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# Callable Corporate Bonds in the Sterling and Euro Markets

Market Structure and Historical Performance

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# Introduction

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- We analyze European callable corporate bonds in the context of insurance portfolio management
- This includes:
  - A description of the current market structure, using data from Barclays Bond Indices
  - An analysis of historical call activity
  - An analysis of price returns around the call announcement date

# Market Structure of Corporate Callable Bonds – GBP

- We consider callable bond included in the Barclays Sterling Agg 100 Corporate Bond Index
- Banks and insurers constitute the bulk of outstanding callable bonds (64% of bonds and 63% of market value)
- Most bonds, especially in the financial sector, are fixed-to-floating

## Callable bonds included in Barclays Sterling 100 Corporate index on 28 November 2014

	Number of bonds	Fixed to Floating bonds	Amount Out-standing (GBP bn)	Market value (GBP bn)	Market Value [%]	Option adjusted Spread (OAS)	Option adjusted Duration (OAD)	Option adjusted Spread Duration (OASD)
By Issuing Sector								
<b>Banks</b>	28	26	10	11	22%	217	4.0	8.9
<b>Insurance</b>	42	42	17	20	41%	254	6.7	11.1
<b>Other financials</b>	17	11	6	7	15%	128	8.5	10.3
<b>Non-Financials</b>	22	15	10	11	22%	238	5.3	6.0
By Issuance Cohort (annual)								
<b>Before 2006</b>	34	33	12	13.6	28%	210	6.1	11.7
<b>2006</b>	15	15	4	4.6	9%	204	3.3	11.4
<b>2007</b>	13	13	6	6.4	13%	184	4.1	11.6
<b>2008</b>	5	4	2	2.7	6%	211	5.8	5.9
<b>2009</b>	3	3	1	1.6	3%	239	4.1	4.1
<b>2010</b>	5	5	2	1.7	4%	176	3.3	4.1
<b>2011</b>	4	3	2	1.8	4%	285	4.3	4.2
<b>2012</b>	6	5	3	3.6	7%	282	5.6	5.4
<b>2013</b>	10	7	5	5.3	11%	259	8.6	8.4
<b>2014</b>	14	8	7	7.1	15%	239	9.4	9.3
<b>Total</b>	<b>109</b>	<b>96</b>	<b>43</b>	<b>48.3</b>	<b>100%</b>	<b>224</b>	<b>6.0</b>	<b>9.4</b>

Source: Barclays Research

# Market Structure of Corporate Callable Bonds – EUR

- We consider callable bonds included in the Barclays Euro Credit Corporate index
- Fixed-to-floating bonds represent less than 60% of the universe
- Over 75% of bonds were issued in 2013 and 2014

## Callable bonds included in Barclays Euro Corporate index on 28 November 2014

	Number of bonds	Fixed to Floating bonds	Amount Outstanding (EUR bn)	Market value (EUR bn)	Market Value [%]	Option adjusted Spread (OAS)	Option adjusted Duration (OAD)	Option adjusted Spread Duration (OASD)
By Issuing Sector								
<b>Banks</b>	39	38	35	38	20%	193	4.6	6.4
<b>Insurance</b>	48	47	39	45	23%	263	6.0	7.4
<b>Other financials</b>	20	5	11	11	6%	144	4.6	8.6
<b>Non-Financials</b>	118	35	93	100	52%	144	5.9	8.4
By Issuance Cohort (annual)								
<b>Before 2006</b>	6	6	5	5	3%	70	1.6	3.6
<b>2006</b>	10	10	7	8	4%	170	1.7	5.2
<b>2007</b>	7	7	5	5	3%	204	2.4	9.6
<b>2008</b>	3	3	2	2	1%	182	3.2	3.2
<b>2009</b>	1	1	0	1	0%	215	4.1	4.1
<b>2010</b>	7	6	6	6	3%	309	3.4	6.1
<b>2011</b>	5	5	6	7	4%	226	4.5	4.5
<b>2012</b>	16	14	12	15	8%	227	6.0	5.9
<b>2013</b>	46	27	38	42	22%	180	6.1	6.5
<b>2014</b>	124	54	98	102	53%	163	7.6	8.7
<b>Total</b>	<b>225</b>	<b>133</b>	<b>179</b>	<b>194</b>	<b>100%</b>	<b>178</b>	<b>6.3</b>	<b>7.5</b>

Source: Barclays Research

# Historical Call Rates (GBP Market)

- We track bonds from the Sterling Corporate Index<sup>1</sup> from January 2000 and identify bonds with a first call date (FCD) prior to 28 November 2014
- We find 103 issues, of which 77 are from banks
- Many bonds (67%) were called on their first call date<sup>2</sup>
  - 73% were called before maturity

## Sterling corporate bonds with call date before 28 November 2014

	Total number of bonds past first call date	Called on First Call date	Called	% Called on First Call Date	% Called
<b>All sectors</b>	103	69	75	67%	73%
<b>Banks</b>	77	51	55	66%	71%
<b>Insurance</b>	2	2	2	100%	100%
<b>Other financials</b>	11	5	6	45%	55%
<b>Non-Financials</b>	13	12	12	85%	92%

Source: Bloomberg, Barclays Research

1. We use the callable bonds from the Sterling Agg 100 Index from January 2010 and the Sterling Credit Corp index prior to that.

2. 68 bonds were called on their first call date, and one bond was called within a month of the first call date; An additional two bonds were called within a quarter of the first call date.

# Historical Call Rates (EUR Market)

- We track bonds from Barclays Euro Credit Corporate index from January 2000 and identify bonds with a first call date prior to 28 November 2014
- We find 262 issues, of which 206 (79%) are from banks
- Many bonds (62%) were called on their first call date
  - 76% were called before maturity

## Euro-denominated corporate bonds with call date before 28 November 2014

	Total number of bonds past first call date	Called @ First Call date	Called	% Called @ First call date	% Called
<b>All sectors</b>	262	162	200	62%	76%
<b>Banks</b>	206	123	153	60%	74%
<b>Insurance</b>	24	19	21	79%	88%
<b>Other financials</b>	18	10	12	56%	67%
<b>Non-Financials</b>	14	10	14	71%	100%

Source: Bloomberg, Barclays Research

# Call Proportions and Bond Pricing

- We focus on bonds with prices available a day before the call date
  - There are 74 bonds in GBP and 182 in EUR that have pricing data before the call date
  - We focus on the call announcement date for bonds that were called on their first call date and the first call date for bonds that were not
- Bonds that traded close to or moderately below call price (within 5%) were usually called
  - Despite there being an economic incentive to extend the bond if it is trading below the call price
  - Nearly 70% of bonds in GBP and 50% in EUR markets were called when their price was below call price
- Only those bonds that are significantly below call price were not called

## Call proportions for bonds with FCD before 28 November 2014 and pricing data available

GBP corporate callable bonds				
Distance from call price	Total	Number called	Number extended	% Called
Below -5%	13	4	9	31%
-5% to -1%	7	5	2	71%
-1% to 0%	21	19	2	90%
0% to 1%	29	26	3	90%
Above 1%	4	4	0	100%
Below 0%	41	28	13	68%
Above 0%	33	30	3	91%

EUR Corporate callable bonds				
Distance from call price	Total	Number called	Number extended	% Called
Below -5%	36	2	34	6%
-5% to -1%	26	14	12	54%
-1% to 0%	36	32	4	89%
0% to 1%	76	71	5	93%
Above 1%	8	3	5	38%
Below 0%	98	48	50	49%
Above 0%	84	74	10	88%

Source: Bloomberg, Barclays Research

# Call Proportions by Year of First Call Date

- A relatively large number of bonds were left uncalled after 2011
  - These were mostly deeply discounted bonds with price at least 5% below call price, as shown below
  - Bonds trading closer to call price (within +/-5%) are generally called, regardless of the period

TOTAL BONDS				CALLED					NOT CALLED				
				Distance from call price one day before call date									
Sterling corporate callable bonds with FCD before 28 November 2014 & pricing data available													
Year	All bonds	Called	Not called	Below - 5%	-5% to - 1%	-1% to 0%	0% to 1%	Above 1%	Below - 5%	-5% to - 1%	-1% to 0%	0% to 1%	Above 1%
Before 2007	12	12	0	2	2	2	4	2	0	0	0	0	0
2008	2	2	0	0	0	0	2	0	0	0	0	0	0
2009	2	2	0	0	0	2	0	0	0	0	0	0	0
2010	9	7	2	0	1	1	5	0	1	1	0	0	0
2011	16	13	3	1	1	8	3	0	1	0	2	0	0
2012	11	6	5	1	1	2	2	0	4	0	0	1	0
2013	14	10	4	0	0	3	6	1	3	1	0	0	0
2014	8	6	2	0	0	1	4	1	0	0	0	2	0
Total	74	58	16	4	5	19	26	4	9	2	2	3	0
Euro corporate callable bonds with FCD before 28 November 2014 & pricing data available													
Before 2007	23	21	2	0	0	2	19	0	0	0	1	0	1
2008	3	3	0	0	0	1	2	0	0	0	0	0	0
2009	17	11	6	2	2	4	3	0	3	1	0	1	1
2010	18	17	1	0	0	9	8	0	1	0	0	0	0
2011	27	14	13	0	3	4	7	0	9	3	1	0	0
2012	26	13	13	0	4	5	4	0	11	1	0	0	1
2013	35	21	14	0	4	4	11	2	7	2	0	4	1
2014	33	22	11	0	1	3	17	1	3	5	2	0	1
Total	182	122	60	2	14	32	71	3	34	12	4	5	5

Source: Bloomberg, Barclays Research



# Price Return of Called Bonds Around Announcement Date

- From the previous slide, we observe that bonds trading close to call price were usually called
- We report the cumulative price return of bonds from a week before to a week after the call announcement date
  - We only consider bonds that were called<sup>1</sup> on the first call date
- There is a large positive price change around the call announcement date
- Median return is 0, indicating that for most issuers there is insignificant price movement
  - But the average price return is highly positive

Cumulative price return around call announcement dates (bp)							
GBP Market				EUR market			
Start period (days) =>	-7	-1	1	Start period (days) =>	-7	-1	1
End period (days) =>	-1	1	7	End period (days) =>	-1	1	7
Average (equal weighted)	0.01	0.39	0.32	Average (equal weighted)	0.08	0.51	0.01
Average (outstanding weighted)	0.07	0.55	0.14	Average (outstanding weighted)	0.08	0.76	0.00
Median	0.00	0.00	0.00	Median	0.00	0.00	0.00

Source: Bloomberg, Barclays Research

1. It is difficult to determine the announcement date for bonds that were called after the first call date.

# Sterling Callable Corporate Bonds Left Un-Called

## Sterling corporate bond market: uncalled bonds with first call date before 28 November 2014

Final List (ISIN)	Name	Comment	Amount Issued (GBP m)	Issue Date	First Call Date	Maturity Date	Industry Sub-Group	Price Before FCD
XS0125466705	FIXED-LINK FIN		232	28/02/2001	01/02/2005	02/02/2009	Diversified Fin	103.45
XS0109138536	BANK OF SCOTLAND	Trading at deep discount - 19% below call price	250	14/03/2000	31/05/2010	NaN	Banks	81.25
XS0099508698	LLOYDS BANK PLC	Mostly repurchased in May and Dec 2009	410	15/07/1999	15/07/2010	NaN	Banks	NaN
XS0117972702	ABBEY NATL PLC	Mostly repurchased in Jul 2009 and Jan 2010	325	28/09/2000	28/09/2010	NaN	Banks	NaN
XS0189609745	DB-CALL09/14	Extended as communicated in advance of call date	225	05/04/2004	15/12/2010	15/12/2015	Banks	95.5
XS0243113098	LANDLN-CALL05/11	Calls within a quarter of First call date	300	03/02/2006	03/02/2011	03/02/2013	Real Estate	99.604
XS0186999669	INVESTEC FINANCE	Mostly repurchased on Feb 2011 (Exchange offer)	200	01/03/2004	01/03/2011	01/03/2016	Banks	99.584
XS0247645160	RBS-CALL09/14	Trading at deep discount - 30% below call price	400	17/03/2006	18/03/2011	NaN	Banks	70
XS0131475666	ANGIRI-REPURCH	Obligation not outstanding - repurchased	200	28/06/2001	28/06/2011	NaN	Diversified Fin	NaN
XS0131038522	SANTAN-CALL09/14	Mostly repurchased in Jul 2009 and Jan 2010	200	22/06/2001	07/12/2011	NaN	Banks	NaN
XS0273608827	BANCA INTESA SPA	Issue does not exist - funged	250	07/11/2006	19/12/2011	19/12/2016	Banks	NaN
XS0286515621	BELFIUS FND NV	Restructuring of Dexia Belgium - extended	150	09/02/2007	09/02/2012	09/02/2017	Banks	NaN
XS0143152337	NRKLN-REDM12/11	Repurchased on Dec 2011	250	27/02/2002	28/02/2012	28/02/2017	Diversified Fin	NaN
XS0300190831	JPMORGAN CHASE	Trading at deep discount - 11% below call price	700	16/05/2007	16/05/2012	30/05/2017	Banks	89.125
XS0307728146	SANTANDER FIN PF	Mostly repurchased Jul 2009 (Exchange offer)	250	10/07/2007	10/07/2012	NaN	Banks	NaN
XS0308305803	BBVA INTL PREF	Mostly repurchased Nov 2009 (Exchange offer)	400	19/07/2007	19/07/2012	NaN	Banks	NaN
XS0261787898	SANTANDER ISSUAN	Mostly repurchased in Jan 2010	300	25/07/2006	25/07/2012	25/07/2017	Banks	NaN
XS0323839042	ARGON CAP PLC	Trading at deep discount - 45% below call price	750	04/10/2007	05/10/2012	NaN	Banks	56.25
XS0325811296	HBOS PLC	Trading at deep discount - 13% below call price	500	17/10/2007	18/10/2012	18/10/2017	Banks	86.938
XS0327310669	SANTAN-CALL07/14	Trading at deep discount - 19% below call price	800	24/10/2007	24/10/2012	24/10/2017	Banks	81
XS0335844402	MKS-CNCL/02/2013	Purchased and cancelled on 15/02/2013	250	13/12/2007	13/12/2012	13/12/2037	Retail	100.247
XS0137784426	ROYAL BK SCOTLND	Exchanged for Senior bonds in 6/04/2010	350	02/11/2001	17/12/2012	NaN	Banks	NaN
XS0151557799	YBS-EXCH04/10	Restructuring - acquired by CBS capital	100	25/07/2002	18/12/2012	18/12/2017	Savings&Loans	NaN
XS0277061692	ANGIRI-REPURCH	Repurchased on Sep 2009, and in 2011	250	07/12/2006	10/01/2013	10/01/2018	Banks	NaN
XS0276330643	BRADFORD&BIN BLD	Restructuring - repurchased on Jun 2010 and Nov 2011	250	01/12/2006	15/01/2013	15/01/2018	Banks	NaN
XS0238792393	BKIR-REPURCH	Obligation not outstanding - repurchased	400	22/12/2005	22/01/2013	22/01/2018	Banks	NaN
XS0284633327	SANTANDER ISSUAN	Trading at deep discount - 15% below call price	300	31/01/2007	31/01/2013	31/01/2018	Banks	84.998
XS0284776274	NATIONWIDE BLDG	Trading at deep discount - 20% below call price	350	30/01/2007	06/02/2013	NaN	Savings&Loans	80
XS0289655598	BBVA SUB CAP UNI	Trading at deep discount - 16.5% below call price	250	09/03/2007	11/03/2013	11/03/2018	Banks	83.438
XS0270002669	MEDIOBANCA	Mostly repurchased (exchange offer) in May 2013	200	11/10/2006	11/10/2013	11/10/2018	Banks	95.678
XS0167366433	BRADFORD&BIN BLD	Trading at deep discount - 40% below call price	250	29/04/2003	20/12/2013	NaN	Banks	60.375
XS0520493007	VMED-CALL04/14	Calls within a quarter of First call date	867	05/08/2010	15/01/2014	15/01/2018	Telecommunications	103.979
XS0189539942	COOPWH-REPURCH	Mostly Repurchased on Dec 2012	150	01/04/2004	02/04/2014	02/04/2019	Banks	NaN
XS0457234291	BBVA INTL PREF		251	21/10/2009	21/10/2014	NaN	Banks	100.974

Source: Bloomberg, Barclays Research

# Conclusions

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- The Sterling callable corporate bond market is relatively small, with about GBP43bn outstanding. The Euro callable corporate market is larger, with close to EUR179bn outstanding.
  - There has been significant new issuance of callable bonds in the euro market in recent years, while GBP issuance has been more muted.
- Most callable bonds were issued by banks and insurers.
  - But there is a large proportion of non-financial issuers in the euro market.
- Close to 70% of callable bonds were called on their first call date.
  - Nearly 80% of bonds were called before maturity.
- Bonds trading within 5% of the call price were usually called.
  - Deeply discounted bonds, possibly because of funding pressures, were not called.
- The average price return of called bonds around the call announcement date was very positive.

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