

Global Securitized Products Strategy

The 2013 European Securitized Products Outlook

- **Top Call Recommendations** — Our top three calls for 2013 are: (1) Italian RMBS, (2) UK BTL RMBS, and (3) UK credit card ABS. We like Italian RMBS at EURIBOR +240bp and prefer deals with greater exposure to Northern Italy. Italian mortgage LTVs are low, and home prices did not inflate during the bubble years. In the UK, the proportion of renters is rising, and we like the buy-to-let fundamental story at EURIBOR +95bp. At EURIBOR +45bp, 3YR UK credit cards pick up 35bp to US cards.
- **Broad Themes** — Higher yielding peripheral RMBS is likely to benefit most in 2013 as investors pursue yield to meet return targets. Powerful technicals such as scarce new issue supply and more securitization tenders should continue to provide very strong support to securitized spreads. We envision stable to tighter securitized spreads in 2013, barring any major risk event.
- **Expect Flat Supply** — We project €61.5 billion of placed European securitized products supply in 2013, about flat to the year 2012. We expect the Funding for Lending Scheme (FLS) to continue to significantly curb UK Prime RMBS supply, while Dutch RMBS and certain other sectors should compensate for some of the deficiency.
- **UK Housing Stable, Euro Zone Worse** — Our UK macro-economic and housing outlook is stable but we expect further deterioration in the Euro zone. We anticipate house prices to fall in all Euro zone countries except Italy and Ireland. Noteworthy is that Ireland might be turning a corner and we project positive GDP and house price growth for 2013.
- **Well-Compensated for Risk** — A potential worsening of the sovereign debt crisis and continued regulatory uncertainty are latent risks for all fixed income markets, yet we prefer the inherent security interest of securitized products. Moreover, European securitized products investors are still paid for risk — we point out that the volatility-adjusted spread multiples for UK prime and Dutch RMBS are up to 2–5 times higher than European covered bonds, and US ABS and CMBS.

Global Securitized Products Research

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

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Short, amortizing “secured” assets offer good portfolio protection against the possible tail events that could transpire during 2013.

Double-Digit Portfolio Returns, World Peace, Full Employment and Other Goals for 2013

If these objectives seem ambitious, consider that current fixed income markets are priced for perfection, and are still in hot pursuit of adding more credit risk. While it is unwise, in our view, to “fight the tape”, we do recommend anchoring fixed income portfolios with “secured” European securitized products investments. Considered the black sheep of the bond world since the 2008 financial crisis, even good performing securitized markets suffered from irrational market sell off, and prices slid to unrealistic levels until even disbelievers woke up to the inherent value, justified by good performance and cheap prices. While the European securitized products market rallied significantly during 2012, we believe the market still under-appreciates certain sectors, particularly when benchmarked against corporate credit and comparable US securitized sectors.

Peripheral RMBS have the most tightening potential and a few high quality alternatives to UK prime RMBS also offer upside, in our view. This is consistent with our preferred investment strategy, which is to employ a credit barbell, but shifting to a greater emphasis on high yielding assets. The market seems to be increasingly comfortable with the ongoing European sovereign debt crisis and we expect spreads to tighten further, barring any major risk event. We expect powerful technical spread support as reinvestment demand trumps primary supply¹. Regulation is likely to be the focus again in 2013 as the market expects more clarity on the implementation dates of Basel III and Solvency II. We hope that regulators take notice of the very good collateral performance of certain sectors and consider industry initiatives like “Prime Collateralised Securities” before finalizing the regulatory treatment of European securitized products.

We discuss our 2013 outlook in this report, outlining our top calls, strategic recommendations, and cross sector relative value. We provide our supply projections for various securitized sectors and comment on the economic and housing outlook. We also comment on broader market themes for 2013 and provide a regulatory and policy overview. Overall, we recommend a European securitized products market weight, and we outline our Top Calls in Figure 1.

Top Calls

Figure 1. Top Three European Securitized Products Recommendations for 2013

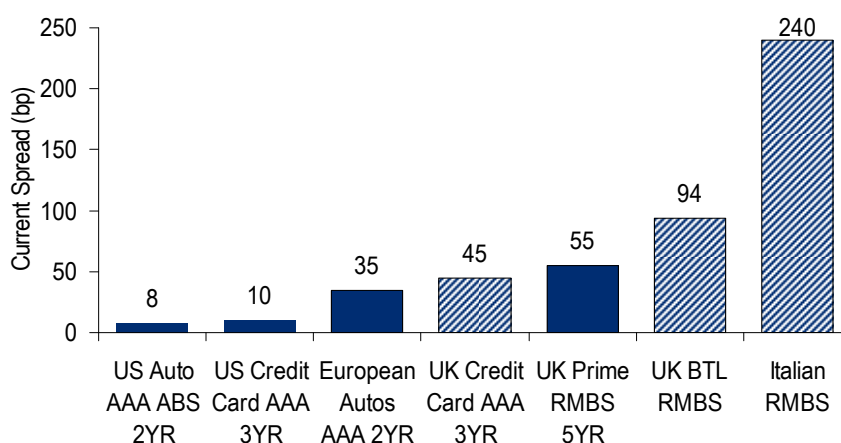
ITALIAN RMBS	UK BTL RMBS	UK CREDIT CARD ABS
Current Spread: EURIBOR +240bp	Current Spread: EURIBOR +94bp	Current Spread: EURIBOR +45bp
Market Size: €19 billion equivalent	Market Size: €26 billion equivalent	Market Size: €15 billion equivalent
<ul style="list-style-type: none"> ■ Prefer Northern Italy. Bifurcated housing market, recovery timelines range from 3–9 years from north to south ■ Strong Fundamentals. Low mortgage debt, stable house prices, and positive mortgage lending 	<ul style="list-style-type: none"> ■ Rising Rents. Average rents in England and Wales increasing for the past four years ■ Strong Rental Demand. Homeownership rates fell to 66% in 2011 from 71% in 2000 and expected to fall further 	<ul style="list-style-type: none"> ■ Short WAL. Weighted average life of 3YR compared to 5YR for RMBS ■ Attractive to US. Picks up 35bp to comparable US credit cards and collateral performance for both sectors is equivalent

Source: Citi Research

¹ A more detailed technical overview is discussed in the supply section of the report.

Investing in European securitized products is a conservative strategy for hedging the 2013 event risks and the possible need for investment draws. Moreover, European securitized markets are cheap by many measures, as Figure 2 shows. We comment on comparative value trends and core recommendations next.

Figure 2. Selected Sectors Spread Comparison to UK Prime, US Credit Cards, and Autos (bp)



Source: Citi Research. 7th Dec 2012

- **Prefer Italian RMBS.** Italian mortgage market fundamentals are the strongest among peripheral countries² and RMBS collateral performance has been good³. Italian households' low mortgage indebtedness, relatively stable house prices, and positive net mortgage lending provide valuable support to the sector. Average senior Italian RMBS current spreads are EURIBOR +240bp, picking up 185bp to senior UK prime RMBS (Figure 2).
- **UK Credit Cards Attractive.** We like UK credit card ABS because of strong collateral performance and relatively short duration compared to RMBS. Citi's UK credit card index performance improved during the past 2 years⁴ and we expect the positive trend to continue during 2013. Current spreads for 3YR Triple-A rated credit card are EURIBOR +45bp, picking up 35bp to US credit cards.
- **Value in UK BTL RMBS.** Buy-to-let accounts for roughly 10% of the UK RMBS market and we think that certain shelves in this sector offer value. The sector benefits from supportive fundamentals like rising rents (Figure 3), low interest rates, and falling homeownership (Figure 4). As discussed in a previous report⁵, Paragon is a major BTL RMBS issuer and we expect it to remain active in 2013. Current UK BTL generic spreads are EURIBOR +94bp.⁶

² ["European Securitized Products Weekly: GIIPS Mortgage Market Fundamentals Paint Varied Picture"](#), Citi, 30 March

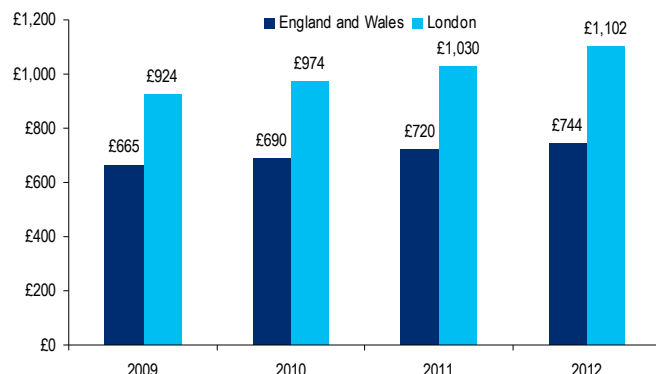
³ ["European Securitized Products Weekly: GIIPS RMBS Credit Performance Analysis Reveals Opportunities"](#), Citi, 20 April

⁴ ["Securitized Products Strategy: September 2012 UK Credit Card Index Update"](#), Citi, 26 September

⁵ ["European Securitized Products Weekly: Paragon—Dominant BTL Issuer"](#), Citi, 7 September

⁶ In this report we recommend the ABS securities from Paragon Mortgages Ltd. Paragon Mortgages Ltd is the creator of PARAGON MORTGAGES 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16 PLC.

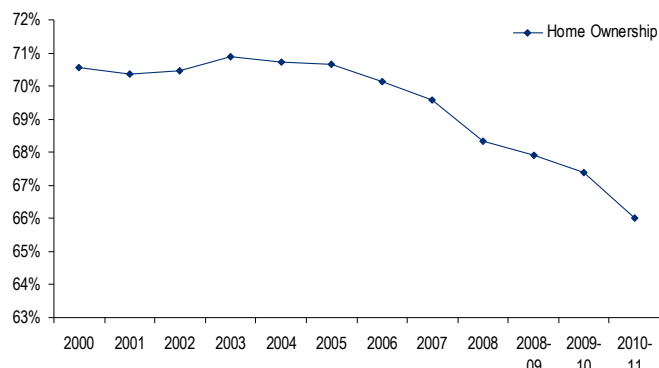
Figure 3. Average Monthly Rent in England and Wales, 2009 – 2012* (£)



*Data as of October for each year

Source: LSL Property Services and Citi Research

Figure 4. Average Homeownership Rate in England, 2000 – 2011 (%)



Source: DCLG and Citi Research

Re-Balancing the Barbell

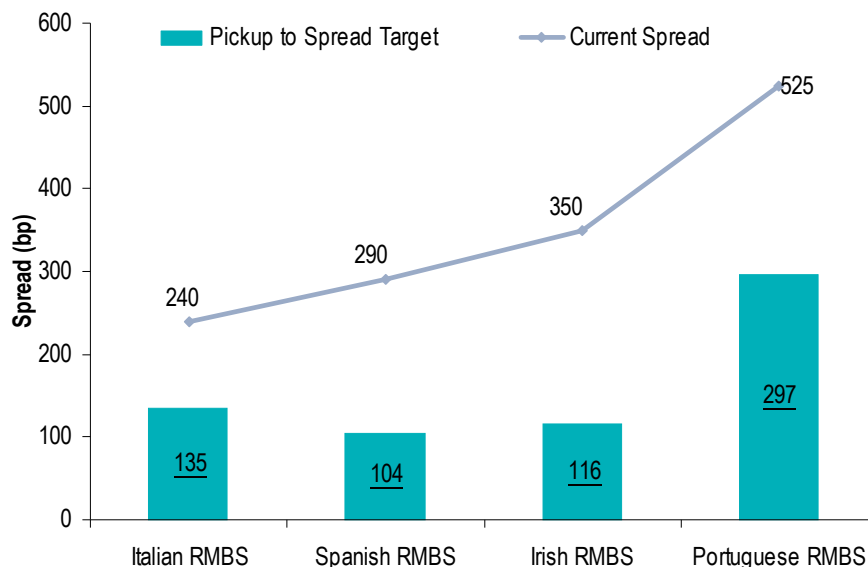
Looking ahead to 2013, we recommend a credit barbell strategy but with greater exposure to high yield peripherals and other high quality alternative to UK prime RMBS. European securitized market rallied considerably in 2012 due to favourable technicals and broader market risk-on sentiment. We think the search for additional yield will drive peripheral spreads tighter in 2013 and strong technicals will support core sector spreads at current tight levels.

We divide our strategic recommendations in three parts: 1) high yield trades, 2) core defensive trades, and 3) UK prime alternatives.

High Yield Trade Ideas

- **Peripheral Pickups.** After the strong 2012 rally in European securitized markets, we expect investor focus to shift to higher yielding peripheral RMBS sectors in 2013. We think that selective senior peripheral RMBS are good high yield alternatives with quality collateral. Peripheral RMBS offers attractive pickups ranging from 104–297bp to our spread targets (Figure 5) and we think these have further tightening potential during 2013.

Figure 5. Peripheral 5YR RMBS Spreads and Pickups to Spread Target, as of 7 Dec 2012 (bp)



Source: Markit and Citi Research

- **First-Pay Senior and Pro-Rata Sub UK NCRMBS.** The low interest rate environment is positive for UK non-conforming RMBS collateral performance. UK policy rates are expected to remain low until 2014, and an increase in rates would be accompanied by economic growth and higher house prices. We recently expanded our recommendation for senior first-pay UK non-conforming RMBS to certain NCRMBS subordinate classes which we expect to switch to trigger-based pro-rata payments⁷. The UKNCRMBS senior sector offers spreads of LIBOR +195bp, and subordinates offer LIBOR +500bp.

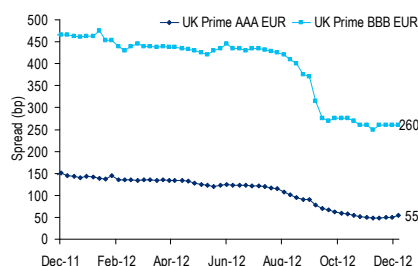
Core Quality Trades

- **Demand for Short Duration Supports Autos.** We recommend overweighting autos despite currently tight spreads, as there are few alternative short duration and high quality credit sectors, and we expect spreads to tighten further. As highlighted in our previous note⁸, the auto ABS sector is a very good defense against the uncertainties still facing the European credit markets. Senior and subordinate autos trade at EURIBOR +35bp and +95bp, respectively, and offer attractive pickups to their US counterparts.

⁷ "European Securitized Products Weekly: UK NCRMBS Picks for Potential Pro-Rata Benefit", Citi, 26 October 2012

⁸ "European Securitized Products Weekly: Top Five Reasons to Buy European Auto ABS", Citi, 19 October 2012

Figure 6. 5YR UK Prime Senior and Subordinate Spreads, Dec 11 – Dec 12 (bp)



Source: Citi Research

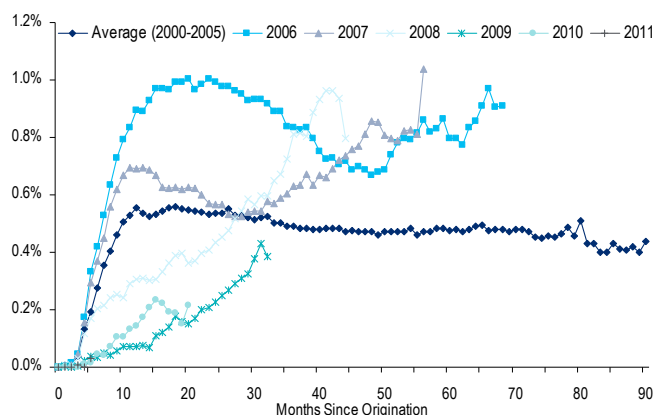
■ **UK Prime Scarcity to Drive Spreads Tighter.** UK prime senior and subordinate spreads tightened 64% and 44% year-over-year, respectively, due to favorable technicals and good collateral performance. We expect senior and subordinate spreads to tighten further in 2013 due to FLS induced supply scarcity and strong investor demand. 5YR Triple-A rated UK prime RMBS trades at EURIBOR +55bp and 5YR Triple-B trades at EURIBOR +260bp (Figure 6).

High Quality UK Prime Alternatives

We expect UK prime RMBS new issue supply to collapse in 2013, largely owing to the Bank of England's Funding for Lending (FLS) scheme. While we like UK prime RMBS, we appreciate that sourcing paper would be difficult in a supply constrained environment. Moreover, UK prime scarcity would drive investors to other high quality sectors, creating attractive technicals in these sectors. We recommend the following high quality alternatives to UK prime RMBS:

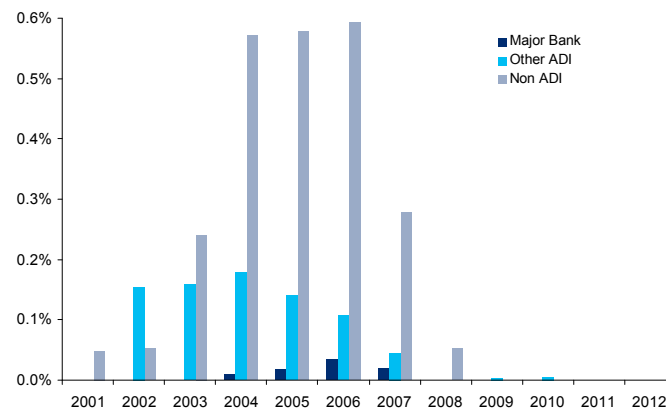
■ **Aussie RMBS Attractive.** Australian RMBS looks attractive, with spreads ranging from EURIBOR +85–140bp. The collateral performance of Australian RMBS has been impressive so far, with lower average delinquencies (Figure 7) and losses (Figure 8) compared to the UK prime RMBS. Australian RMBS market is tiered, offering a range of investment opportunities depending on the risk appetite. We discuss tiering in Australian RMBS in detail in our report published on 28 September 2012⁹.

Figure 7. Australian RMBS 90D+ Delinquencies by Seasoning and Vintage (%)



Source: Fitch and Citi Research

Figure 8. Australian RMBS Cumulative Pre-LMI* Losses by Vintage and Originator Type (%)



* LMI — Lenders Mortgage Insurance, ADI — Authorised Deposit-taking Institution

Source: Moody's and Citi Research

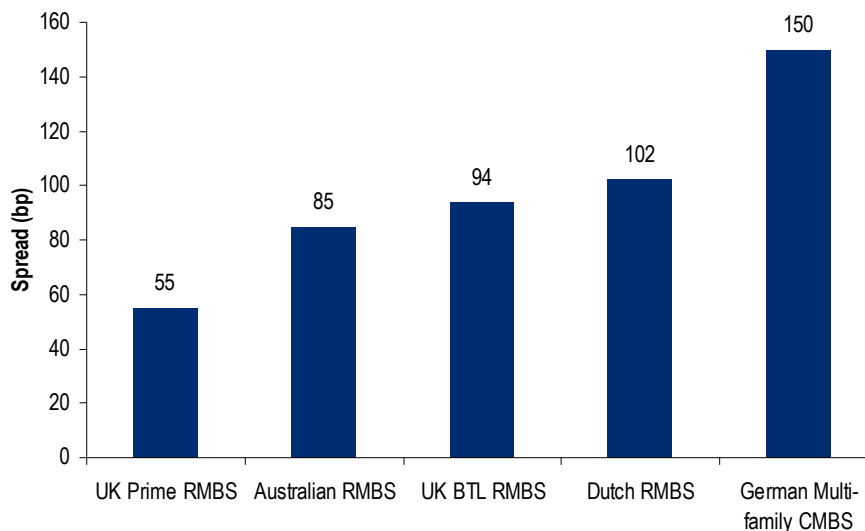
■ **German Multi-family CMBS.** We also like German multifamily CMBS as another high quality alternative to UK prime RMBS. The sector benefits from granular rental pools and strong fundamentals in Germany. German home ownership rates (43%) are much lower than the UK (66%) and the US (66%), which explains the widespread German rental culture. We provided a detailed analysis of the German multi-family sector in our report published on 2 August 2011¹⁰.

⁹ "European Securitized Products Weekly: Rank-Ordering Australian RMBS Programs", Citi, 28 September 2012

¹⁰ "Global Securitized Products Strategy: German Multifamily — A Good Defense", Citi, 2 August 2011

We show comparative spreads of alternative UK prime RMBS sectors in Figure 9 and summarize our sector recommendations in Figure 10.

Figure 9. Spread Comparison of Select High Quality UK Prime Alternative Sectors, as of 7 Dec 2012 (bp)



Source: Citi Research

Figure 10. Sector Recommendation Summary

Category	Sector	Senior	Subordinate	Comments
Top Calls				
	Italian RMBS	Overweight	Overweight	Low LTVs, relatively low house price declines, and positive net mortgage lending
	UK Credit Cards	Overweight	Overweight	Short WAL, attractive pickup to comparable US credit cards with equivalent credit performance
	UK BTL RMBS	Overweight	Overweight	Strong fundamentals like rising rents and falling homeownership, supported by low interest rates
Core				
	UK Prime RMBS	Marketweight	Marketweight	Favourable technicals to support spreads
	UK NCRMBS	Marketweight	Underweight	Credit performance likely to deteriorate fast when interest rates rise but we think seniors are well protected
	Dutch RMBS	Marketweight	Underweight	Falling house prices and rising unemployment a concern but strong demand for core RMBS a positive
	Australian RMBS	Overweight	Marketweight	Credit performance better than UK prime RMBS, low doc loans potential concern for subordinates
	Autos	Overweight	Overweight	Short duration, high quality. Very few comparable short and high quality credit alternatives to this sector
Peripherals				
	Irish RMBS	Marketweight	Underweight	Very high indexed LTVs to impact subordinate recoveries but tender likelihood to support spreads
	Portuguese RMBS	Marketweight	Underweight	No major housing boom but high unemployment and negative economic growth outlook a concern
	Spanish RMBS	Marketweight	Underweight	Further house price drop likely but bad bank plan and possibility of tenders overall positive for the sector
Other				
	CMBS	Marketweight	Underweight	Seniors are protected but a large maturity pipeline in 2013 and beyond to impact recoveries
	Pubs	Underweight	Underweight	This sector requires in-depth bespoke corporate analysis

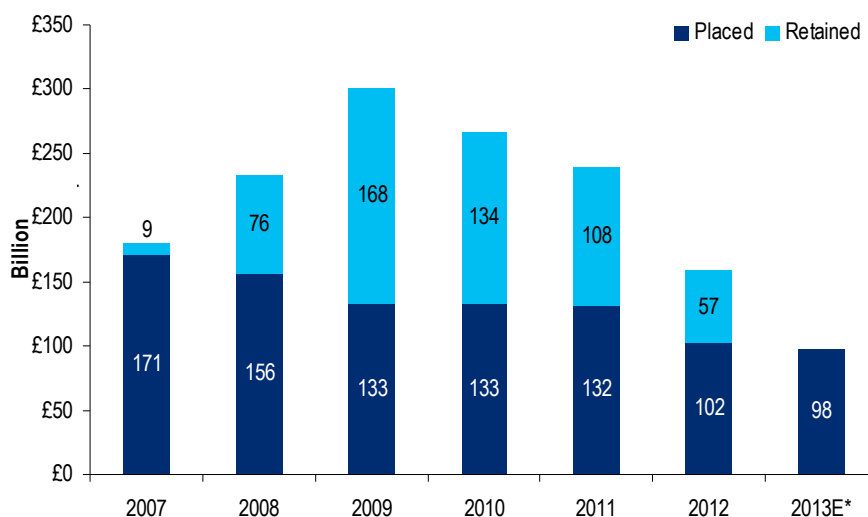
Source: Citi Research

Broad Market Trends for 2013

Favorable Technicals to Support Securitized Spreads

- **UK Prime Universe to Shrink Further.** We expect UK prime placed outstanding to decrease to £98 billion in 2013 from its current £102 billion outstanding. Tradable UK prime RMBS has decreased 40% from roughly £171 billion in 2007 due to greater runoff than new primary supply (Figure 11). The Bank of England's Funding for Lending Scheme (FLS) will continue to divert a significant portion of bank funding from the UK prime RMBS to direct borrowing from the central bank, shrinking the asset class further in 2013.

Figure 11. UK Prime RMBS Outstanding Balances, 2007 – 2012 and 2013 Est. (£ billion)

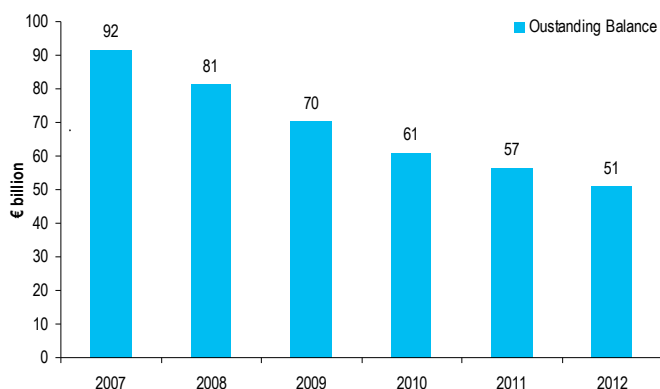


* We do not project retained outstanding for 2013

Source: Investor Reports, Concept ABS, Bloomberg and Citi Research

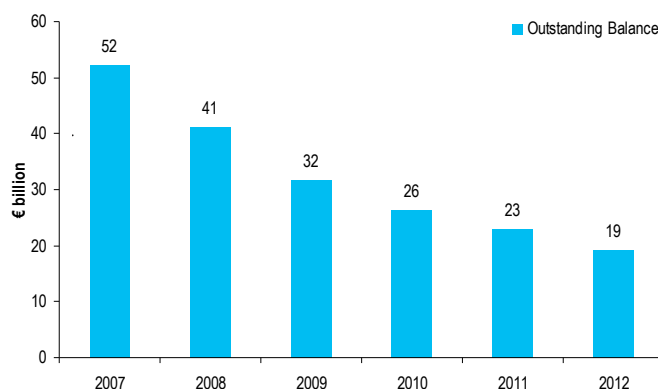
- **Peripheral RMBS Markets Shrinking.** Lack of placed new issue supply in peripheral countries and its associated runoff also present very powerful technicals. We expect peripheral spreads to tighten in 2013, backed by strong technicals and demand for higher yielding assets. Spanish and Italian RMBS markets have shrunk by 45% and 63%, respectively, from 2007 (Figure 12 and Figure 13).

Figure 12. Placed Spanish RMBS Outstanding Balances, 2007 – 2012 (€ billion)



Source: Investor Reports, Concept ABS, Bloomberg and Citi Research

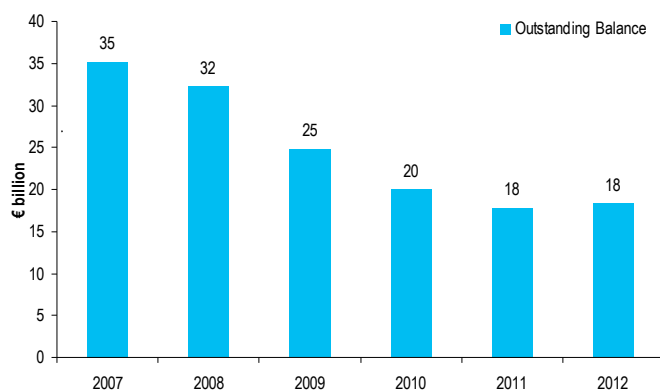
Figure 13. Placed Italian RMBS Outstanding Balances, 2007 – 2012 (€ billion)



Source: Investor Reports, Concept ABS, Bloomberg and Citi Research

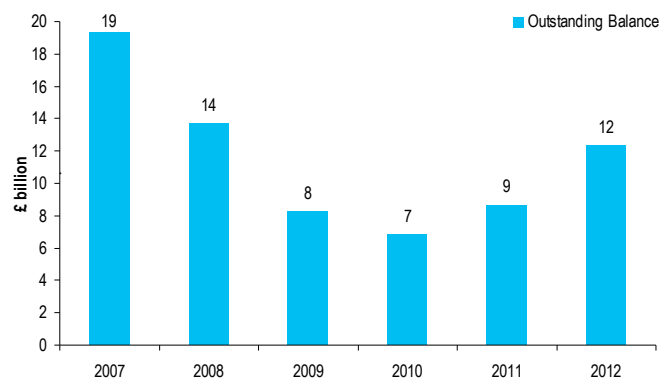
- **Strong Demand Absorbs Autos and Credit Card Supply.** Autos and credit card primary markets experienced reasonable supply during the past couple of years. Although, the outstanding balance in these sectors is not decreasing (Figure 14 and Figure 15), strong demand for short duration and high quality core assets is lending support to the spreads.

Figure 14. Placed European Autos Outstanding Balances, 2007 – 2012 (€ billion)



Source: Investor Reports, Concept ABS, Bloomberg and Citi Research

Figure 15. Placed UK Credit Cards Outstanding Balances, 2007 – 2012 (£ billion)



Source: Investor Reports, Concept ABS, Bloomberg and Citi Research

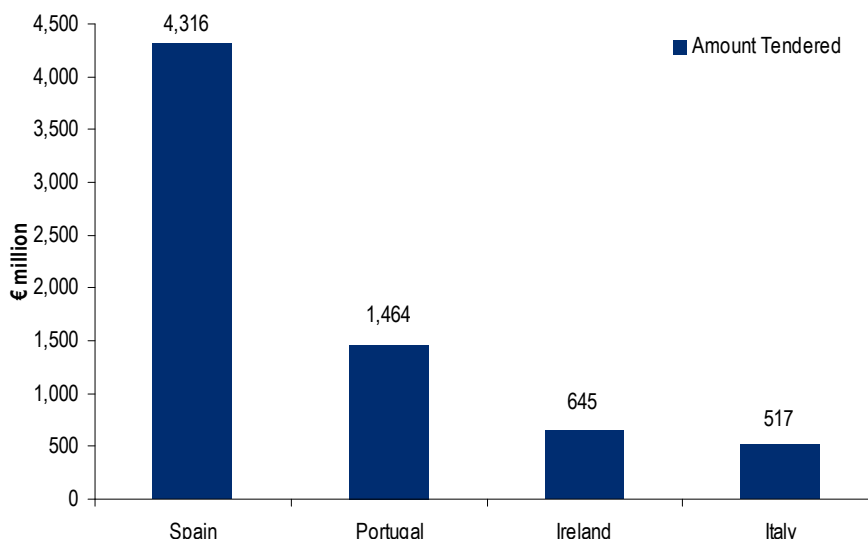
Quest for Tender Capital to Continue

Roughly 7% of Placed Peripheral RMBS Outstanding Tendered in 2012

- **More Peripheral Tenders.** We expect more Spanish, Portuguese, and Irish RMBS tenders during 2013. These sectors trade at considerable discounts to par and discounted tenders are a good alternative to raise core Tier 1 capital¹¹. European banks stepped up discounted securitization tenders in 2012, buying back about €7 billion of peripheral RMBS bonds. About €4.3 billion of Spanish RMBS and €1.5 billion of Portuguese RMBS was tendered, while Ireland and Italy accounted for €645 million and €517 million, respectively (Figure 16).

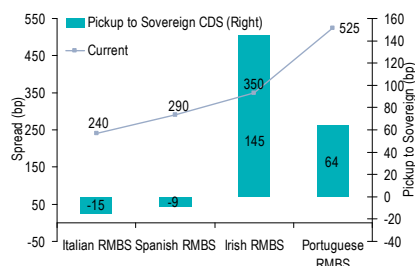
¹¹ “[European Securitized Products Weekly: Quest for Capital Propels Securitization Tenders](#)”, Citi, 17 February 2012

Figure 16. Peripheral RMBS Notes Tendered in 2012 by Country, 2012 YTD (€ million)



Source: Concept ABS and Citi Research

Figure 17. Peripheral 5YR RMBS Spreads and Pickups to Sovereign CDS, as of 7 Dec 2012 (bp)



Source: Markit and Citi Research

■ **€5 Billion Peripheral Equity Raise.** The expectation of additional tender activity is one of the reasons why many peripheral RMBS trade tighter than their sovereign CDS (Figure 17). We think that the likelihood of future tenders will prevent any large widening of peripheral spreads. Peripheral banks raised approximately €5 billion in Tier 1 capital in 2012, tendering €7 billion in ABS/RMBS bonds. In spite of a strong rally in the peripheral markets in 2012, these bonds still trade at considerable discount to par and are attractive tender candidates, in our opinion.

■ **Further UKAR Tenders Likely.** We think the UKAR (UK Asset Resolution entity) will announce further tenders for subordinate notes of AIREM and GRANM RMBS trusts. UKAR bought back £534 million of outstanding notes from these trusts in July 2012, generating a profit of roughly £144 million. Unlike other banks, UKAR tenders are not driven by the need to raise Tier 1 capital, but a desire to generate positive returns for UK tax payers. For more information, we discussed the detailed economics and likelihood of tenders by UKAR and other government supported banks in a previous report¹².

Regulatory Clarity Ahead

■ **Surprise Upside.** 2013 will bring further clarity on the implementation of Basel III in Europe and the treatment of ABS in Liquidity Coverage Ratio (LCR) under CRD IV. We discuss regulatory issues in more detail separately in this report but overall we think that the anticipated regulatory challenges are all manageable and surprise upside is likely as the industry prepares itself for the worst.

¹² "European Securitized Products Weekly: Government-Supported Tenders", Citi, 6 July 2012

2013 Primary Supply Projections

Total Placed Supply to Remain Flat

We project €61 billion of placed European securitized products supply during 2013, a 0.3% increase from the year ended December 31, 2012 (Figure 18). We predict 2013 UK prime RMBS supply at €10 billion, roughly half of 2012, largely owing to the Bank of England's Funding for Lending Scheme (FLS). Dutch RMBS, UK non-conforming, and BTL RMBS should fill a good portion of this gap as issuers take advantage of tight spreads and strong demand for core RMBS. We project €19 billion placed issuance in 2013 from these sectors, a 55% increase from 2012.

We predict issuance growth in Auto ABS and CMBS sectors. Auto ABS is an important funding source for European car manufacturers and current tight spreads make auto issuance even more attractive. We project €16 billion of placed auto ABS in 2013. European CMBS issuance economics look attractive for the first time during the past five years, and we expect €8 billion of CMBS new issue in 2013.

We expect a modest decrease in credit card and other ABS issuance and expect these sectors to register €5.5 billion and €3.0 billion of placed supply, respectively, in 2013.

Figure 18. Projected Full-Year 2013 Placed European Securitized Products Supply (€ Million)

	Placed FY 2012A*	Placed FY 2013E	Placed: YoY % Change	Comments
UK Prime RMBS	21,448	10,000	-53%	Expect FLS to decrease supply but large issuers will continue token issuance to maintain market presence
UK NC & BTL RMBS	888	2,000	125%	Expect selective issuers to come to market in small size to capitalize on tighter spreads
Dutch Prime RMBS	11,378	17,000	49%	Issuers to take advantage of tight spreads and strong demand for core country RMBS
Auto ABS	13,632	16,000	17%	Strong demand for short duration ABS and tight spreads to improve issuance
Credit Card ABS	5,591	5,500	-1.6%	Regular issuers to fund maturing receivables
CMBS	3,936	8,000	103%	Attractive new issue economics and upcoming €21 billion loan maturity to revive CMBS primary market
Other	4,449	3,000	-33%	
Total	61,321	61,500	0.3%	Overall supply flat to 2012, Dutch RMBS, Autos and CMBS filling the gap for decrease in UK prime RMBS

* 2012 Year-to-Date Actual Issuance as of December 7, 2012

Source: Concept ABS, IFR and Citi Research

Dutch RMBS, Autos and CMBS Issuance to Grow, UK Prime to Shrink

- **UK Prime RMBS Supply to Halve.** We expect UK prime RMBS placed new issuance to decline to €10 billion in 2013, a 53% year-over-year decline. The UK FLS program will continue to cause a shift in a significant amount of bank funding from the RMBS market to direct borrowing from the Bank of England, in our opinion. The low-cost funding available via FLS would offer little incentive for eligible banks to issue new securitizations during 2013¹³ and we expect only token issuance from large issuers.
- **Token UK NC and BTL RMBS Issuance.** We project placed issuance to register approximately €2 billion in 2013. UK non-conforming and BTL RMBS senior spreads tightened 175bp and 186bp, respectively, in 2012. We expect some programmatic issuers will take advantage of tight spreads and issue UK NC and BTL RMBS in small sizes.
- **Dutch Prime Supply to Pick up.** We project Dutch prime RMBS placed new issue supply to pickup by 49% year-over-year to €17 billion during 2013. Demand

¹³ ["European Securitized Products Weekly: UK FLS to Sustain Strong Positive Technicals in 2013"](#)
Citi, 5 October 2012

for Dutch RMBS has been strong, with roughly €11.4 billion in placed supply for 2012. We expect the Dutch primary market to fill a portion of the shrinking supply in UK prime RMBS in 2013 as investor appetite for core country RMBS remains strong.

- **Auto Issuance to Rise.** We expect Auto ABS placed issuance to rise 21% year-over-year to €16 billion, largely owing to tightening of spreads. Auto ABS is a valuable funding source for the auto industry and car manufacturers from several new regions in Europe tapped the securitization markets in 2012. The market saw auto ABS deals from countries such as Finland, Norway, Sweden and Switzerland for the first time in 2012. Strong demand for short high quality ABS and tight spreads at EURIBOR +35bp will help issuers place deals more economically.
- **Flat Credit Card Supply.** We project credit card ABS placed supply to be flat at €5.5 billion in 2013, a 1.6% drop year-over-year. Regular issuers are expected to match the maturing credit card ABS notes in their master trusts.
- **CMBS Attractive Once More.** We anticipate 2013 European CMBS placed supply to surge to €8 billion, a 103% rise off a low base. About €21 billion of CMBS loans are maturing in 2013 and we estimate 38% to refinance based on our conservative underwriting criteria of a low LTV (65% or less) and high DSCR (1.6 times or more)¹⁴. These maturing loans will most likely be funded through CMBS because the cost of issuing CMBS is 19–33% cheaper than the current average commercial lending margin of around 350bp¹⁵.
- **Other.** The “other” sector is composed of a mix of securitizations for small and medium-sized enterprise loans (SME), consumer installment loans, equipment lease, and assorted sectors not fitting in elsewhere, and the trend is difficult to predict. We project placed supply to drop by 9% year-over-year to €3 billion.

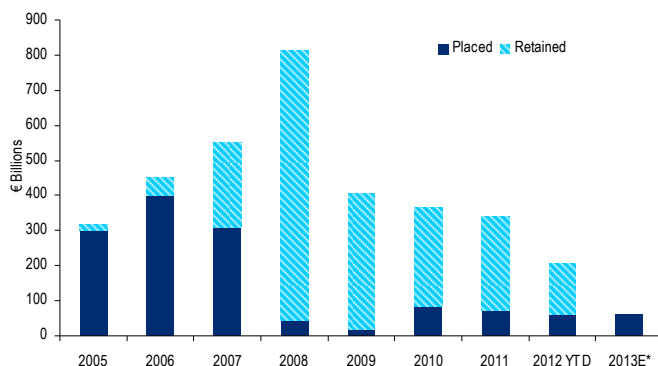
2013 Supply Highlights

- **New Equilibrium at €60–80 billion.** European securitized products annual placed issuance averaged €73 billion from 2010–2012 and we predict €61 billion of new supply in 2013 (Figure 19). After virtually shutting off in 2008 and 2009, European ABS primary markets have found a new equilibrium point, which is roughly 80% below the pre-crisis peak of €401 billion in 2006. A large proportion of European ABS issuance is retained on bank balance sheets and is used as collateral for central banks’ repo operations. We do not expect placed issuance to reach pre-crisis levels in the near future.
- **UK and Netherlands Most Active.** UK and Netherlands will account for 68% of ABS issuance in 2013, according to our estimates (Figure 20). UK and Netherlands have well established securitized primary markets and industry initiatives such as “Prime Collateralised Securities” and “Dutch Securitisation Standard” are likely to support these markets further. We discuss these initiatives separately in the “Regulatory and Policy Overview” section of this report.

¹⁴ [“European Securitized Products Weekly: We Project European CMBS New Issue Market to Revive in 2013”](#), Citi, 16 November 2012

¹⁵ [“European Securitized Products Weekly: CMBS: Attractive New Issue Economics Could Revive Primary Market”](#), Citi, 2 November 2012

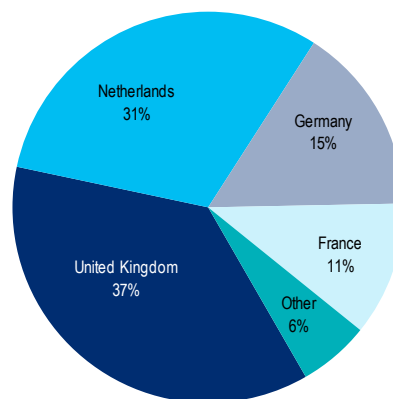
Figure 19. Annual Historical Placed and Retained Issuance, 2005-2012YTD and 2013 Est. (€ billions)



* We do not project retained issuance for 2013

Source: Concept ABS, IFR, Informa and Citi Research

Figure 20. Projected Placed Issuance Split by Region, 2013 Est. (%)



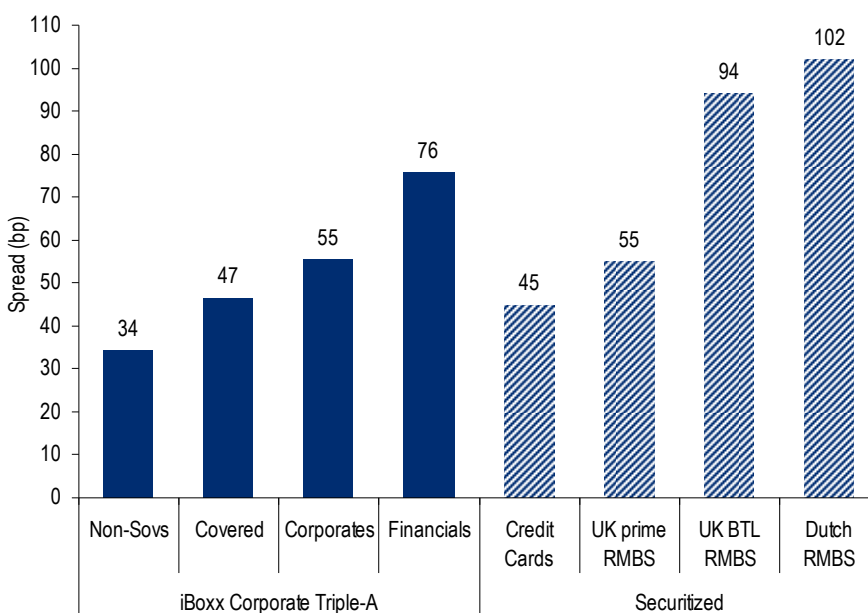
Source: Citi Research

Cross Sector Relative Value

European ABS Cheap by Many Measures

- **Upside to Corporate Triple-As.** Several high quality securitized sectors like UK BTL RMBS and Dutch RMBS offer attractive pickups to similar rated corporate unsecured and covered bonds. UK prime RMBS is now at par with European corporates but still 8bp wider than covered bonds and 21bp wider than non-sovereign triple-A rated unsecured bonds (Figure 21).

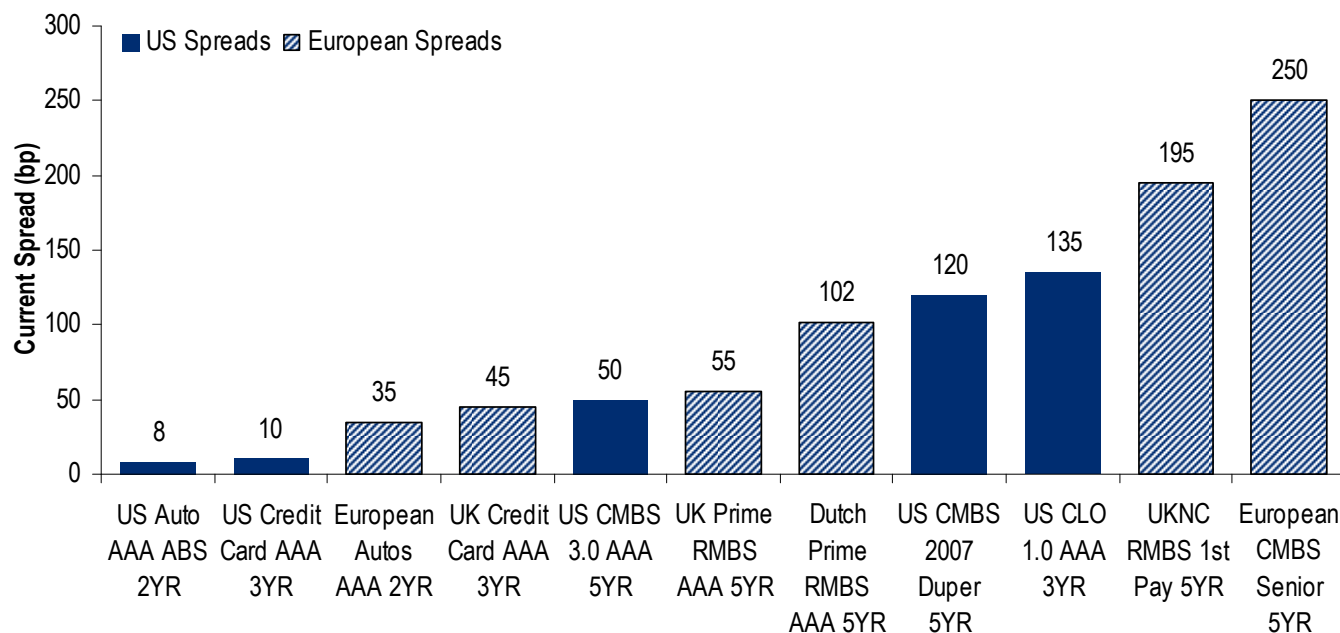
Figure 21. Selected Securitized and iBoxx Corporate Triple-A Sector Spreads to EURIBOR, as of 7 Dec 12 (bp)



Source: Markit and Citi Research

- **Attractive Pickups to US Securitized.** European securitized products still offer attractive pickups to their US counterparts. Senior UK prime RMBS trades 5bp wide to the latest senior US CMBS 3.0 (LIBOR + 55bp versus LIBOR + 50bp). European CMBS (EURIBOR +250bp) and UK non-conforming RMBS (LIBOR +195bp) offer high pickups to US 2007 CMBS Dupers at LIBOR +120bp and US 1.0 triple-A CLOs at LIBOR +135bp (Figure 22).

Figure 22. Selected Securitized Product Spreads to LIBOR and EURIBOR Comparisons, as of 7 Dec 2012 (bp)



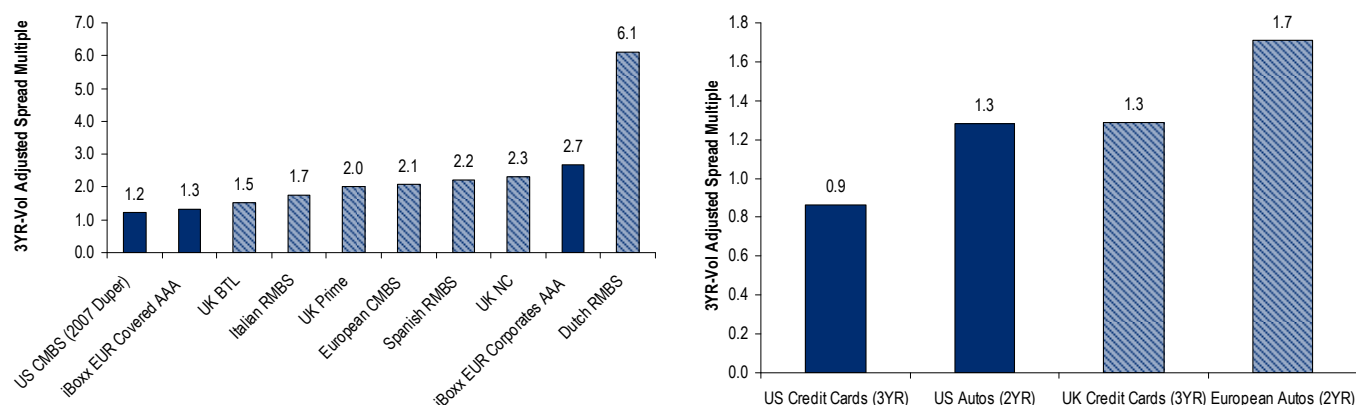
Note: European spreads are over EURIBOR. UK NC RMBS and US spreads are over LIBOR

Source: Citi Research

ABS Scores on Superior Post 2008 Crisis Volatility

- **Dutch RMBS Best.** On a 3YR volatility-adjusted basis, Dutch RMBS looks attractive when compared to broader European credit markets, covered bonds, and US CMBS. The Dutch RMBS vol. adjusted spread multiple is roughly 2.3 times higher than corporate unsecured and 4.7 times higher than senior European covered bonds (left chart of Figure 23).
- **RMBS Beats Covered.** European RMBS 3YR vol adjusted spread multiples range from 1.5–6.1 — all higher than the 1.3 times multiple for Triple-A rated European covered bonds (left chart of Figure 23).
- **European Autos and Credit Cards Trump US Counterparts.** The 3YR vol adjusted spread multiples for European credit cards and autos surpass their US counterparts (right chart of Figure 23). European autos and credit cards have rallied 31–62% during the past quarter but are still attractive on a vol adjusted basis, in our view.

Figure 23. Selected Comparative 3YR Vol Adjusted Spread Multiples, as of 7 Dec 2012

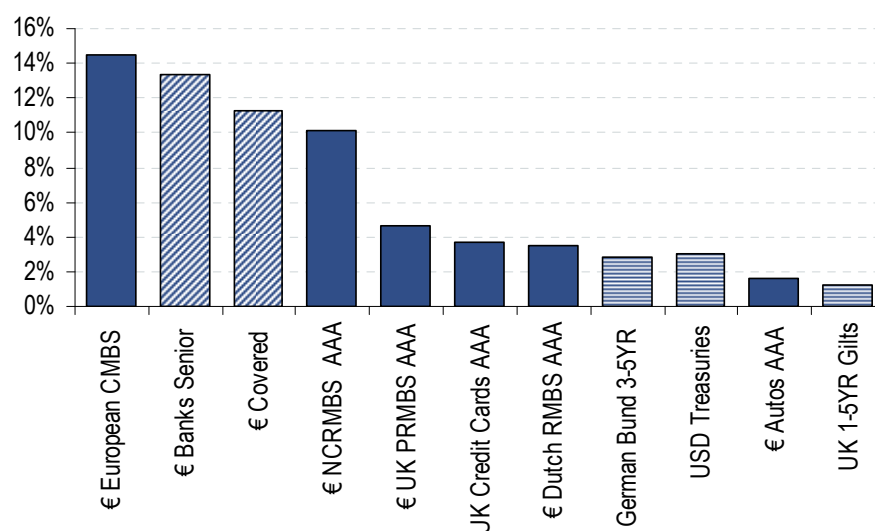


Source: Markit and Citi Research

Strong Total Returns in 2012

- **Securitization Shines.** Total year-to-date returns for 2012 range from 1.6–14.5% across various sectors. European securitized products as a whole registers strong performance, returning 9.2% year-to-date (Figure 24). One of the better performing sectors, 5YR UK prime RMBS spreads, rallied from EURIBOR +143 on 1 January to current spreads of 55bp.
- **CMBS Top Performer.** European CMBS is the best performer with a 14.5% year to date total return. CMBS total returns best not only other European securitized products, but also government and covered bonds, and unsecured credit sectors. We expect CMBS spreads to tighten further in 2013 as more investors look at the sector in search for additional yield. Current average CMBS spreads are roughly EURIBOR +250bp.

Figure 24. Selected European Securitized Products Indexes Total Return Comparisons, 1 Jan – 9 Dec 2012 (YTD Total % Return)



Source: Markit, Bloomberg and Citi Research

Regional Economic Outlook

Citi economists forecast positive GDP growth for the UK, Germany and Ireland during 2013. They also project UK unemployment to shrink.

Citi economists predict recession and rising unemployment in the Euro area for the next two years. Euro area GDP will shrink by 0.7% in 2013 and 0.4% in 2014 and the unemployment rate will increase to 12.2% by 2014, according to Citi forecasts (Figure 25). However, Citi economists predict positive GDP growth for the UK (0.8%), Germany (0.5%), and Ireland (0.4%), with decreasing unemployment for the UK in 2013. Austerity measures in the Netherlands and peripheral countries will continue to weigh not only on the overall economy but also on the housing sector, in our opinion. We expect Spanish, Portuguese, and Dutch housing markets to soften further, but expect UK, Italian, and Irish housing markets to remain stable in 2013. Citi economists lowered the probability of a Grexit¹⁶ from 90% to 60% in October 2012. Greece's potential exit from the euro zone is the most critical event risk for European ABS investors and although Grexit likelihood is still high, it has decreased appreciably in recent months.

The Bank of England is expected to keep policy rates low at 50bp until 2014 and the ECB is likely to cut rates by 50bp in the next two years. The low interest rate environment is overall positive for RMBS credit performance because most of European mortgages are floating rate.

GDP, Unemployment and Policy Rate Projections

Figure 25. Citi Euro-Area Economic Forecasts, 2012F – 2014F¹⁷

	Real GDP (% , YY)			Unemployment Rate (% , Annual Average)			Policy Rate (% , Annual Average)			10 YR Yields (% , Annual Average)		
	2012F	2013F	2014F	2012F	2013F	2014F	2012F	2013F	2014F	2012F	2013F	2014F
UK	-0.1	0.8	1.0	7.8	7.6	7.6	0.50	0.50	0.50	1.9	1.9	1.75
Euro-Area	-0.4	-0.7	-0.4	11.3	11.9	12.2	0.75	0.32	0.25	1.59	1.63	1.44
Germany	0.9	0.5	0.3	5.5	5.8	6.0	*	*	*	1.59	1.63	1.44
France	0.1	-0.2	0.2	9.8	10.3	10.0	*	*	*	2.57	2.60	2.64
Spain	-1.5	-2.4	-1.9	25.0	26.6	27.4	*	*	*	5.96	5.50	5.19
Italy	-2.1	-1.2	-1.5	10.7	11.9	12.4	*	*	*	5.44	5.19	4.94
Portugal	-3.3	-4.6	-2.4	15.5	18.0	19.9	*	*	*	-	-	-
Netherlands	-1.1	-0.9	0.2	6.2	6.9	7.0	*	*	*	1.98	2.03	1.69
Ireland	-0.1	0.4	1.0	15.1	16.2	16.9	*	*	*	-	-	-
Greece	-7.2	-7.4	-11.8	24.6	29.7	35.9	*	*	*	-	-	-

* Same Euro-area policy rate

Source: Citi Research

UK — Stable to Improving

- **Slow Economic Growth and Falling Unemployment.** Citi economists project slow economic growth but falling unemployment in the UK in 2013. UK GDP growth is expected to average 0.8% in 2013 and 1.0% in 2014. The unemployment rate declined from 8.3% in January to 7.8% in September 2012, a healthy 50bp drop. Citi economists expect this trend to continue and project 7.6% unemployment in 2013.
- **FLS Likely to Support Housing.** The Bank of England's Funding for Lending Scheme (FLS), operational since August 2012, provides very low cost funding to participating banks. The FLS aims to encourage more lending to the UK economy. Although the most recent data from the Bank of England puts FLS utilization at a modest £4.4 billion, we expect FLS take-up to increase with time. The potential growth in mortgage lending due to the FLS should have a positive impact on the UK housing market.

¹⁶ "Euro Economics Weekly: Grexit — Delayed But Not Cancelled", Citi, 12 October 2012

¹⁷ "Global Economic Outlook and Strategy: Prospects for Economies and Financial Markets in 2013 and Beyond", Citi, 26 November 2012

Euro Zone — Deterioration to Continue

- **Recessionary Outlook.** Citi Economists expect the Euro zone to remain in recession in 2013 and 2014. Euro area GDP is projected to decline 0.7% in 2013 and 0.4% in 2014. Peripheral economies are expected to contract more than the core countries. The GDP for Greece (-7.4%), Portugal (-4.6%), and Spain (-2.4%) is likely to contract more deeply in 2013 than 2012. Germany (0.5%) is the only core Euro zone country expected to grow, while France (-0.2%) and the Netherlands (-0.9%) are expected to fall into recession.
- **Unemployment Rising.** Euro area unemployment rate is projected to climb to 11.9% in 2013 from 11.3% in 2012. Unemployment rates in the peripheral countries are projected to be 11.9–29.7% in 2013, with Italy registering the lowest and Greece the highest unemployment rate.
- **Ireland Turning a Corner.** Ireland is the only peripheral European economy projected to grow in 2013 (0.4%) and 2014 (1.0%), according to Citi forecasts. Irish house prices are also showing early signs of recovery after a deep correction of approximately 50% from the pre-crisis peak of 2007. Irish house prices registered gains in all three months of Q3 2012, which is the first quarter of gain since Q3 2007.
- **Fiscal Headwinds for Dutch Housing.** The coalition government agreed on extra fiscal tightening amounting to the tune of about 2.5% of GDP for the period 2013-2017. Mortgage interest tax deductibility is set to be reduced in 2014 and onwards. Household deleveraging in response to these measures is likely to act as a headwind for the Dutch Housing sector.

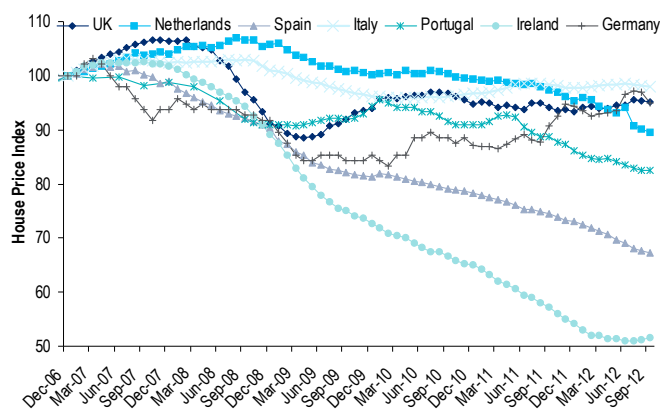
Housing Outlook — Ireland Positive, Italy and UK Flat, Rest Negative

- **Irish House Prices Bottoming.** Irish house prices are showing signs of recovery after a sharp 50% decline from the 2007 peak. Ireland registered positive house price movement in all the three months of 2012 Q3 after more than four years of monthly house price declines.
- **UK Housing to Remain Flat.** Average house prices in England and Wales have not changed much in the past two years, according to Land Registry data (Figure 26). The housing recovery has been limited to London and the South East regions, while house prices in other regions are still stagnant. Citi economists expect the UK housing market to remain sluggish for the next couple of years¹⁸. We think that Bank of England's FLS will marginally decrease mortgage rates and support the UK housing market in 2013.
- **Italian House Prices Stable.** House prices in Italy have remained fairly stable through out the European debt crisis. Average house prices are only 8% down from the 2006 peak and remained flat during the past year (Figure 26). Strong fundamentals like positive mortgage credit availability and low household leverage would support the housing market going forward, in our view.
- **Dutch Trending Down.** Dutch house prices are trending down for the past four years and are likely to fall further (Figure 26). The recent austerity measures announced by the coalition government should lead to further softening in the housing market. House prices have declined roughly 16% from the 2008 peak (Figure 26).

¹⁸ ["UK Economics Weekly: Housing Recovery Still Distant"](#), Citi, 2 November 12

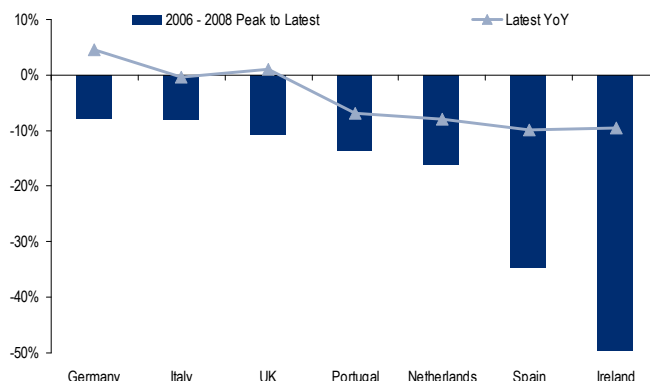
- **Spain and Portugal to Deteriorate Further.** Spanish home prices are roughly 35% down from the 2007 peak and are strongly trending down (Figure 26 and Figure 27). The large backlog of foreclosed properties and high unemployment rate are likely to deteriorate house prices further. Portuguese house prices are also trending down and we expect further weakening in 2013 with a slowing economy and rising unemployment.

Figure 26. Normalized House Price Index by Country, Dec 06 – Sep 12 (Dec 2006 = 100)



Source: Land Registry, Central Statistics Office Ireland, CBS Statline, Fotocasa, INE Portugal, Scenari Immobiliari Spa and Citi Research

Figure 27. Pre-crisis Peak to Current and Latest YoY House Price Changes by Country, as of Sep 12 (%)

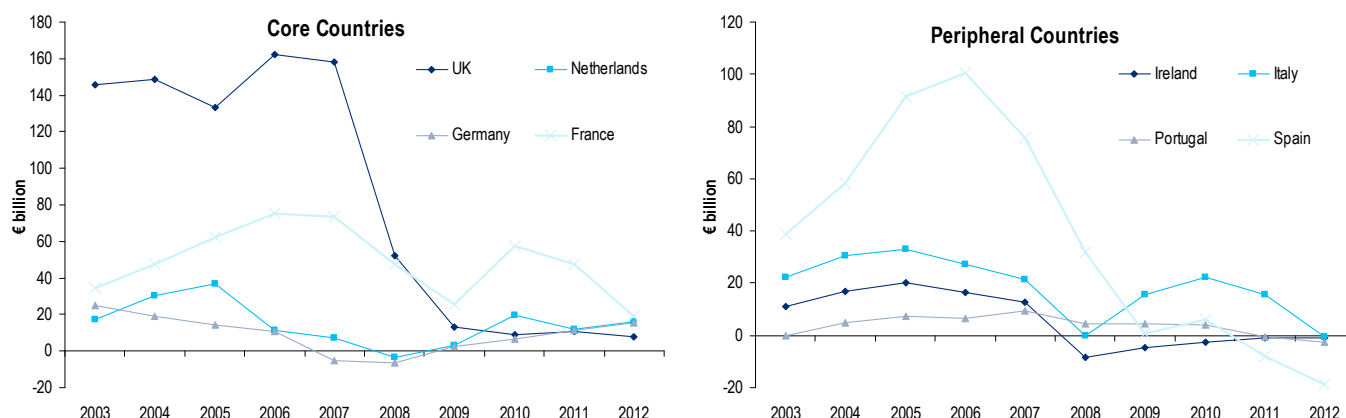


Source: Land Registry, Central Statistics Office Ireland, CBS Statline, Fotocasa, INE Portugal, Scenari Immobiliari Spa and Citi Research

Tight Credit and Low Demand Shrink Mortgage Markets

- **Net Lending Slowing Down.** Net mortgage lending in the core countries has been sluggish for the past few years and registered €8–19 billion in the first ten months of 2012 (left chart of Figure 28). Peripheral countries registered negative net mortgage lending ranging from -0.4–18.6 billion during the same period (right chart of Figure 28).

Figure 28. Annual Net Mortgage Lending by Country, 2003 – 2012YTD (€ billion)

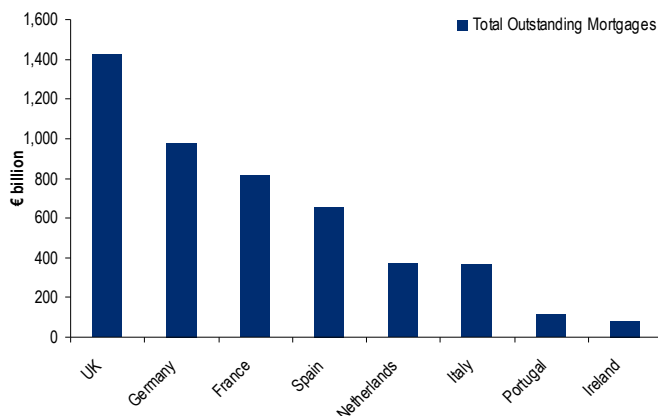


Source: ECB, Bank of England and Citi Research

- **Peripheral Mortgage Markets Shrinking.** Peripheral countries account for roughly 25% of total mortgages outstanding in European countries that have an

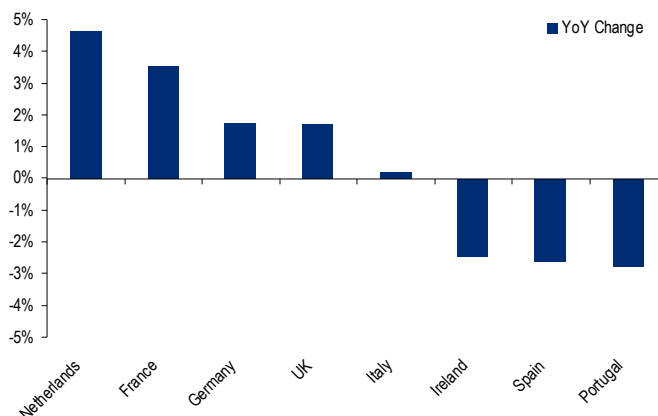
active securitization market (Figure 29). Peripheral mortgage markets excluding Italy contracted 2-3% year-over-year in October 2012 (Figure 30) and we expect this downward trend to continue in 2013. Economic contraction, tight credit conditions, and falling house prices will continue to weigh on loan growth and shrink the mortgage markets further, in our opinion.

Figure 29. Total Outstanding Mortgage Loans by Country, as of Oct 2012 (€ billion)



Source: ECB, Bank of England and Citi Research

Figure 30. Year-over-Year Change of Total Outstanding Mortgage Loans by Country, as of Oct 2012 (%)



Source: ECB, Bank of England and Citi Research

Regulatory and Policy Overview

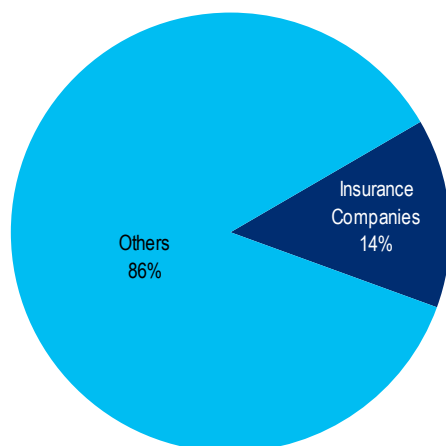
Basel III — Further Clarity Expected

- **Short Delay Likely.** The 1 January 2013 deadline to begin implementing Basel III is likely to be postponed in Europe after US regulators delayed the start date. While we expect a short delay in Europe as well, we do not expect it to have a huge impact on securitized markets.
- **Liquidity Coverage Clarity in 2013.** The Basel committee is expected to announce the details of the revised Liquidity Coverage Ratio (LCR) in early 2013. The LCR would require banks to hold sufficient high-quality liquid assets to meet expected net outflows over a 30-day period. It is still unclear whether ABS would be an eligible high quality liquid asset for the LCR under CRD IV in Europe.
- **Risk Retention Already in Place.** Risk retention (CRD II, Article 122a) became effective on 1 January 2011 for new securitizations and becomes effective in January 2014 for legacy securitizations where new exposures are substituted after that date. 5% risk retention did not have a material impact on RMBS new issue economics because originators anyway held significant skin-in-the-game through seller's share and retained subordinate tranches. However, the impact on CMBS and WBS could be higher because retention rules for transactions that do not involve the participation of originator are less clear.

Solvency II — Minimal Impact

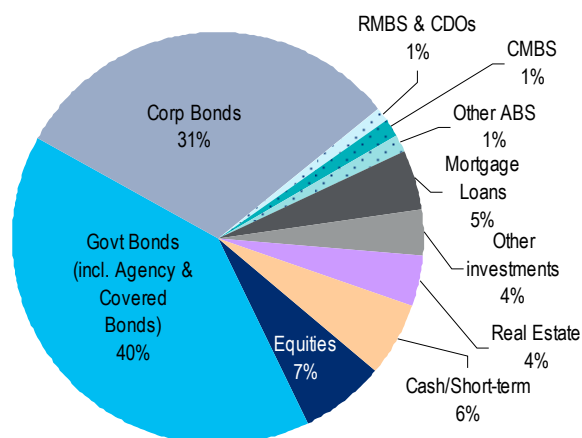
- **Insurers Hold 14% of Total ABS.** We estimate that European insurance companies hold about €250 billion in European ABS. This accounts for around 14% of total ABS outstanding in Europe (Figure 31). Only a small portion (3.8%) of insurance companies' total assets is allocated to ABS (Figure 32) and the proportion will decrease further, in our opinion.

Figure 31. Estimated Share of European ABS Held by Insurance Companies (Total €250 billion of €1786 billion)



Source: Fitch, AFME and Citi Research

Figure 32. Citi Equity Analysts' Estimates of European Insurance Companies Asset Allocation (%)



Source: Citi Research

Short Duration ABS to Benefit from Likely Delay

- **Postponement until 2016 Possible.** The start date of fully implementing the Solvency II requirements is likely to be delayed until 2015 or 2016 from the previously agreed January 2014, according to the chairman of EIOPA, the European insurance regulator. The delay would give European insurers more

time for their asset reallocation and is positive for some short-duration ABS sectors, in our opinion.

- **Continue Investing in Autos and Credit Cards.** European insurers are still investing in short-duration ABS, although in small proportions. Insurers participated in 9 out of 23 auto deals placed in the primary market in 2012. We think that insurance companies would continue investing in autos and credit card ABS in 2013 because of the possible delay in Solvency II implementation.
- **Big Insurers to Use Internal Models.** Larger insurers may decide to use internal models instead of more punitive standard formula to calculate capital charges. The use of internal models would result in relatively favorable treatment of securitizations and help in reducing the negative impact of Solvency II on the asset class.

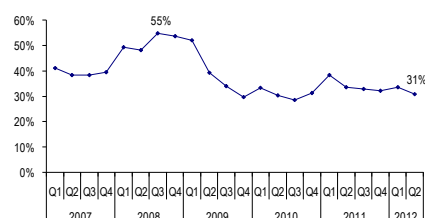
PCS Label to Help Market

- **Increase Investor Confidence.** The “Prime Collateralised Securities (PCS)” label for high quality securitizations would improve investor confidence and can potentially boost the European ABS primary market in 2013 and beyond. PCS endorsement for good quality peripheral assets can help revive non-core issuance as well. The first PCS label was granted to Santander’s Bilkreditt 3, a Norwegian auto ABS deal in November 2012.
- **Grab Regulators’ Attention.** Policymakers have provided positive initial feedback on the PCS initiative and also acknowledged the importance of securitization for European economy. It would be interesting to see if PCS labelled ABS is included in short-term regulatory liquidity under CRD IV.
- **Dutch Securitisation Standard.** Dutch issuers and investors launched the Dutch Securitisation Association (DSA) to standardize the investor reporting in the Dutch RMBS sector. The DSA aims to complement the PCS label for high quality European securitizations and to harmonize the prospectuses and monthly investor reporting further.

FSA Mortgage Market Review

- **Implementation from 26 April 2014.** The UK Financial Services Authority (FSA) published the results of Mortgage Market Review (MMR) on 25 October 2012. The new rules including mandatory income verification and affordability assessment would be implemented April 2014.
- **Muted Short-term Impact on UK Prime.** The implementation of MMR should have limited impact on the UK prime RMBS prepayments in the short term. UK lenders have already tightened the underwriting criteria considerably following the subprime crisis and average prepayments are at historical lows. The proportion of remortgages in gross lending decreased to 31% in 2Q 2012 from 55% in 3Q 2008 (Figure 33).
- **IO Loans to Refinance as Rate Rises.** Interest only prime borrowers’ incentive to refinance will increase when interest rates rise. We think that a large portion of these borrowers would refinance to amortizing mortgages, resulting in higher prepayments. Prime borrowers with good credit history and low LTV should be able to refinance easily. UK prime master trusts have significant proportion of interest only loans, ranging from 27–68% (Figure 34) and their average indexed LTV is relatively low ranging from 59–69%.

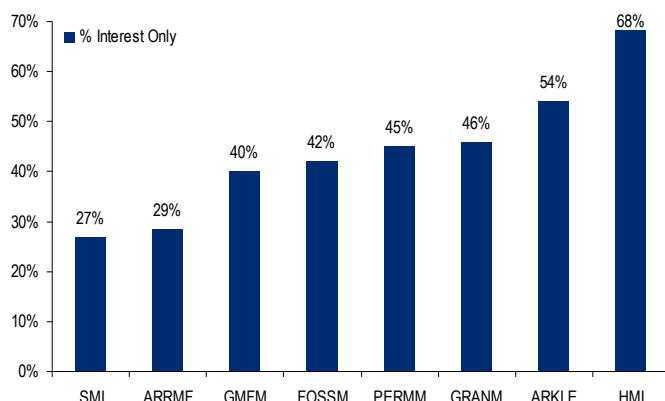
Figure 33. Proportion of Remortgages in Gross UK Mortgage Lending, 1Q 2007 – 2Q 2012 (%)



Source: CML and Citi Research

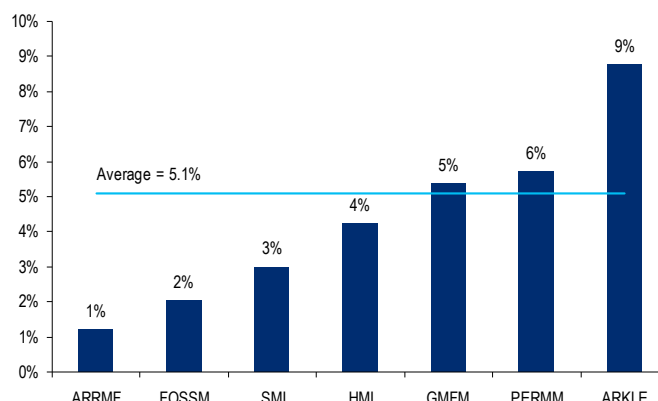
- **Slow Improvement in Pool Quality.** The quality of UK prime master trust pools would improve in the long term as new loans with tighter underwriting criteria substitute the old maturing loans. Approximately 5.1% of loans in major UK prime master trusts mature in the next five years (Figure 35).

Figure 34. Proportion of Interest Only Loans in UK Prime Master Trusts (%)



Source: Investor Reports and Citi Research

Figure 35. Proportion of UK Prime Master Trust Loans Maturing in the Next Five Years (%)



Source: Investor Reports and Citi Research

- **UK NC Performance Deterioration.** Low interest rates are supporting UK non-conforming RMBS collateral performance currently. Although we do not expect interest rates to rise soon, we think that the sector performance will start deteriorating with rate hikes. This performance deterioration would be further exacerbated as non-conforming borrowers with high LTVs and interest only loans face difficulties in refinancing their mortgages.

Summary

The outlook for European securitized products appears benign despite some lingering challenges such as regulatory uncertainties and the ongoing sovereign debt crisis. We think some sectors present money-making opportunities, and our three TOP CALLS for 2013 include: (1) Italian RMBS, (2) UK BTL RMBS, and (3) UK credit card ABS. We expect the supply technicals to remain supportive for spreads, and we discussed some high quality alternatives to UK Prime RMBS, including German multi-family CMBS, Australian RMBS, UK buy-to-let and other sectors. New regulatory rules will begin to be implemented. However, as we discussed, we expect many of these regulations to be delayed, and we expect regulators to take more time to evaluate the potential effects on the market. European securitized products have the potential to assist in a European economic renaissance, and we have a positive outlook for the market's future.

Notes

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Appendix A-1

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