	-13	2	-1	-0	0	1
Oct	-13	-31	-11	-13	0	1	-1	0	-7	-2	-0
Nov	1	-7	-9	5	0	1	-0	-1	-0	3	-0
Dec	-21	-2	-30	1	-3	-2	-1	-1	-1	-1	-0
Total	-136	-33	-87	-27	-23	-17	-14	-5	-7	-0	4

Source: Citi Research, DMOs, Bloomberg. *€43bn/month, split across countries by capital key

Appendix A-1

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