

European Securitized Products Weekly

What IMF Outlook and Ecofin SME Plan Mean for ABS

- **Favour ABS to Weak Peripheral Financials and Corporates** — The IMF's reports point to the fledgling Euro recovery which is unable to gain strength partly due to a weak financial sector and access to credit for SME corporates, mostly in peripheral countries. As such, we prefer ABS to bank debt and covered bonds.
- **ABS Less Vulnerable to QE Led Rate Risks that IMF Identifies** — IMF points to the risk of large losses from rate rises in global asset portfolios due to the QE-led shift to fixed income. The lack of leveraged buyers and floating rate nature of Euro ABS offer better protection than many peer assets.
- **Ecofin's SME Project Could Revive Peripheral ABS Markets** — EIB and EU Commission proposed a mix of ABS technology and guarantees to revive SME lending in Europe. The newly-announced Jan 2014 timeline for new SME loan-linked instruments could boost lending by €55–100 billion in the next three years.
- **Downgrades in Peripheral ABS Imminent on New S&P Rating Ceiling** — S&P's proposal to lower the maximum difference between securitization and sovereign ratings to four from six notches would affect around 50–60% of securitized assets and covered bonds in Spain, 60–70% in Italy, 60% in Portugal and 20% in Ireland.
- **Sustained Growth in Car Sales Positive for Auto ABS Issuance** — Improving car sales point to both a Euro-area recovery and better prospects for the primary auto ABS market given issuers' reliance on ABS as a key funding source. New car sales rose 5.5% year-over-year in September, the biggest gain since August 2011.

Global Securitized Products Research

Mary E Kane
+1-212-816-8409
mary.e.kane@citi.com

European Securitized Products

Ratul Roy
+44-20-7986-9003
ratul.roy@citi.com

Himanshu Shrimali, CFA
+44-20-7986-6151
himanshu.shrimali@citi.com

Rajat Deshpande
+91-22-4277-5048
rajat.deshpande@citi.com

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

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

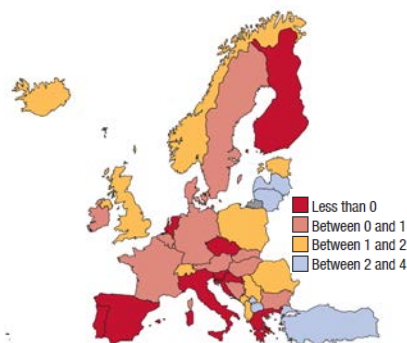
Contents

IMF and Ecofin Updates – Euro ABS Impact	3
Other News and Events	5
New Issuance	7
BWIC Tracker	8
Core RMBS Spreads and Relative Value	10
Peripheral RMBS and Relative Value	11
CMBS and CLO Spreads and Relative Value	12
Auto and Credit Card ABS Spreads and Relative Value	13
Rating Actions and Trends	14
Recent Key Publications	15
Appendix A-1	17

IMF and Ecofin Updates – Euro ABS Impact

Economic and Financial Outlook

Figure 1. Europe: 2013 GDP Growth Forecasts, %



Source: IMF

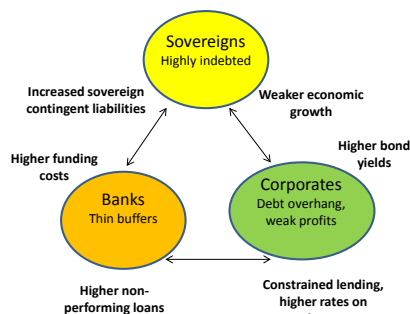
October saw the publication of two of the IMF's key periodic reports – the [World Economic Outlook \(WEO\)](#) and the [Global Financial Stability Report](#). In light of the sharp rally that we have seen in European ABS ([European Securitized Products Weekly - All ABS Are Equal, But Some Are More Equal Than Others](#)) the two reports have a somewhat sobering effect. Despite an anaemic economic picture, we feel ABS stand in good light versus debt from a fragmented financial sector, and should be resilient to interest rate-related systemic risk that the IMF identifies.

Fragile Recovery Overall, Weak Banks Hurt Peripherals

■ **Tail Risks Removed but Weak Recovery and Labour Markets.** Despite a recent return to growth after six quarters of recession, activity in the Euro area is forecast to shrink by 0.4% in 2013, but increase to 1% in 2014, and core countries are hurt by global growth concerns and euro-area prospects. The IMF says labour and product market weakness are hurting Euro area competitiveness generally.

■ **Weak Peripheral Financial and Corporate Sectors.** The IMF reports that the main concern for banks is the weak economic environment rather than funding or capital shortfall. However, it believes that capital buffers are still thin and the ECB's 2014 plan to test balance-sheets has the potential to backfire without a back-up capital injection plan. Moreover, even if the financial fragmentation in Spain, Portugal, and Italy is reversed, a persistent debt overhang would remain and could derail the IMF's baseline recovery for these countries. Deterioration of the corporate loan book would absorb much of bank profits. Weak banks make, in our view, ABS a stronger investment than unsecured or covered bank bonds.

Figure 2. Bank-Corporate-Sovereign Linkage Adverse for Weaker Corporates

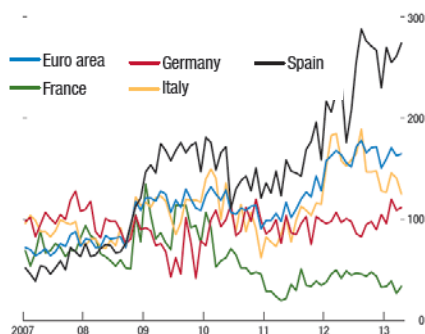


Source: IMF

Corporates, Especially Peripheral SMEs, Worst-Hit

■ **Access to Credit Hurting Corporate Recovery.** The credit problem is particularly acute for SMEs who reported that access to finance was their most pressing problem, because of a lower success rate in loan applications and higher loan rates. Though sovereign risks have abated, there is an adverse feedback loop among weak banks, corporates, and sovereigns (Figure 2). Weak banks have been exacerbating the problems of weak corporates because institutions with thin buffers have been tightening credit conditions. Small banks in stressed economies have been facing the greatest wholesale funding strains, and it is these banks that tend to be the main providers of credit to SMEs. Spanish SMEs are the hardest hit in this credit crunch (Figure 3).

Figure 3. Interest Rate Spread between Loans to SMEs and Larger Firms, bps



Source: ECB, IMF

■ **ABS Not Incentivized to Help.** The IMF has recommended that policy be put in place to promote SME loan securitizations to boost credit. The report once again commented on the less favourable treatment of ABS by investors and central banks citing the example of higher ECB haircuts for ABS versus covered bonds.

Focus on Systemic Rate Risk from Fixed Income

■ **Risks from Overextended Duration and Market Illiquidity but Euro ABS Less Vulnerable.** The Financial Stability Report commented on the QE-led shift into fixed income and an above-norm portfolio duration. It estimates that a 100 basis point rise in rates generates 5.6% losses or \$2.3trillion in global bond portfolios, much higher than in previous tightening scenarios. Lower liquidity from dealers and possible weaknesses in the repo system could exacerbate the scale of such losses in the event of large position unwinds. In our view, the floating-rate nature of Euro ABS and lack of leveraged buyers are positive for the sector in such an adverse situation.

The Ecofin SME Initiative

- **EIB's SME Financing Plan to Commence in January 2014.** Almost as though the European Council was listening to the IMF's arguments about SME lending that we just described, it announced a timescale for its plan to stimulate SME lending through loan-backed instruments which would be co-financed by the EIB. The scheme will become operational in 2014 and would facilitate €55–100 billion in additional SME lending over a period of three years, according to Ecofin. The structure of the instrument is not yet finalised but the Council is considering three securitization structures proposed by the European Commission and EIB. We provide a brief description of these structures in Figure 4 below:

Figure 4. Overview of Proposed Instruments to Stimulate SME Lending in Europe

	Joint SME Guarantee Plus Securitization Instrument	Joint Securitization Instrument	Joint Securitization Instrument with Risk Pooling
Scope	New SME loans	New and existing SME loans	New and existing SME loans
Pooled Funds	€10 billion from ESIF* + €420 million from existing EIB programmes		
Potential SME Lending	€55 – 58 billion benefiting 580,000 SMEs	€65 billion benefiting 650,000 SMEs	€100 billion benefiting 1,000,000 SMEs
Description	The funds would be allocated in 3:1 ratio to two schemes: <ol style="list-style-type: none"> 1. Provide guarantees to banks lending to SMEs with banks keeping at least 20% of the risk 2. Provide guarantees for portfolio of loans that would be securitized in 2–3 years 	A pool of new and existing loans would be guaranteed using the public funds and bundled into securitization. The share of new loans should be proportional to the amount covered by the joint instrument.	Same as "Joint Securitization Instrument" with added advantage of risk pooling at EU level
Advantages	<ul style="list-style-type: none"> • Incentivises banks for new SME lending through partial capital relief • Might help in reviving the securitization market in Europe in around three years • Can be delivered without significant modifications to the draft Common Provisions Regulations for the ESIF • Member states' ESIF funds would be allocated towards loans in their region 	<ul style="list-style-type: none"> • Banks do not need to mobilise their own funds • Attracts institutional investors' monies to purchase securitized assets • Would help in reviving the securitization market • Member states' ESIF funds would be allocated towards loans in their region 	In addition to all the advantages of "Joint Securitization Instrument": <ul style="list-style-type: none"> • Pooling of risks allow greater portfolio diversification and leverage effects • Greater economies of scale and less complexity than shared management structure • Pooling of risks at EU level means higher leverage effect
Disadvantages	<ul style="list-style-type: none"> • Securitization can happen only after 2–3 years after new SME loans are built up • Banks would need to mobilise their own funds for new lending • Private/institutional funds would be available only after 2–3 years when securitization starts • No risk pooling limits portfolio diversification and leverage effect • Complex to operate under shared management with respect to allocation by region 	<ul style="list-style-type: none"> • Modification of draft Common Provisions Regulation required • No risk pooling limits portfolio diversification and leverage effect • Shared management and complex structure adds to overall complexity 	<ul style="list-style-type: none"> • Greater modifications required in draft Common Provisions Regulation • Success would depend upon a widespread participation by member states

* ESIF – European Structural and Investment Funds

Source: Ecofin and Citi Research

Other News and Events

Regulation and Policy

- **Spain and Ireland on Track to Exit Bailout Programme.** EU economic and monetary affairs commissioner Olli Rehn said that “Ireland and Spain are on track for a successful conclusion of their bailout programmes”, reported Irish Times. He said that moderating unemployment and resilient exports are signs that these economies are recovering.
- **Spanish Banks Reduce ECB Borrowing.** According to Bank of Spain data, loans to Spanish banks related to monetary policy operations fell 2.2% month-over-month to €244 billion in September. This represents a decline of 38.9% year-over-year and is the lowest level since February 2012. Citi economists comment that this is a sign of stabilization of the Spanish banking system.
- **Expect AQR Announcement on Oct 23: Mersch.** ECB’s Executive Board member Yves Mersch said that an announcement for ECB’s Asset Quality Review (AQR) could come on October 23 and its results would be due in October 2014 according to Frankfurter Allgemeine Zeitung. He also indicated that target capital ratios will be derived from the EU’s transposition of Basel III (CRD IV) rules and will also include a capital top-up for big banks.

Rating Agencies

- **Lower S&P Rating Ceilings to Affect Peripheral Assets.** S&P recently proposed lowering the maximum rating difference between securitization and sovereigns to four notches from six notches. This would lead to a downgrade of a large proportion of Italian, Spanish, and Irish RMBS, SME CLOs and covered bonds.

Mortgage Lending and Housing Markets

- **UK First Time Buying Increases, Remortgaging Declines: CML.** According to CML data, UK first time buyers borrowed £3.8 billion in August, a 8.6% month-over-month increase whereas remortgagers borrowed £3.5 billion in August representing a month-over-month drop of 7.9%.
- **UK House Prices Reach New High.** The UK ONS house price index increased to a new high of 186.0 in August from 185.0 in the previous month. The ONS house price index last reached 185.5 in January 2008.
- **Spanish Housing Transactions Decline 15% year-over-year.** Spanish housing transactions fell to 23,552 in August from 25,706 in the previous month. Housing transactions declined 8.3% month-over-month and 15.4% year-over-year in August 2013.

Commercial Real Estate

- **UK Commercial Property in Fifth Month of Recovery: IPD.** According to Investment Property Databank (IPD) data, UK commercial property values climbed for the fifth consecutive month in September 2013. Total return on all commercial property in 2013 Q2 was 1.9% whereas return for office property was 2.34%.
- **AXA and Norges Bank Target CRE Investment.** Axa and Norges Bank Investment Management agreed to partner in a commercial real estate co-investment program reported Bloomberg. The program will be primarily focused on UK, France, and Germany and will target large-size senior loans of up to €600 million. Axa has already invested approximately €1.8 billion YTD and targets €2.5 billion for 2013.

- **TPG and Ivanhoe Buy \$1 billion of European Warehouses.** TPG and Ivanhoe Cambridge Inc. acquired 48 warehouses and land from an affiliate of Arcapita Bank BSC reported Bloomberg. The assets are valued at €760 million (\$1 billion) and include warehouse space to the tune of 1.46 million square meters. This transaction follows their purchase of London's Woolgate Exchange (securitized in TITN 2006-CT1X) for €265 million in January.
- **British Land Sells Spanish Shopping Centre Stake.** British Land sold its 50% stake in a shopping center in Zaragoza, Spain to a fund managed by Orion Capital Managers, reported Bloomberg. Through this sale British Land has cut its exposure to mainland Europe to 1%.

Macroeconomic News

- **European Car Registrations Register Highest Growth in Two Years.** Sustained growth in new car sales will likely result in an increase in auto ABS issuance because auto issuers generally seek to maintain a target share of securitization in their diverse funding mix. New car sales in Europe rose 5.5% year-over-year in September, the biggest gain since the rise of 7.8% in August 2011. New car sales have been showing signs of recovery during the past few months following a 19-month slump that ended in April this year.
- **UK Jobless Claims Fall More Than Expected.** Declining jobless claims indicate accelerating recovery of the UK economy and augur well for collateral performance in credit card ABS and UK non-conforming RMBS sectors. UK jobless claims declined 41,700 to 1.351 million in September against an expected drop of 25,000 according to a Bloomberg survey. Jobless claims declined for 11 consecutive months in September and have declined 12.5% YTD.
- **Greek Unemployment Rate Declined in July.** The Greek unemployment rate declined to 27.6% in July from 27.9% in the previous month. Citi economists expect Greek unemployment rate to average 28.0% and 30.5% in 2013 and 2014 respectively.

Tender Update

- **Italian RMBS - MEDIA 1 Tender Results.** Banca Popolare di Puglia e Basilicata accepted €18.1 million in current face of MEDIA 1 notes at average prices ranging from 94.32–99.62pts.

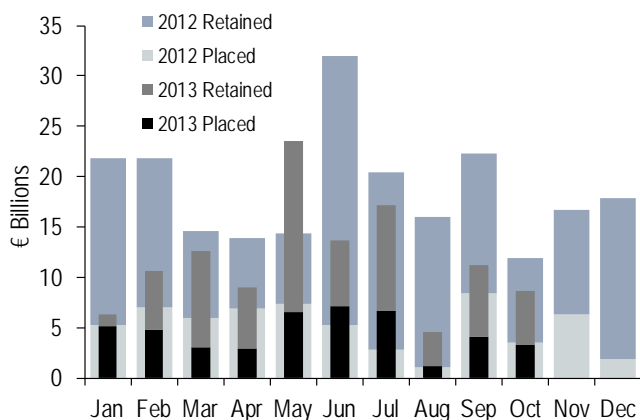
Figure 5. Banca Popolare di Puglia e Basilicata – MEDIA 1 Tender Results

Bond	Accepted(€)	Tender Offer	Accepted Price	Markit Price	Markit Price Date
MEDIA 1 A	3,960,000	99.1	99.6	99.1	1-Oct-13
MEDIA 1 B	6,800,000	95.0	98.0	87.5	14-Jun-13
MEDIA 1 C	7,300,000	90.0	94.3	N/A	N/A

Source: IFR, Markit, Concept ABS and Citi Research

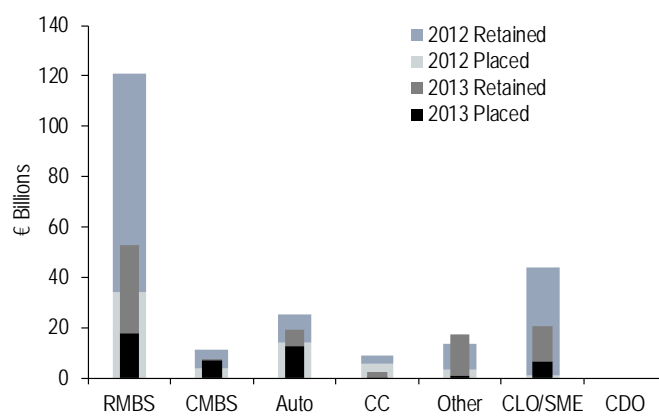
New Issuance

Figure 6. Placed and Retained Issuance by Month, 2012–2013YTD (€ billions)



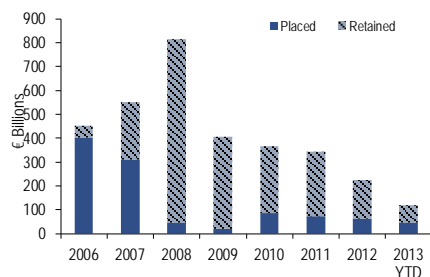
Source: Concept ABS, IFR, Informa and Citi Research

Figure 7. Placed and Retained Issuance by Sector, 2012–2013YTD (€ billions)



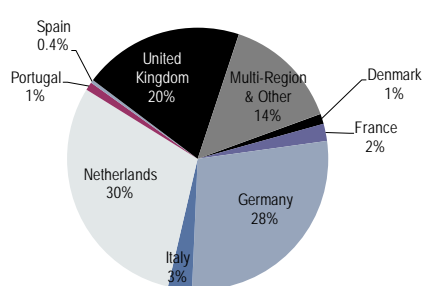
Source: Concept ABS, IFR, Informa and Citi Research

Figure 8. Annual Historical Placed and Retained Issuance, 2006–2013YTD (€ billions)



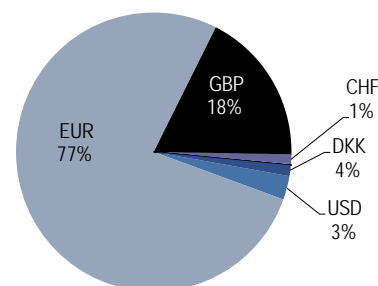
Source: Concept ABS, IFR, Informa and Citi Research

Figure 9. Placed Issuance by Region, 2013YTD (% of Total, € Equivalent)



Source: Concept ABS, IFR, Informa and Citi Research

Figure 10. Placed Issuance by Currency, 2013YTD (% of Total, € Equivalent)



Source: Concept ABS, IFR, Informa and Citi Research

Figure 11. Placed and Retained Issuance by Sector, 2012* and 2013YTD (€ million)

	RMBS(MM)		CMBS(MM)		Autos(MM)		Credit Card ABS(MM)		CLO/SME(MM)		Other(MM)		Total(MM)	
	2013YTD	2012	2013YTD	2012	2013YTD	2012	2013YTD	2012	2013YTD	2012	2013YTD	2012	2013YTD	2012
Placed	17,932	33,928	7,101	3,936	12,518	13,921	164	5,591	6,355	990	897	3,459	44,967	61,825
Retained	34,728	87,137	143	7,460	6,410	11,364	2,076	3,067	14,393	42,879	16,454	10,145	74,204	162,052
Total	52,660	121,065	7,243	11,395	18,929	25,285	2,240	8,658	20,749	43,869	17,351	13,604	119,171	223,877

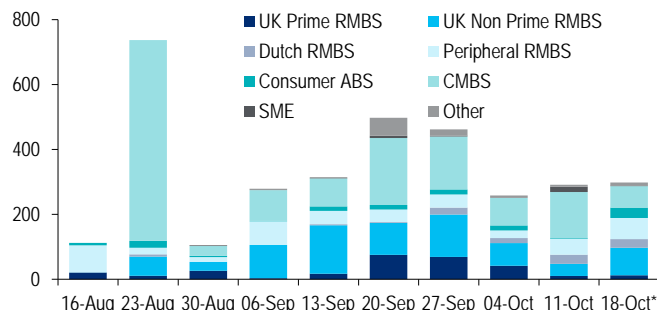
* 2012 complete year

Source: Concept ABS, IFR, Informa and Citi Research

BWIC Tracker

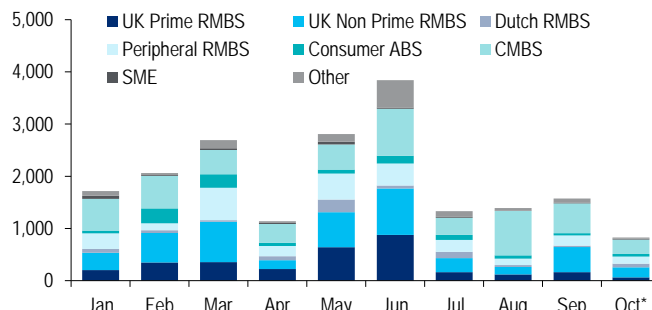
Weekly and Monthly BWIC Volume

Figure 12. Weekly BWIC Volume by Sector, Aug 13–Oct 13 (\$ eq. million)



* Data until 17 Oct
Source: Citi Research

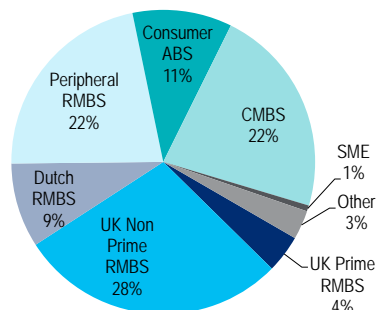
Figure 13. Monthly BWIC Volume by Sector, 2013YTD (\$ eq. million)



* Data until 17 Oct
Source: Citi Research

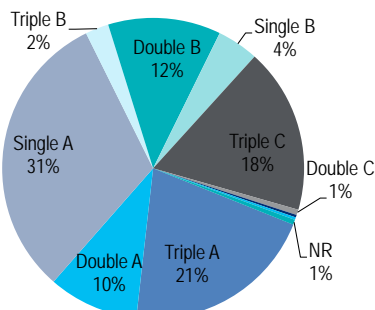
Last Week's BWIC Distribution by Sector, Rating and Currency

Figure 14. BWIC Volume Distribution by Sector, 11 Oct – 17 Oct 2013 (%)



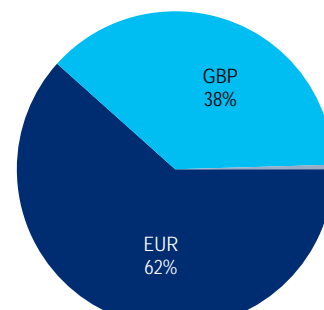
Source: Citi Research

Figure 15. BWIC Volume Distribution by Current Rating*, 11 Oct – 17 Oct 2013 (%)



* We use Bloomberg composite ratings
Source: Bloomberg and Citi Research

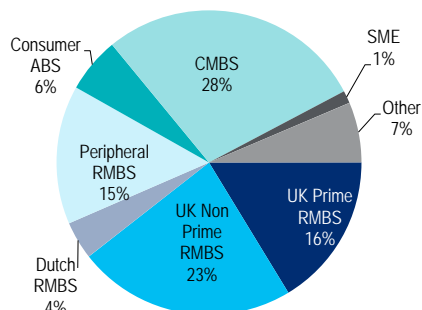
Figure 16. BWIC Volume Distribution by Currency, 11 Oct – 17 Oct 2013 (%)



Source: Citi Research

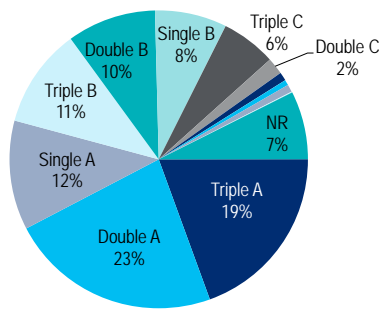
YTD BWIC Distribution by Sector, Rating and Currency

Figure 17. BWIC Volume Distribution by Sector, 2013YTD (%)



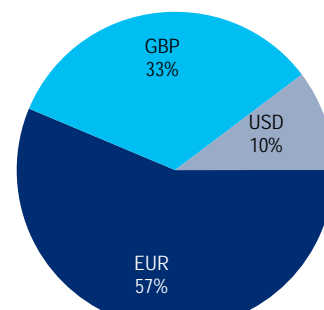
Source: Citi Research

Figure 18. BWIC Volume Distribution by Current Rating*, 2013YTD (%)



* We use Bloomberg composite ratings
Source: Bloomberg and Citi Research

Figure 19. BWIC Volume Distribution by Currency, 2013YTD (%)



Source: Citi Research

Figure 20. BWIC Volume and Number of Bonds by Sector and Current Rating*, 11 Oct – 17 Oct 2013 and 2013 YTD

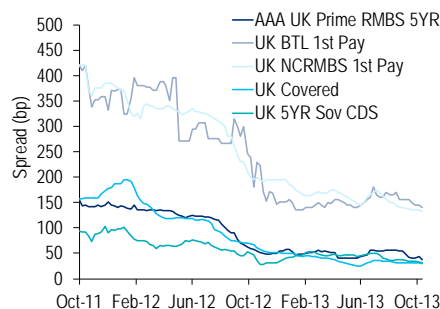
Sector	Rating*	11 Oct – 17 Oct		YTD	
		Volume (MM USD EQ)	Number of Bonds	Volume (MM USD EQ)	Number of Bonds
UK Prime RMBS	Triple A	12.0	1	1,531	296
	Double A	-	-	1,296	347
	Single A	-	-	68	8
	Lower and Not Rated	-	-	261	64
	Total	12.0	1	3,156	715
UK Non Prime RMBS	Triple A	-	-	272	47
	Double A	26.5	3	1,949	347
	Single A	57.0	2	857	126
	Lower and Not Rated	1.4	1	1,404	295
	Total	84.9	6	4,482	815
Dutch RMBS	Triple A	21.2	1	523	119
	Double A	-	-	94	11
	Single A	5.6	2	57	20
	Lower and Not Rated	-	-	108	37
	Total	26.8	3	783	187
Peripheral RMBS	Double A	-	-	652	49
	Single A	20.3	5	604	139
	Triple B	1.1	1	610	130
	Double B	-	-	287	51
	Single B	0.4	1	148	54
	Triple C	40.1	5	233	62
	Lower and Not Rated	3.4	5	319	139
	Total	65.3	17	2,854	624
CMBS	Triple A	-	-	73	8
	Double A	-	-	202	42
	Single A	10.2	2	447	81
	Lower and Not Rated	56.3	9	4,741	689
	Total	66.5	11	5,463	820
Consumer ABS	Triple A	28.5	16	747	232
	Double A	2.3	2	186	18
	Single A	-	-	56	35
	Lower and Not Rated	0.8	1	147	76
	Total	31.5	19	1,136	361
SME	Double A	-	-	5	2
	Single A	-	-	74	27
	Triple B	-	-	27	21
	Double B	-	-	33	20
	Single B	-	-	42	22
	Lower and Not Rated	1.9	2	78	48
	Total	1.9	2	259	140
Other	Triple A	-	-	617	125
	Double A	-	-	52	13
	Single A	-	-	136	33
	Triple B	-	-	91	24
	Double B	-	-	97	18
	Single B	9.2	1	73	12
	Triple C	-	-	92	12
	Lower and Not Rated	-	-	83	27
	Total	9.2	1	1,241	264
Grand Total		297.9	60	19,373.5	3,926

* We use Bloomberg composite ratings

Source: Bloomberg and Citi Research

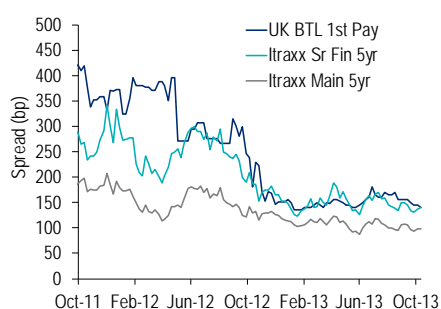
Core RMBS Spreads and Relative Value

Figure 21. UK RMBS Seniors Versus Indexes, Oct 11 – Oct 13



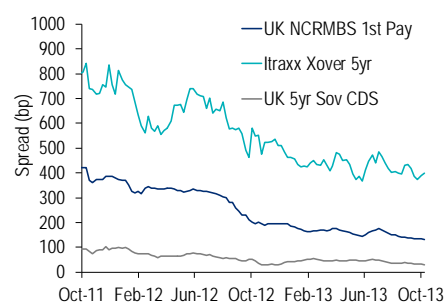
Source: Markit and Citi Research

Figure 22. UK BTL RMBS Seniors Versus Indexes, Oct 11 – Oct 13



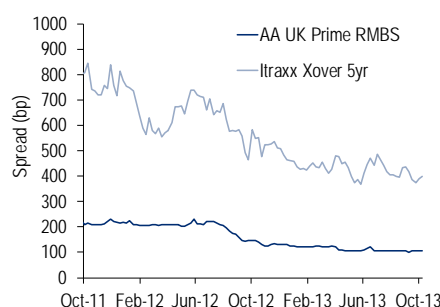
Source: Markit and Citi Research

Figure 23. UK NCRMBS Seniors Versus Indexes, Oct 11 – Oct 13



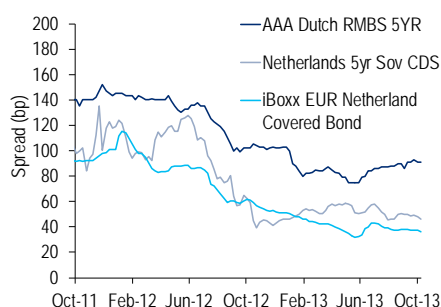
Source: Markit and Citi Research

Figure 24. UK Prime RMBS Subordinates Versus Index, Oct 11 – Oct 13



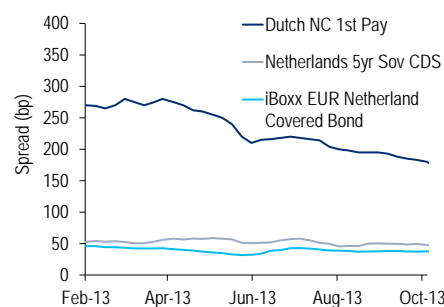
Source: Markit and Citi Research

Figure 25. Dutch RMBS Seniors Versus Indexes, Oct 11 – Oct 13



Source: Markit and Citi Research

Figure 26. Dutch NC 1st Pay Versus Indexes, Feb 13 – Oct 13



Source: Markit and Citi Research

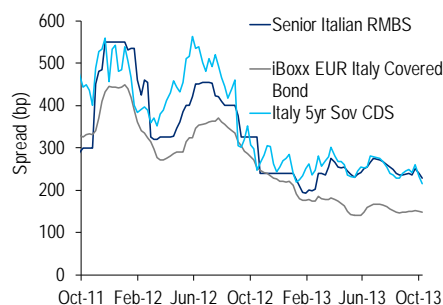
Figure 27. UK Prime, UK NC, UK BTL, Dutch Prime and Dutch NC Spread Changes and Statistics, 2013YTD

Country	Product	Product Detail	Current	Δ1-week	Δ1-month	Δ1-quarter	Δ1-year	2013 Low	Δ From Low	2013 High	Δ From High
UK	Prime RMBS	AAA 1YR	28	-1	-4	-10	-	23	5	38	-10
		AAA 3YR	32	-3	-6	-14	-	32	0	47	-15
		AAA 5YR	38	-5	-4	-17	-	38	0	56	-18
		Mezz	105	0	5	0	-40	100	5	125	-20
	Buy to Let	PARGN 1st Pay	140	-5	-15	-20	-41	135	5	180	-40
		PARGN 2nd Pay	240	0	-5	-15	-	230	10	275	-35
		PARGN 3rd Pay	350	-10	-15	0	-	325	25	375	-25
		AIREM AAA	108	0	-2	-37	-	103	5	160	-52
		AIREM AA	195	0	-45	-50	-	189	6	250	-55
		AIREM BBB	300	-5	-22	-43	-	293	7	350	-50
	Non-Conforming RMBS	NC 1st Pay	133	-2	-4	-29	-62	133	0	183	-50
		NC 2nd Pay	225	-2	-6	-31	-	220	5	315	-90
	Covered Bonds	iBoxx EUR UK	30	-1	-2	-5	-37	24	5	50	-20
Netherlands	Prime RMBS	Sovereign CDS	31	-2	-3	-10	-15	31	0	53	-23
		AAA 1YR	50	0	0	2	-	33	17	51	-1
		AAA 3YR	69	0	-1	2	-	54	15	76	-7
		AAA 5YR	91	0	0	4	-11	75	16	100	-9
	Non-Conforming	Mezz	185	0	0	0	-	160	25	200	-15
		NC 1st Pay	172	-8	-16	-42	-	172	0	320	-148
		NC 2nd Pay	228	-2	-12	-42	-	228	0	365	-137
		NC 3rd Pay	425	-8	-22	-65	-	425	0	675	-250
	Covered Bonds	iBoxx EUR Netherland	36	-1	-2	-4	-25	32	4	51	-15
	Sovereign CDS	Sovereign 5YR	46	-2	-4	-6	-14	46	0	59	-13

Source: Markit and Citi Research

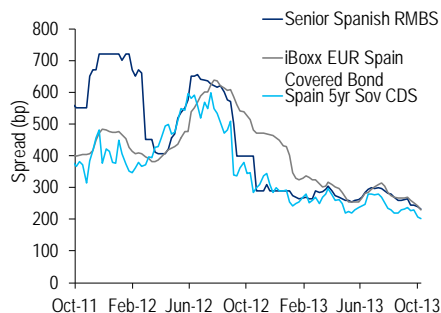
Peripheral RMBS and Relative Value

Figure 28. Italian RMBS Seniors Versus Indexes, Oct 11 – Oct 13



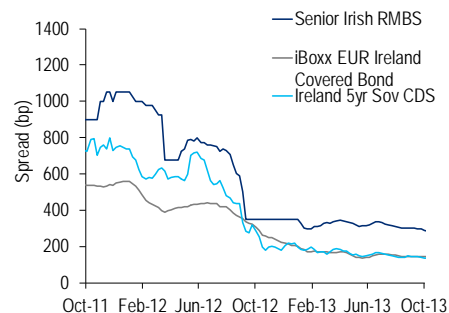
Source: Markit and Citi Research

Figure 29. Spanish RMBS Seniors Versus Indexes, Oct 11 – Oct 13



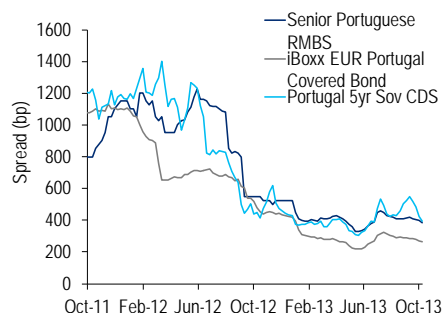
Source: Markit and Citi Research

Figure 30. Irish RMBS Seniors Versus Indexes, Sep Oct 11 – Oct 13



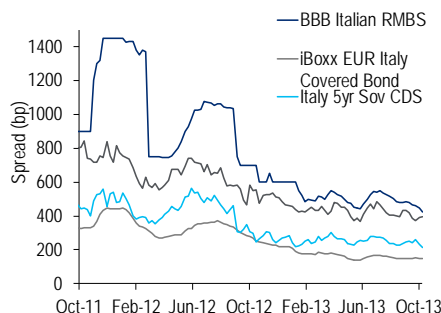
Source: Markit and Citi Research

Figure 31. Portuguese RMBS Seniors Versus Indexes, Oct 11 – Oct 13



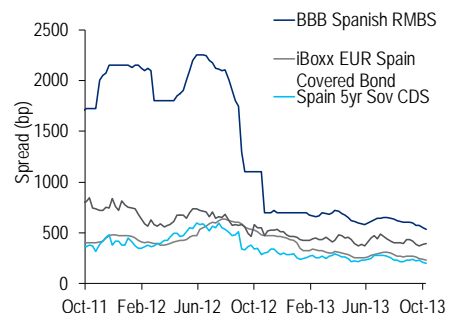
Source: Markit and Citi Research

Figure 32. Italian RMBS Subordinates Versus Indexes, Oct 11 – Oct 13



Source: Markit and Citi Research

Figure 33. Spanish RMBS Subordinates Versus Indexes, Oct 11 – Oct 13



Source: Markit and Citi Research

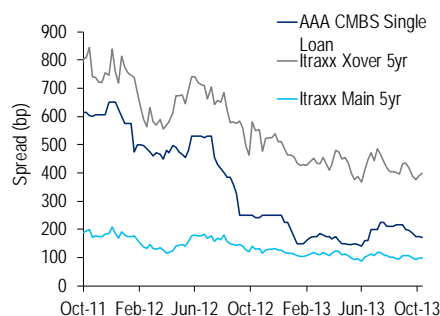
Figure 34. Peripheral RMBS Spread Changes and Statistics, 2013YTD

Country	Product	Product Detail	Current	Δ1-week	Δ1-month	Δ1-quarter	Δ1-year	2013 Low	Δ from Low	2013 High	Δ from High
Italy	RMBS	AAA Italy	228	-12	-12	-39	-97	193	35	275	-47
		AA Italy	285	-5	-5	-35	-	255	30	325	-40
		A Italy	335	-15	-20	-73	-	323	12	440	-105
		BBB Italy	425	-20	-55	-110	-275	425	0	600	-175
	Covered Bonds	iBoxx EUR Italy	148	-2	-2	-17	-123	140	8	211	-64
	Sovereign CDS	Italy Sovereign 5YR	214	-17	-35	-53	-82	214	0	300	-86
Spain	RMBS	AAA Spain	232	-8	-33	-64	-168	232	0	305	-73
		AA Spain	340	-10	-40	-65	-	340	0	410	-70
		A Spain	485	-15	-50	-85	-	485	0	690	-205
		BBB Spain	535	-15	-65	-117	-565	535	0	725	-190
	Covered Bonds	iBoxx EUR Spain	229	-13	-39	-84	-284	229	0	401	-172
	Sovereign CDS	Spain Sovereign 5YR	201	-6	-35	-67	-144	201	0	296	-94
Portugal	RMBS	AAA Portugal	385	-15	-35	-65	-165	328	57	460	-75
		AA Portugal	450	-25	-45	-75	-	428	22	595	-145
		A Portugal	545	-25	-55	-95	-	512	33	740	-195
		BBB Portugal	610	-30	-65	-110	-	594	16	840	-230
	Covered Bonds	iBoxx EUR Portugal	263	-6	-23	-59	-213	218	46	392	-128
	Sovereign CDS	Portugal Sovereign 5YR	393	-31	-155	-101	-55	304	90	548	-155
Ireland	RMBS	AAA Ireland	285	-5	-16	-33	-65	285	0	349	-64
		AA Ireland	530	-10	-30	-50	-	440	90	600	-70
		A Ireland	665	-15	-39	-65	-	575	90	750	-85
		BBB Ireland	890	-20	-50	-85	-	750	140	1000	-110
	Covered Bonds	iBoxx EUR Ireland	145	-1	2	-11	-144	136	9	200	-54
	Sovereign CDS	Ireland Sovereign 5YR	134	0	-10	-20	-121	134	0	197	-64

Source: Markit and Citi Research

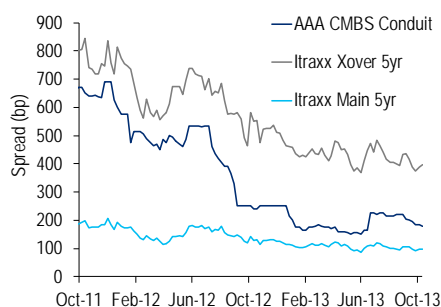
CMBS and CLO Spreads and Relative Value

Figure 35. AAA CMBS Single Loan Versus Indexes, Oct 11 – Oct 13



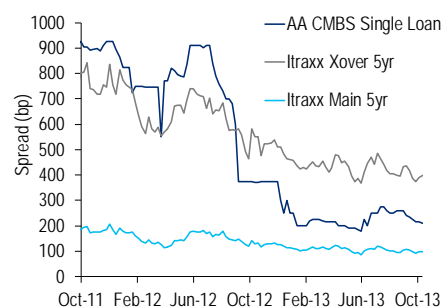
Source: Markit and Citi Research

Figure 36. AAA CMBS Conduit Versus Indexes, Oct 11 – Oct 13



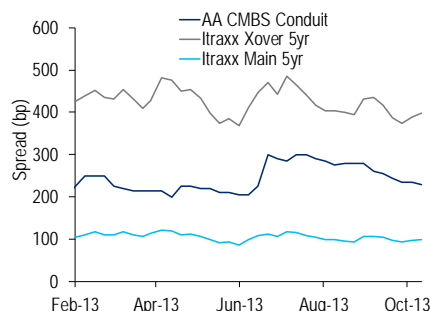
Source: Markit and Citi Research

Figure 37. AA CMBS Single Loan Versus Indexes, Oct 11 – Oct 13



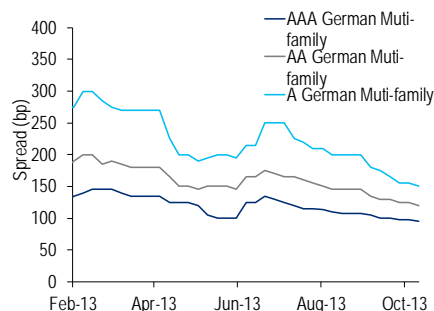
Source: Markit and Citi Research

Figure 38. AA CMBS Conduit Versus Indexes, Feb 13 – Oct 13



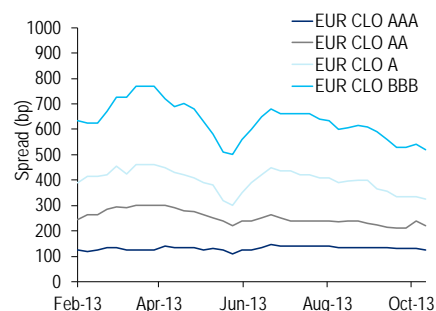
Source: Markit and Citi Research

Figure 39. German Multifamily Spreads, Feb 13 – Oct 13



Source: Citi Research

Figure 40. EUR CLO Spreads, Feb 13 – Oct 13



Source: Citi Research

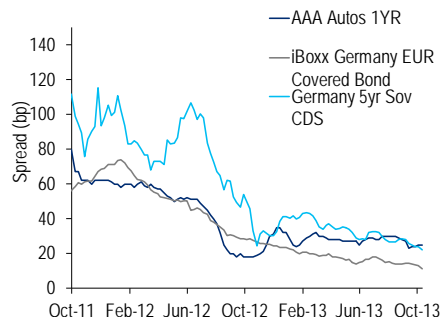
Figure 41. CMBS, WBS and CLO Spread Changes and Statistics, 2013YTD

Country	Product	Product Detail	Current	Δ1-week	Δ1-month	Δ 1-quarter	Δ1-year	2013 Low	Δ from Low	2013 High	Δ from High
Europe	CMBS	AAA German Multi	95	-3	-5	-20	-	95	0	150	-55
		AAA Single Loan	170	-5	-25	-55	-70	140	30	225	-55
		AAA Conduit	180	-5	-20	-45	-60	150	30	225	-45
		AAA Fixed	115	-5	-10	-30	-	110	5	225	-110
		AA German Multi	120	-5	-10	-40	-	120	0	225	-105
		AA Single Loan	210	-5	-25	-65	-160	180	30	275	-65
		AA Conduit	230	-5	-25	-70	-140	200	30	300	-70
		AA Fixed	140	-5	-20	-40	-	140	0	250	-110
		A German Multi	150	-5	-25	-70	-	150	0	350	-200
		A Single Loan	400	-5	-25	-25	-290	250	150	450	-50
		A Conduit	425	-5	-25	-25	-265	270	155	475	-50
		A Fixed	250	-5	-20	-40	-	210	40	495	-245
	CLO	AAA	125	-5	-10	-15	-	110	15	150	-25
		AA	220	-20	5	-20	-	210	10	300	-80
		A	325	-10	-30	-95	-	300	25	460	-135
		BBB	520	-20	-40	-140	-	500	20	800	-280
	WBS	AAA	155	-5	-15	-50	-	155	0	300	-145
		AA	180	-5	-25	-70	-	180	0	350	-170
		A	260	-5	-25	-65	-	260	0	425	-165
		BBB	425	-5	-50	-100	-	390	35	600	-175

Source: Markit and Citi Research

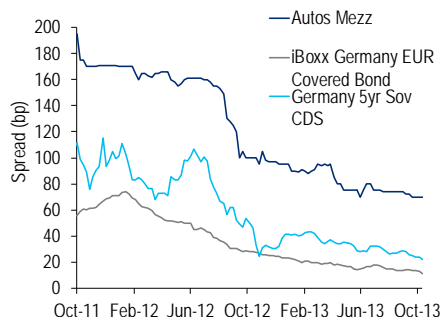
Auto and Credit Card ABS Spreads and Relative Value

Figure 42. European Auto Seniors Versus Indexes, Oct 11 – Oct 13



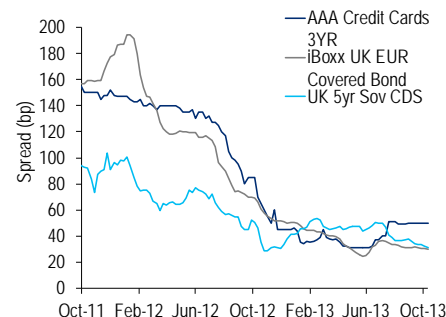
Source: Markit and Citi Research

Figure 43. European Auto Mezz Versus Indexes, Oct 11 – Oct 13



Source: Markit and Citi Research

Figure 44. UK Credit Card ABS Versus Indexes, Oct 11 – Oct 13



Source: Markit and Citi Research

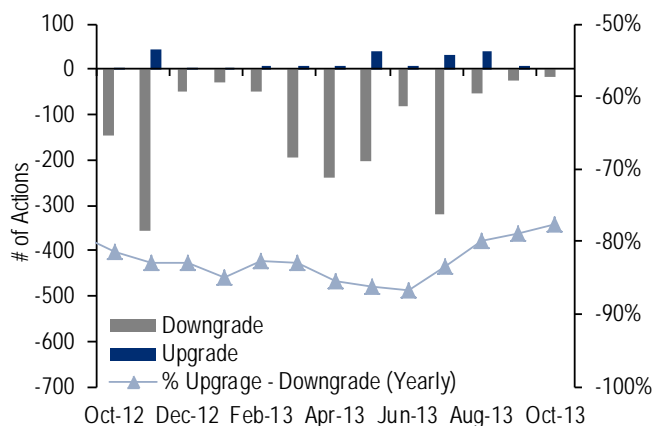
Figure 45. European Autos and UK Credit Card ABS Spread Changes and Statistics, 2013YTD

Country	Product	Product	Current	Δ1-week	Δ1-month	Δ1-quarter	Δ1-year	2013 Low	Δ from Low	2013 High	Δ from High
Europe	Autos	1YR	25	0	2	-5	7	23	2	32	-7
		3YR	45	0	3	0	-	38	7	45	0
		5YR	60	0	5	0	-	55	5	63	-3
		Mezz	70	0	-2	-4	-30	70	0	95	-25
Germany	Automobile and Parts Index	iBoxx EUR	67	0	11	9	-47	47	20	91	-23
		Automobile & Parts	11	-1	-3	-5	-17	11	0	23	-11
		Sovereign CDS	22	-2	-4	-8	-24	22	0	43	-21
UK	Credit Cards	1YR	38	0	0	0	-	25	13	38	0
		3YR	50	0	0	-1	-20	31	19	51	-1
		5YR	58	0	0	-2	-14	42	16	63	-5
		Mezz	110	0	0	0	-	89	21	127	-17
	Covered Bonds	iBoxx EUR UK	30	-1	-2	-5	-37	24	5	50	-20
		Sovereign CDS	31	-2	-3	-10	-15	31	0	53	-23

Source: Markit and Citi Research

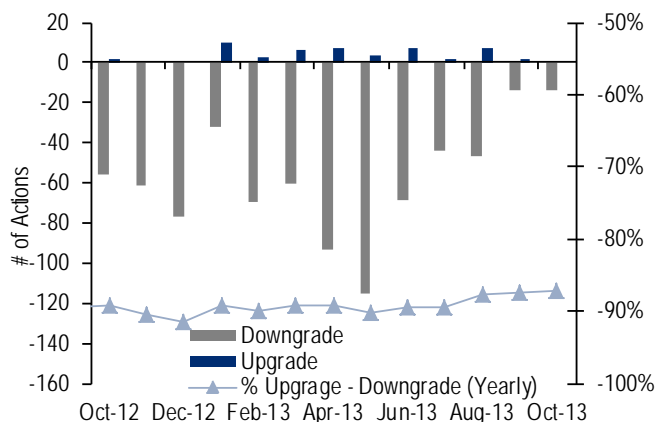
Rating Actions and Trends

Figure 46. European RMBS Rating Upgrades and Downgrades, Oct 12 – Oct 13



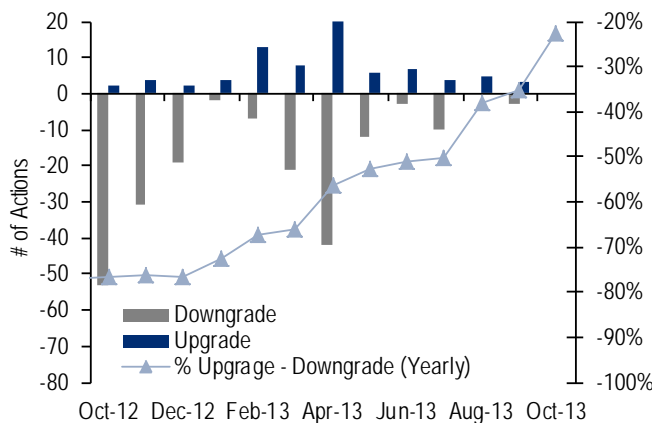
Source: Moody's, S&P and Fitch

Figure 47. European CMBS Rating Upgrades and Downgrades, Oct 12 – Oct 13



Source: Moody's, S&P and Fitch

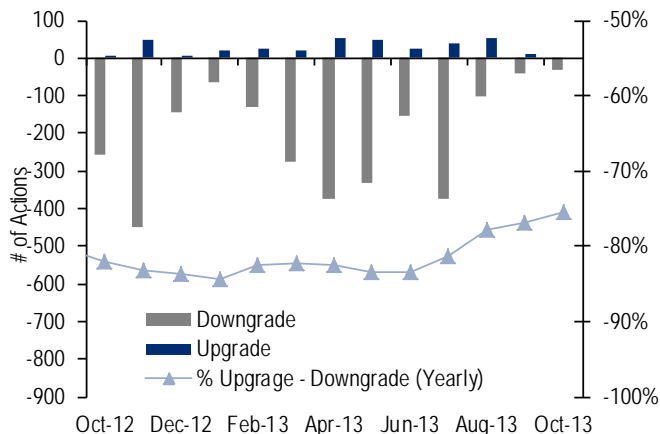
Figure 48. European ABS* Rating Upgrades and Downgrades, Oct 12 – Oct 13



* ABS includes – European Lease ABS, European Consumer ABS, SME ABS, Auto ABS, UK Credit Card ABS, NPL ABS

Source: Moody's, S&P and Fitch

Figure 49. European Total Securitized Products Rating Upgrades and Downgrades, Oct 12 – Oct 13



Source: Moody's, S&P and Fitch

Recent Key Publications

[All ABS Are Equal, But Some Are More Equal](#), Oct 11, 2013
[Easing Off Regulatory Gas](#), Oct 4, 2013
[Italian RMBS: Truffle Hunting Among Poisonous Mushrooms](#), Sep 27, 2013
[ABS Ignores Another Week of Policy Initiatives](#), Sep 20, 2013
[Strategies for a \(Potential\) Euro Recovery](#), Sep 13, 2013
[Going Dutch RMBS: High Leverage Masks Sector Value](#), Aug 15, 2013
[Granite - Structure and Hedging: Credit Options Best to Reduce Price Swings](#), Aug 01, 2013
[ECB Repo Move Better for Originators than for Primary Market](#), Jul 22, 2013
[Stay in Front to Catch the Rally](#), Jul 12, 2013
[Likes and Dislikes from Global ABS Conference](#), Jun 21, 2013
[Strategies for QE Withdrawal and Choppy Markets](#), Jun 14, 2013
[Spanish RMBS: Rain in Spain... But Sunny on Many RMBS](#), Jun 12, 2013
[RMBS Resilience Post Co-op Downgrade](#), May 10, 2013
[Italian RMBS and Granite Stand Out](#), Apr 12, 2013
[UK BTL RMBS: Cheap for Prime Quality but Mind Back-end Risks](#), Apr 8, 2013
[UK Budget Could Increase RMBS Prepayments](#), Mar 22, 2013
[The Knock-On Effect to Continue](#), Mar 15, 2013
[An Overview of Spanish SME ABS](#), Feb 22, 2013
[Distinguishing Values along the Credit Spread Curves](#), Feb 8, 2013
[Quantifying the Impact of Proposed Basel III Securitization Rules](#), Jan 25, 2013
[Correlation, Volatility and Other Reasons to Like Italian RMBS](#), Jan 11, 2013
[The 2013 European Securitized Products Outlook](#), Dec 12, 2012

Notes

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Inc	Mary E Kane
Citigroup Global Markets Ltd	Ratul Roy; Himanshu Shrimali, CFA
Citigroup Global Markets India Private Limited	Rajat Deshpande

OTHER DISCLOSURES

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citi Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A. Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A.,

Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangkok, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. With the exception of our product that is made available only to Qualified Institutional Buyers (QIBs) and other product that is made available through other distribution channels only to certain categories of clients to satisfy legal or regulatory requirements, Citi Research concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual Citi Research analysts may also opt to circulate research posted on such platforms to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels. Citi Research simultaneously distributes product that is limited to QIBs only through email distribution.

The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints. Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters and Datastream.

© 2013 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on

a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
