

European Securitized Products Weekly

An Overview of Spanish SME ABS

- **Unique Short Duration Peripheral Exposure** — Investing in short duration first-pay Spanish SME ABS provides a rare and sensible strategy to pick up additional spread without taking excessive peripheral-country risk. Current spreads for 1–3 YR front pay Spanish SME ABS range from 180–325bp.
- **Senior Classes Well Protected** — Almost half of placed Spanish SME deals have senior credit enhancement levels exceeding four times the total amount of current 90D+ delinquencies and defaults combined. Moreover, the first pay notes are rapidly amortizing at annual repayment rates ranging from 15–73%.
- **Several Second Pay Tranches Better Protected** — The Spanish SME sector's credit performance prevents us from recommending mezz notes *per se* but we note that certain second-pay notes look better protected than others because of high credit enhancement and rapid amortization of the senior notes. Second pay SME ABS with a 3–6YR average life trade at 500–750bp, picking up roughly 150bp to slightly longer second-pay Spanish RMBS.

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Spanish SME ABS Focus

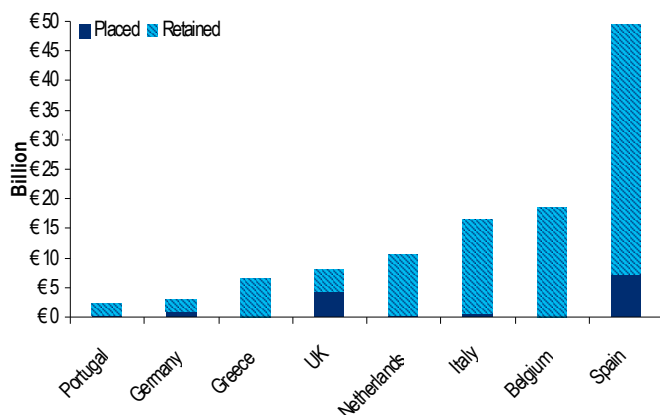
European SME ABS is a niche story and we are overall neutral on this sector. We focus on the €7 billion placed Spanish SME ABS market in this report because it is the largest portion of the European SME ABS tradable universe. Many senior Spanish SME ABS notes offer good value, in our view. Spanish SME first pay notes have built up high credit enhancement and many are amortizing quickly. Certain second pay notes also have considerable credit support and would soon become first pay once the seniors pay down.

European SME ABS Market Overview

Small and medium enterprises (SME) are an integral part of the European economy, accounting for 67% of total employment, according to the European Commission's latest annual report on SME¹. The challenging funding and economic environments, particularly in peripheral European countries, are weighing on current SME performance. Nonetheless, there are some positive signs and the gross value add (GVA)² across all SME sizes has been slowly increasing after hitting a trough in 2009.

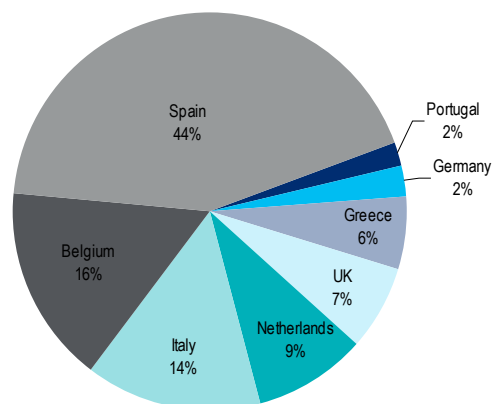
- **Market Size €114 Billion.** We estimate that the total size of European SME ABS market is around €114 billion. The sector comprises 167 deals from eight different countries (Figure 1).
- **Spain Dominates.** Spain accounts for roughly 44% of total SME ABS outstanding in Europe. Belgium, Italy, the Netherlands, and the UK contribute another 46% while Greece, Germany, and Portugal make up for the remaining 10% (Figure 2).
- **88% of the Market Retained.** A large portion of SME ABS issuance is retained on bank balance sheets. Only 12% (€13 billion) of the current outstanding is placed in the market. We think that a portion of the retained universe will eventually come to the market as banks' reliance on central bank funding programmes decreases.

Figure 1. SME ABS Total Outstanding by Region and Placement Type, as of Jan 2013 (€ billion)



Source: Moody's, Bloomberg, Concept ABS and Citi Research

Figure 2. European SME ABS Distribution by Region, as of Jan 2013 (%)



Source: Moody's, Bloomberg and Citi Research

¹ [EU SMEs in 2012: at the crossroads](#), ECORYS and European Commission, September 2012

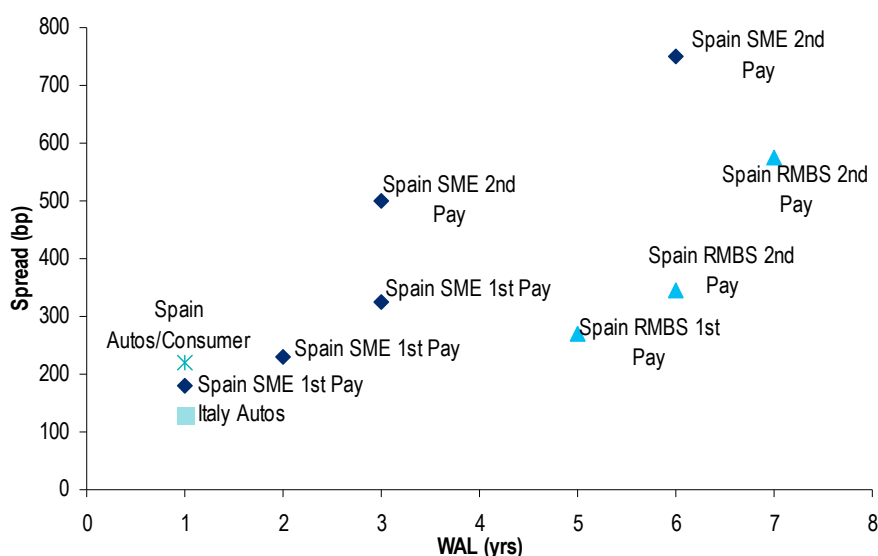
² According to ECORYS definition, "GVA includes depreciation, rewards to labour, capital and entrepreneurial risk. GVA remains when the intermediate costs are deducted from the turnover"

Evaluating Spanish SME ABS

Spanish SME ABS comprises a large part of the placed (55%) and retained (42%) European SME ABS universe, and provides a source of relative value for many short-duration ABS investors. The sector consists of about 123 deals. We describe the major structural features of Spanish SME deals and provide an overview of the collateral below. Moreover, we evaluate the relative value between Spanish SME ABS and other peripheral sectors and identify investment opportunities.

Spanish SME Relative Value

Figure 3. Spanish SME ABS Relative Value with Other Peripheral Sectors, as of 8 Feb 2013 (bp)



Source: Citi Research

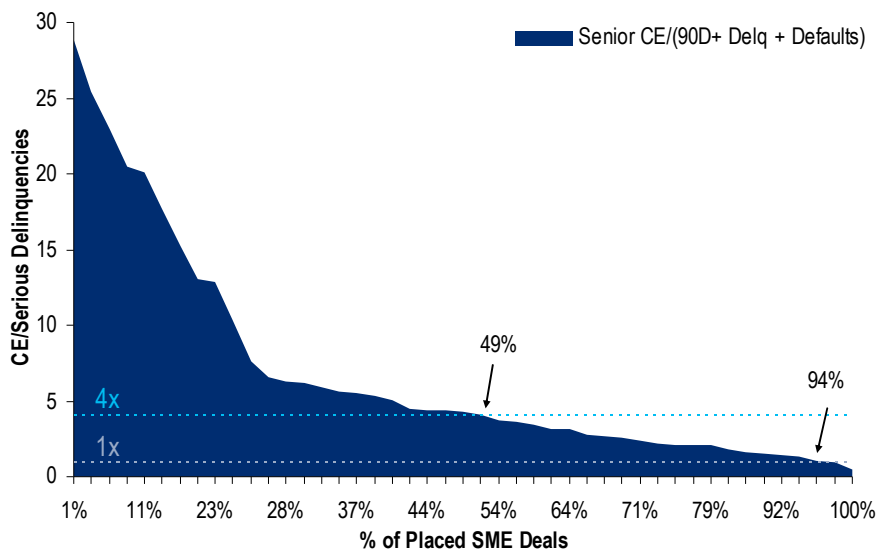
- **Short Duration Peripheral Exposure.** Spanish SME offers a unique exposure to short peripheral assets as there are few other short WAL securitized sectors from the peripheral countries. We think that first pay Spanish SME is a sensible investment to pick up extra spread without taking excessive risk. Senior Spanish SME notes pick up 150–250bp to comparable WAL European core-country autos and UK credit cards. Current spreads for first pay Spanish SME notes range from 180–325bp for a WAL of 1–3 years (Figure 3).
- **Second Pay SME Attractive versus Second Pay RMBS.** Second pay Spanish SME ABS pick up roughly 150bp to second pay RMBS and offer shorter WAL. Three-to-six year WAL Spanish second pay SME ABS trades at 500–750bp while 5–7 YR second-pay Spanish RMBS trades at 345–575bp.

Senior SME Notes Structured to Withstand High Losses

- **Impressive Credit Enhancement.** Almost half of the placed Spanish SME deals have senior credit enhancement exceeding four times the total amount of current 90D+ delinquencies and defaults combined. These notes are likely to be money good even in a severe stress scenario where all the seriously delinquent loans eventually default and there are no principal recoveries. We recommend avoiding the deals in the tail-end of the distribution (Figure 4) which are characterized by

low credit enhancement as a multiple of the combined total of 90D+ delinquency and defaults.

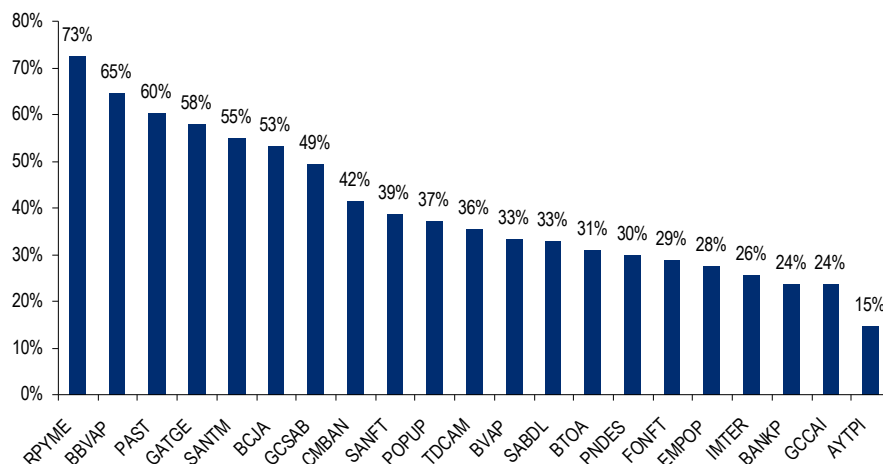
Figure 4. Distribution of Spanish SME Deals by the Ratio of Senior Credit Enhancement to Total 90D+ Delinquencies and Defaults (times)



Source: Fitch, Moody's, Bloomberg, Investor Reports and Citi Research

■ **Accelerated Pay Down.** Spanish SME front-pay notes are currently amortizing at an annual payment rate of 15–73% (Figure 5). Several structural features like sequential principal payment, subordinate interest deferral, and “artificial write-off”³ facilitate faster senior repayments when collateral performance deteriorates. We discuss these structural features in detail later in this report.

Figure 5. Average Annual Amortization Rates for Front Pay SME Bonds by Shelves, as of 2012 (%)

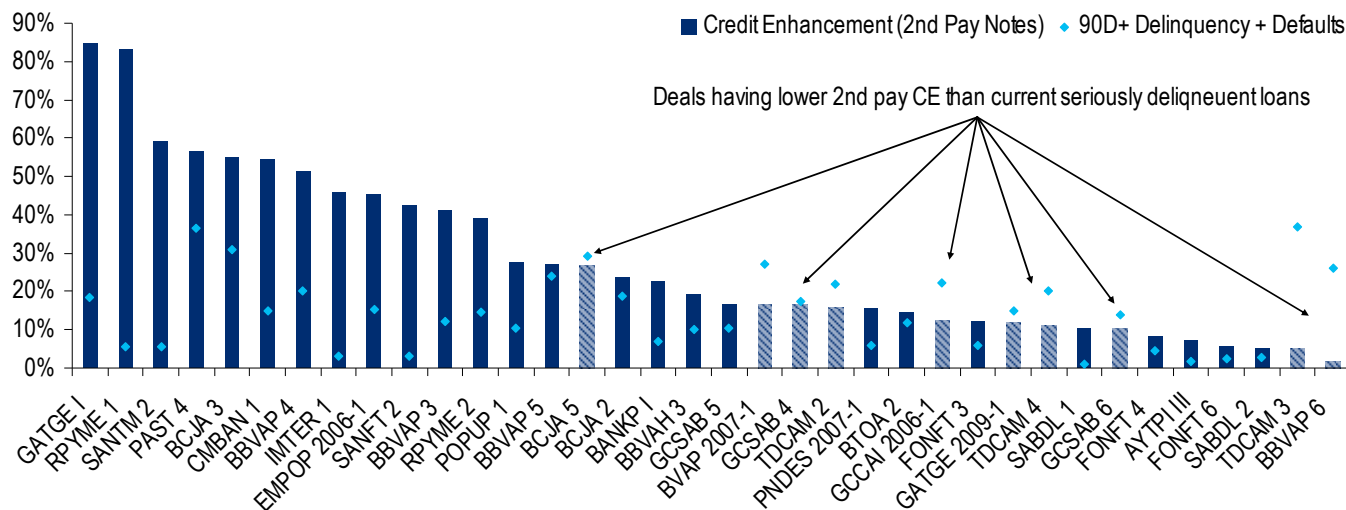


Source: Bloomberg and Citi Research

³ Refer to the “Salient Structural Features” section of this report for the discussion on “artificial write-off”

- **Certain Second Pays Well Protected.** The Spanish SME sector's credit performance prevents us from recommending mezz notes *per se* but we note that certain second-pay notes look better protected than others because of high credit enhancement and rapid amortization of the senior notes. About one-third of the outstanding placed deals have second pay credit enhancement above 40%. Conversely, 28% of the deals have second pay enhancement less than current 90D+ delinquent plus defaulted loans (Figure 6).

Figure 6. Current Credit Enhancement for Second Pay Placed SME Notes, as of last reported date (%)



Source: Fitch, Moody's, S&P and Citi Research

We provide the list of all placed Spanish SME ABS deals with the credit enhancement for the first and second pay notes in Appendix 1 of this report.

Collateral and Structural Overview

The performance of SME collateral is challenging as many pools, especially from recent vintages, are showing high (and often rising) delinquency rates. This is especially true for pools with large real estate concentrations. Against this, investors must balance the high prepayments of many loan pools and the structural strengths of the securitizations.

Collateral Composition

The collateral underlying Spanish SME ABS is comprised of loans to small and medium enterprises and the average loan size ranges from €150,000 - 500,000. Most of these loans are amortizing and very few have balloon payments at maturity. We provide a brief description of the SME collateral pool below:

- **Granular Pools.** In contrast to CLO and CMBS pools, Spanish SME ABS pools are granular with around 300–36,000 loans per deal. The pools also benefit from sector diversity as a typical securitization has exposure to 18–86 small business sectors.
- **Mortgage Security for Some Loans.** Roughly 25–98% of the collateral is secured by first lien mortgages, depending on the deal. Some loans are backed by personal guarantees and security interests while the remaining loans have no guarantee.

- **Relatively Shorter Average Life.** Shorter average maturity of the underlying collateral results in faster amortization of SME ABS compared to RMBS. Average maturity of SME loans ranges from 8–10 years which is shorter than a typical 20–25 year mortgage loan in Spanish RMBS. Moreover, Spanish SME ABS loans are prepaying at a faster rate (7% CPR) than Spanish RMBS (4% CPR) on average, shortening the average life of the notes further.
- **Significant Real Estate Exposure.** SME ABS pools typically have significant exposure to real estate and related businesses. These businesses include real estate and rental activities, construction of buildings and infrastructure, and business services for real estate companies. Real estate exposure in SME transactions ranges from 8–50% depending on the deal.

Figure 7. Spanish SME ABS Collateral Summary by Originators

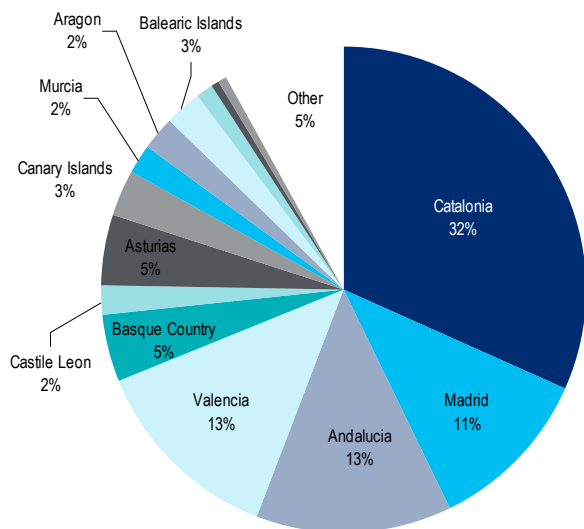
		BBVA	Santander	Sabadell	Bancaja	Caja de Ahorros del Mediterraneo	Multiple Originator
Collateral Composition (At Origination)	Number of Loans	6,861-15,159	21,198-29,448	2,935-5,152	2,801-3,793	5,306-14,971	2,201-11,802
	Number of Sectors	28-29	57-83	50-50	25-46	-	18-53
	Real Estate Sector Concentration	24%-41%	12%-28%	36%-44%	36%-50%	27%-52%	8%-33%
	Top Region Concentration	18%-34%	21%-29%	45%-60%	36%-58%	48%-52%	26%-91%
	Real Estate Collateral Security	25%-47%	5%-84%	88%-96%	69%-92%	57%-70%	52%-98%
Collateral Performance (Current)	90–360 Day Delinquency	1%-5%	1%-13%	2%-8%	12%-15%	7%-8%	1%-8%
	Outstanding Defaults	10%-25%	1%-7%	8%-9%	7%-14%	5%-14%	5%-15%
	Moody's Expected Recovery Rate	30%-50%	35%-45%	40%-50%	40%-60%	53%-60%	30%-60%
	CPR	0%-9%	8%-43%	2%-14%	6%-20%	0%-3%	1%-30%

Source: Company Filings, Moody's and Citi Research

Diversified Regional Exposure

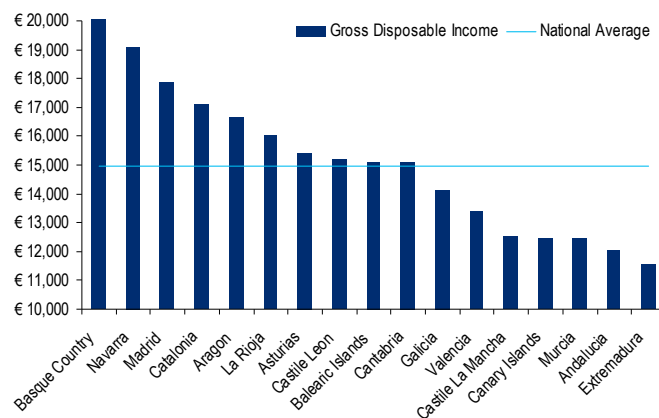
- **Regional Diversity.** Overall SME ABS collateral is regionally well diversified (Figure 8). The highest proportion of SME ABS collateral is from the Catalonia region, which contributes around 32%.
- **Greater Exposure to Wealthier Regions.** SME ABS collateral has a high exposure to the relatively wealthy areas of Northern Spain. 56% of placed SME ABS collateral hails from areas such as Catalonia, Madrid, Basque Country, Castile Leon, Asturias, and La Rioja all of which have above national average gross disposable income (Figure 9).
- **Deals with High Regional Concentration.** Certain deals have more than 90% of their collateral concentrated in one region. This is common for deals that have a regional guarantee. For instance, deals guaranteed by Catalonia's FTGENCAT programme have most of their collateral concentrated in Catalonia.

Figure 8. Spanish SME ABS Exposure by Region (%)



Source: Investor Reports and Citi Research

Figure 9. Household Gross Disposable Income by Region, 2010 (€, per capita)



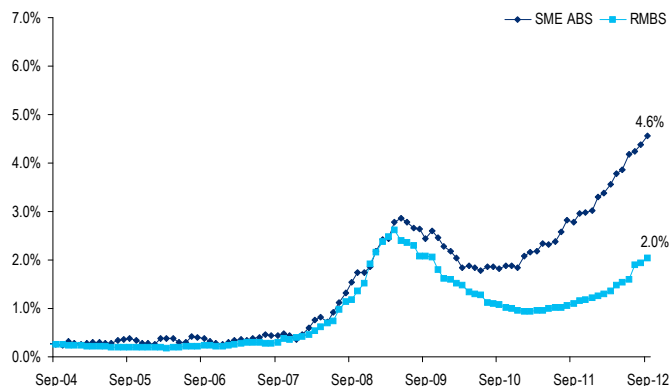
Source: INE and Citi Research

Collateral Performance

SME ABS Delinquencies Much Higher than RMBS

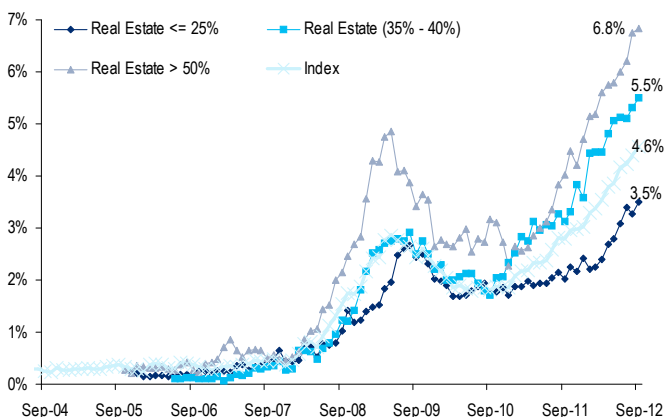
- **SME Delinquencies Twice that of RMBS.** Average reported 90D+ delinquencies for SME ABS are more than double that of RMBS delinquencies, according to Moody's data. Both the sectors experienced equivalent delinquencies until mid-2009 but the SME ABS performance has deteriorated rapidly since 2011 (Figure 10).
- **Real Estate SME Performing Worse.** SME deals with larger exposure to real estate related sectors are performing much worse than deals with lower real estate exposure. Average 90-360 day delinquencies for deals with greater than 50% real estate exposure is 6.8%, roughly twice the 3.5% average 90-360 delinquency for deals with less than 25% real estate exposure (Figure 11).

Figure 10. Spanish SME ABS and RMBS Serious Delinquencies, Sep 04 – Sep 12 (%)



Source: Moody's and Citi Research

Figure 11. Spanish SME ABS 90-360 Day Delinquencies by Real Estate Exposure, Sep 04 – Sep 12 (%)

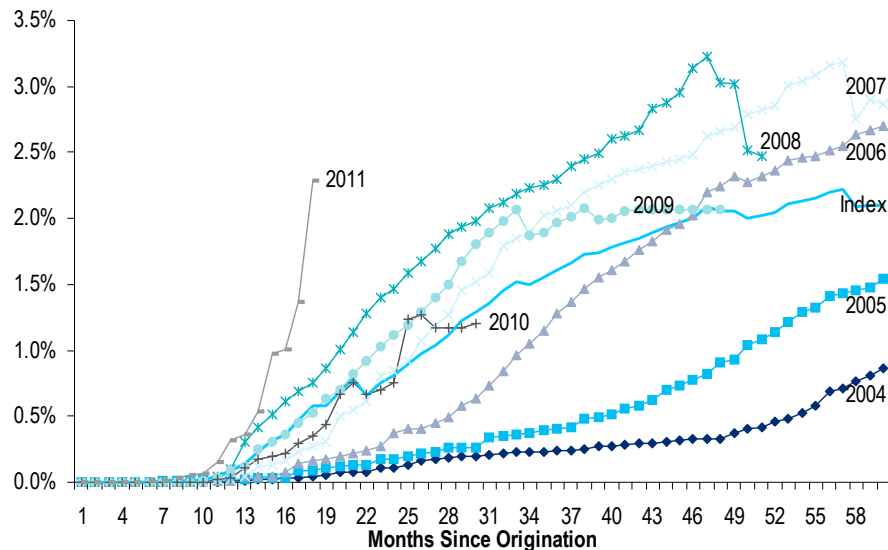


Source: Moody's and Citi Research

Cumulative Defaults Tiered by Vintage

- **Low Defaults.** Average cumulative defaults for a seasoned Spanish SME ABS transaction are low in absolute terms, in our opinion. However, we think that the recent rapid increase observed in serious delinquencies could potentially translate to increasing defaults. Average cumulative defaults on a five-year seasoned transaction range from 0.9–2.9% of the original balance, depending on vintage (Figure 12).
- **Older Vintages Outperform.** Average cumulative defaults for 2004 and 2005 vintages are substantially lower than for more recent deals or even the average across all vintages (shown as 'Index'), at 60 months of seasoning. Cumulative defaults for 2006–2009 vintages are slightly higher than the average while the 2011 vintage has much higher defaults than all other vintages at comparable seasoning.

Figure 12. Spanish SME ABS Cumulative Defaults by Vintage, as of Sep 2012 (%)

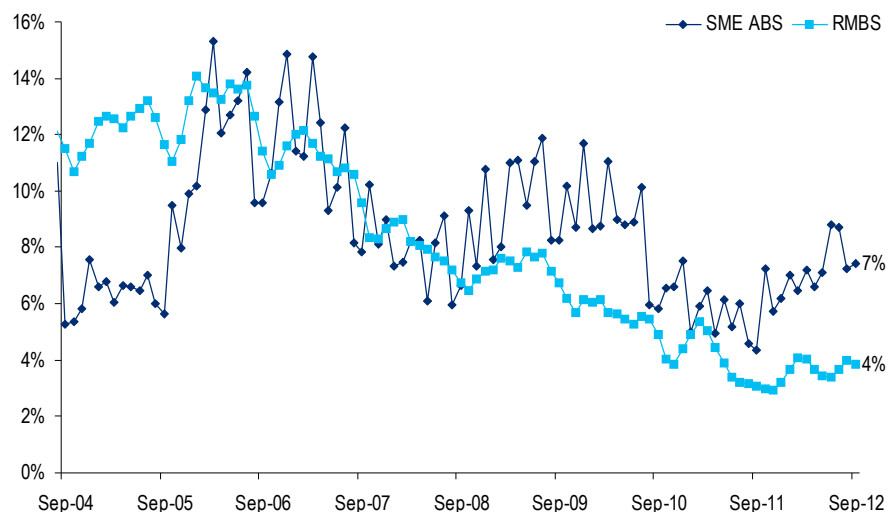


Source: Moody's and Citi Research

SME Prepayments Higher than RMBS

- **Prepayments Diverge Post Crisis.** Average prepayments on Spanish SME ABS have recently been higher compared to RMBS and benefit SME ABS investors (Figure 13). This shows that small businesses have been possibly more proactive than households in seeking out refinancing in the difficult post crisis lending environment.

Figure 13. Spanish SME ABS and RMBS Prepayments, Sep 04 – Sep 12 (% CPR)



Source: Moody's and Citi Research

Salient Structural Features

SME ABS deals benefit from structural protection for the senior tranches — including various forms of credit enhancement as well as cash diversion triggers. Moreover, the levels of credit enhancement have increased for deals issued after the financial crisis, though, as a practical matter, most new deals are still retained. The situation may change if a combination of investor demand and the decision of banks to seek alternative funding sources motivates issuers to sell the bonds in the open market.

We examine the structures of 24 Spanish SME ABS deals from top eight originators and some multiple originator deals (Figure 14). These deals span across 2003–2011 vintages and cover about 20% of the Spanish SME ABS market.

Figure 14. Spanish SME ABS Structural Features Summary by Originators

		BBVA	Santander	Sabadell	Bancaja	CAM	Multi-Originator
Structural Information	Structure Type	Revolving/Static	Revolving/Static	Static	Static	Static	Static
	State Guarantee	For some deals	For some deals	For most deals	For some deals	For most deals	For some deals
Senior Credit Enhancement	Original	7%-8%	8%-41%	6%-7%	10%-44%	9%-9%	8%-17%
	Current	20%-83%	46%-125%	25%-38%	59%-131%	30%-51%	55%-129%
Credit Enhancement Components	Guaranteed Excess Spread	0.65%-0.65%	0.65%-1.00%	0.005	0.00%-0.87%	0.50%-0.60%	0.00%-0.65%
	Pre Funded Reserve fund	0.00%-1.90%	1.3%-20.00%	1.05%-1.40%	0.00%-20.35%	1.40%-1.95%	0.00%-4.90%
	Artificial Write-off Definition*	12–18 Month	12–18 Month	12 Month	18 Month	12 Month	12–18 Month
Triggers	Pro Rata Pay-down Trigger	Yes, contingent on 1) 90D+ delinquency, or 2) Outstanding Defaults, or 3) Principal Deficiency					
	Subordinate Interest Deferral	Yes, contingent on 1) 90D+ delinquency, or 2) Outstanding Defaults, or 3) Principal Deficiency					
	Reserve Fund Amortization Abort	Yes, contingent on 90D+ delinquency					

* We explain "Artificial Write-off" below

Source: Company Filings, Moody's and Citi Research

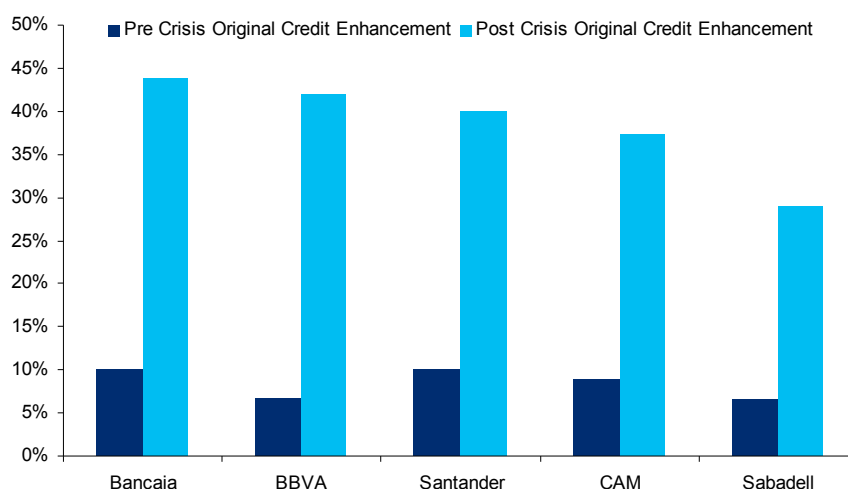
Higher Credit Enhancement in Post Crisis Deals

- **Elevated Credit Enhancement.** The senior credit enhancement at origination for the SME ABS deals we examined range from 6–41%. Original credit enhancement has increased significantly post the 2008 subprime crisis (Figure

15). We describe the various components of SME ABS credit enhancement below:

- **Subordination.** Subordinate notes take the first principal losses and protect the seniors from deterioration in pool performance
- **Reserve Fund.** Reserve fund for a typical SME ABS deal ranges from 1.9–20% of original balance depending on the originator and the vintage.
- **Excess Spread.** Excess spread for typical SME ABS transactions ranges from 0.5–0.87%. This excess spread is trapped to pay the seniors when the pool performance deteriorates beyond a threshold.

Figure 15. Pre and Post Crisis* Original Credit Enhancement by Originator (%)



* We refer to the 2008 subprime crisis here

Source: Moody's and Citi Research

■ **Structural Features Benefit Seniors.** SME structures contain features which benefit seniors in multiple ways. These features ensure continuing credit support for the seniors and accelerate their amortization when pool performance deteriorates. We briefly discuss these features below:

- **Sequential Principal Payment Triggers.** SME ABS deals switch to sequential amortization when the 90D+ delinquencies deteriorate beyond a threshold.
- **Subordinate Interest Deferral.** SME ABS structures have triggers to defer interest payments on subordinate notes contingent on 90D+ delinquency or principal deficiency. Principal deficiency arises when the principal due under the notes is higher than the cash flows from the underlying loans. This deferred interest is used to pay down senior notes shortening their WAL.
- **“Artificial Write-off”.** Spanish SME ABS deals have a so called “artificial write-off” mechanism, which tries to keep the outstanding note balance less than or equal to the performing collateral balance. Most deals write-off loans delinquent for more than 12–18 months and make up for the deficiency by tapping the excess spread and the reserve fund. The feature is called “artificial write-off” because recoveries on these written-off loans could materialize at a later point in time.

- **Reserve Fund Amortization Stop Trigger.** The reserve fund stops amortizing if current 90D+ delinquencies are above a certain pre-decided threshold. This feature ensures continued credit and liquidity support to the transaction when the pool performance deteriorates.
- **State Guarantees in Older Vintages.** Some senior tranches in many Spanish SME ABS deals have government guarantees. The guarantee makes whole any shortfall in interest and principal payments of the guaranteed notes. FTPYME (national guarantee) and FTGENCAT (Catalonia region guarantee) are the two main SME ABS government guarantee programmes.
- **Swaps Guarantee Excess Spread.** A typical SME ABS is structured such that a pre determined amount of excess spread is guaranteed as part of the swap agreement. The swap counterparty receives interest from the underlying collateral and provides payments covering note interest, servicing fees, and a guaranteed excess spread.
- **Mostly Static Pools.** In contrast to standard CLOs, most Spanish SME ABS collateral pools are static. Only a few pre-crisis deals were structured with revolving pools. However, post the 2008 crisis, originators have moved towards simplifying the structures and revolving pools are less prevalent now.

Summary — Value within SME ABS Sector Despite Headlines

We think that certain Spanish SME ABS notes offer value although many investors shy away from European peripheral country exposures. We recommend short-dated front-pay bonds as an often overlooked way of picking up spread without taking too much country risk. Moreover, several second-pay look better protected than others. In these instances, the headline delinquency levels of the pools are secondary to the structural strength of the securitizations and the speed of debt repayment by the borrowers.

Appendix 1 — List of Outstanding Placed Spanish SME ABS Deals

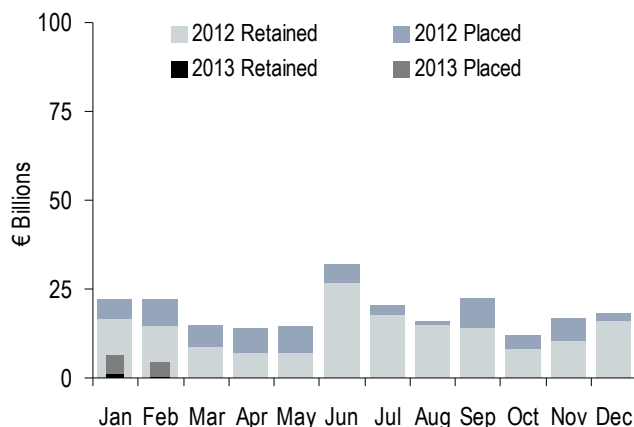
Figure 16. List of Placed SME ABS Deals with Relevant Collateral Characteristics and Credit Support Metrics, as of Feb 2013

Deal	Originator	Current Balance	Deal Factor	Top Region	Real Estate %	90D+ Delq	Defaults	1st Pay Notes		2nd Pay Notes		Reserve Fund	Principal Deficiency
								Outstanding	CE	Outstanding	CE		
BCJA 5	Bancaja	116,111,376	10%	Valencia	44%	14%	15%	21,444,863	81%	62,700,000	27%	6,811,765	0
BCJA 2		31,806,580	6%	Valencia	31%	12%	7%	15,515,334	59%	12,098,739	24%	3,845,202	0
BCJA 3		53,342,351	6%	Valencia	36%	18%	13%	13,100,337	78%	12,361,279	55%	1,233,645	0
SABDL 1	Banco de Sabadell	89,798,833	18%	Catalonia	35%	1%	0%	72,190,276	29%	19,800,000	10%	6,426,002	0
GCSAB 5		209,801,017	17%	Catalonia	39%	2%	8%	144,359,467	36%	40,000,000	17%	8,421,503	0
GCSAB 4		106,267,101	14%	Catalonia	54%	8%	9%	72,957,291	38%	24,000,000	17%	4,099,773	0
GCSAB 6		233,332,080	23%	Catalonia	36%	5%	9%	184,531,126	25%	35,500,000	10%	4,758,935	0
SABDL 2		164,507,743	33%	Catalonia	35%	3%	0%	139,007,752	17%	19,800,000	5%	3,562,014	0
BVAP 2007-1	Banco de Valencia	175,358,461	21%	Valencia	45%	10%	17%	81,391,278	44%	47,600,000	17%	0	18,379,000
PYME 6	Banco Guipuzcoano	21,732,842	14%	Basque Country	40%	15%	2%	15,290,010	24%	4,500,000	1%	276,703	0
PAST 3	Banco Pastor	36,611,870	7%	Galicia	49%	13%	25%	17,969,865	37%	15,400,000	7%	3,340,240	0
PAST 4		75,186,638	12%	Galicia	15%	10%	26%	20,061,851	76%	15,800,000	57%	0	26,662
EMPOP 2006-1	Banco Popular	278,820,997	15%	Andalucia	33%	5%	11%	171,043,416	55%	28,800,000	45%	45,000,000	0
POPUP 1	Banco Popular Espanol	170,192,338	9%	Madrid	18%	1%	9%	91,586,116	46%	34,560,565	27%	4,994,668	0
BTOA 2	Banesto	227,208,714	23%	Valencia	14%	4%	8%	169,957,075	25%	24,300,000	14%	0	1,048,406
BANKP I	Bankinter SA	200,730,471	26%	Madrid	44%	3%	4%	141,799,394	30%	16,200,000	23%	8,788,056	0
BBVAP 3	BBVA	39,010,542	4%	Andalucia	24%	2%	10%	14,623,305	80%	17,657,844	41%	10,412,618	0
BBVAP 4		57,511,286	5%	Catalonia	29%	1%	19%	8,725,030	83%	18,409,870	51%	3,235,310	0
BBVAP 5		162,443,315	9%	Valencia	41%	3%	22%	74,609,186	50%	39,900,000	27%	0	10,727,213
BBVAP 6		200,252,249	13%	Catalonia	19%	4%	22%	138,344,959	24%	50,300,000	2%	0	0
FONFT 3	Caixa d'Estalvis i Pensions de Barcelona	156,068,323	24%	Catalonia	48%	2%	4%	137,187,734	19%	10,700,000	12%	5,533,880	0
FONFT 6		362,909,320	48%	Catalonia	22%	3%	0%	350,222,795	10%	15,000,000	6%	13,529,889	0
FONFT 4		192,552,240	32%	Catalonia	13%	2%	2%	176,305,560	12%	7,565,011	8%	5,043,293	0
PNDES 2007-1	Caixa Penedes	215,974,708	28%	Catalonia	37%	5%	1%	147,373,644	37%	44,600,000	16%	13,430,000	0
GCCAI 2006-1	Caixa Sabadell	98,266,176	33%	Catalonia	25%	16%	6%	81,207,513	24%	11,458,485	13%	1,640,042	0
IMTER 1	Caixa Terrassa	45,137,566	14%	Catalonia	36%	3%	0%	16,849,260	84%	9,159,265	46%	9,917,400	0
CMBAN 1	Caja de Ahorros de Valencia	75,670,450	14%	Madrid	34%	10%	5%	23,072,984	85%	21,928,201	55%	12,233,803	0
TDCAM 2	CAM	83,110,659	11%	Madrid	N.A.	8%	14%	34,550,409	51%	27,473,385	16%	1,982,915	0
TDCAM 4		393,627,737	26%	Valencia	38%	8%	12%	241,564,856	30%	66,000,000	11%	653,045	0
TDCAM 3		224,688,495	30%	Valencia	49%	15%	23%	143,259,552	19%	29,300,000	5%	0	23,932,203
AYTPI III	Caja de Ahorros y Monte de Piedad de Gipuzkoa y San Sebastian	72,460,123	24%	Basque Country	100%	2%	0%	54,222,410	32%	17,659,002	7%	5,210,984	0
CIBFT III	Caja de Ahorros y Monte de Piedad de Madrid	42,899,517	9%	Madrid	N.A.	1%	7%	16,537,414	103%	25,000,000	41%	17,678,843	0
AYTPI IV	Monte de Piedad y Caja de Ahorros de Huelva y Sevilla	56,077,844	13%	Andalucia	100%	18%	0%	49,341,506	100%	0	-	51,163,219	0
AYTPI II		51,310,233	11%	Andalucia	100%	12%	0%	49,579,941	60%	0	-	29,747,965	0
RPYME 1	Multi-Originator	21,722,118	10%	Navarra	22%	1%	4%	2,219,077	129%	10,228,675	83%	8,621,643	0
GATGE I		62,736,312	9%	Catalonia	19%	4%	15%	12,824,764	99%	9,008,746	85%	14,982,969	0
GATGE 2009-1		296,156,426	51%	Catalonia	8%	10%	5%	57,844,945	88%	0	12%	36,562,500	0
RPYME 2		122,515,403	21%	Aragon	19%	9%	6%	69,513,815	63%	29,100,000	39%	24,050,000	0
AYTPI I		25,559,369	8%	Cantabria	100%	4%	0%	25,076,637	34%	0	-	8,500,000	0
AYTPY II		78,146,050	16%	Madrid	8%	3%	3%	37,962,609	64%	34,000,000	17%	12,288,156	0
SANTM 2	Santander	319,879,652	11%	Madrid	31%	3%	2%	62,805,561	85%	84,100,000	59%	37,655,366	0
SANTM 1		336,088,541	11%	Madrid	32%	4%	3%	52,071,235	86%	96,100,000	58%	23,292,254	0
SANFT 2		334,318,552	19%	Madrid	14%	2%	2%	91,438,361	62%	28,924,994	43%	18,000,000	0
SANFT 1		255,129,140	14%	Madrid	13%	1%	1%	123,459,986	63%	27,000,000	52%	18,000,000	0

Source: Fitch, Moody's, S&P, Bloomberg, Investor Reports and Citi Research

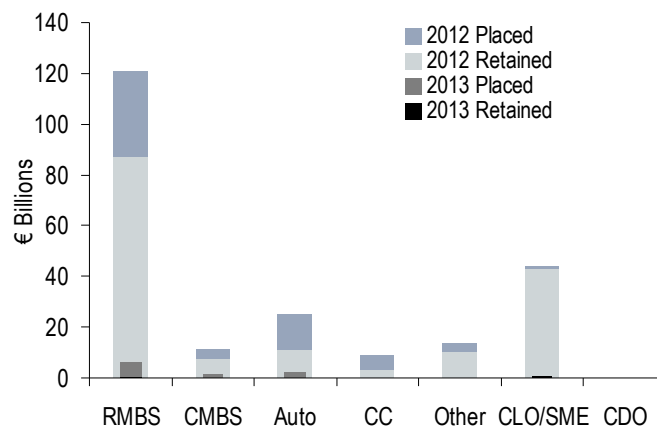
New Issuance

Figure 17. Placed and Retained Issuance by Month, 2012–2013YTD (€ billions)



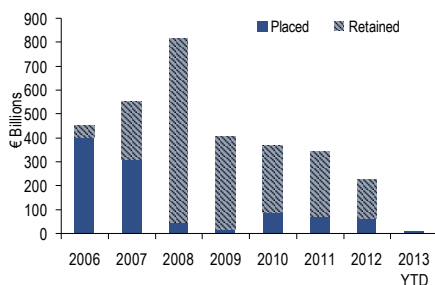
Source: Concept ABS, IFR, Informa and Citi Research

Figure 18. Placed and Retained Issuance by Sector, 2012–2013YTD (€ billions)



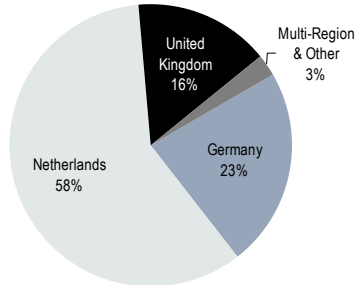
Source: Concept ABS, IFR, Informa and Citi Research

Figure 19. Annual Historical Placed and Retained Issuance, 2006–2013YTD (€ billions)



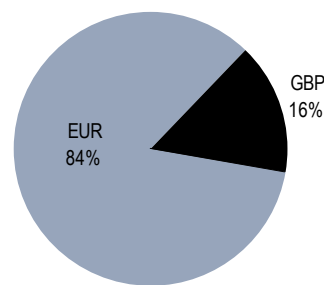
Source: Concept ABS, IFR, Informa and Citi Research

Figure 20. Placed Issuance by Region, 2013YTD (% of Total, € Equivalent)



Source: Concept ABS, IFR, Informa and Citi Research

Figure 21. Placed Issuance by Currency, 2013YTD (% of Total, € Equivalent)



Source: Concept ABS, IFR, Informa and Citi Research

Figure 22. 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	5,565	33,928	1,469	3,936	2,131	13,921	0	5,591	241	990	0	3,459	9,405	61,825
Retained	476	87,137	143	7,460	141	11,364	0	3,067	648	42,879	0	10,145	1,408	162,052
Total	6,041	121,065	1,612	11,395	2,271	25,285	0	8,658	889	43,869	0	13,604	10,813	223,877

* 2012 complete year

Source: Concept ABS, IFR, Informa and Citi Research

Figure 23. Recent Placed Issuance, 1 Jan — 21 Feb 2013

Deal Name	BBG	Transaction Type	Tranche	Crncy	Size(MM)	Fitch/Moodys/S&P/D BRS	WAL	Index	Margin	CE	Closing Date
VCL Multi-Compartment SA Comp VCL 17	VCL 17	Auto ABS Germany	A B	EUR EUR	697.5 21	-/Aaa/AAA/- -/A1/A+/-	1.29YR 1.88YR	1mE 1mE	25bp 75bp	8.20% 5.40%	21-Feb
Arqiva Financing plc	-	CMBS - Business Risk UK	2013-1a 2013-1b	GBP GBP	350 400	BBB-/BBB/- BBB-/BBB/-	7.3YR 12.6YR	4.04% (Fixed) 4.88% (Fixed)			21-Feb
Cairn CLO III	CRNCL 2013-3	CLO - Arbitrage Multi Region - Europe	A B C D M	EUR EUR EUR EUR EUR	181.5 28 20 11 60	-/Aaa/ AAA/- -/Aa2/ NR/- -/A2/ NR/- -/Baa2/ NR/- -/NR/ NR/-		6mE 6mE 6mE 6mE	140bp 235bp 325bp 425bp		20-Feb
Orange Lion 2013-9 BV	ORANL 2013-9	RMBS - Prime Netherlands	A B C	EUR EUR EUR	1365 64.97 42.9	AAA/ Aaa/-/- NR/ NR/-/- NR/ NR/-/-	5.1YR 6YR 6YR	3mE N/A N/A	85bp N/A N/A	7.50% 0.00% 0.00%	20-Feb
Tesco Property Finance 6 plc	-	CMBS - Business Risk - UK	A	GBP	493.4	A-/Baa1/A/-/-	21.1YR	UKT4Q3 2	245bp	-	7-Feb
Red & Black TME Germany 1 UG	-	Auto ABS Germany	A B	EUR EUR	513 87	AAA/-/AAA/- NR/-/NR/-	1YR 2.8YR	1mE N/A	50bp N/A	15.50% 1.00%	6-Feb
Dutch MBS XVIII BV	DUTCH 2013-18	RMBS - Prime Netherlands	A1 A2 B C D E F	EUR EUR EUR EUR EUR EUR EUR	140 360 8 7 7 4.5 2.7	AAA/Aaa/-/- AAA/Aaa/-/- AA/Aa2/-/- A/A2/-/- BBB/Baa2/-/- B/Ba2/-/- NR/NR/-/-	1.96YR 4.96YR 5YR 5YR 5YR 5YR 0.7YR	3mE 3mE 3mE 3mE 3mE 3mE 3mE	45bp 95bp 200bp 225bp 250bp 275bp 300bp	5.50% 5.50% 4.00% 2.70% 1.70% 0.50% 0.00%	24-Jan
Storm 2013-I BV	STORM 2013-1	RMBS - Prime Netherlands	A1 A2 B C D E	EUR EUR EUR EUR EUR EUR	150 550 17.1 13.1 14.5 7.5	AAA/ Aaa/ AAA/- AAA/ Aaa/ AAA/- AA-/ Aa1/ AA/- BBB+/ Aa3/ A/- BB/ A2/ BBB/- BB/ Baa3/ NR/-	2YR 4.9YR 4.9YR 4.9YR 4.9YR 4.9YR	3mE 3mE 3mE 3mE 3mE 3mE	45bp 85bp	7.00% 7.00% 4.70% 3.00% 1.00% 0.00%	22-Jan
Orange Lion 2013-8 BV	ORANL 2013-8	Netherlands RMBS - Prime	A B C	EUR EUR EUR	3000 191.5 95.7	AAA/Aaa/-/- NR/NR/-/- NR/NR/-/-	5.1YR 6YR 6YR	3mE Zero Zero	115bp Cpn Cpn	9.00% 0.00% 0.00%	15-Jan

Source: Concept ABS, IFR, Informa and Citi Research

Collateral and Macro Trends

Netherlands

Figure 24. Unemployment Rate, Jan 05 – Jan 13

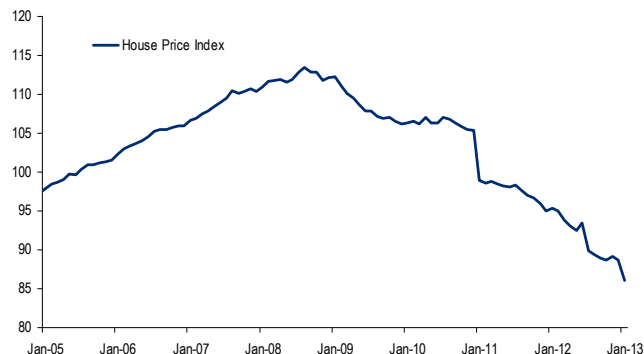


Source: Dutch Statistics Office

- Dutch unemployment rate climbed to 7.5% in January 2013 from 7.2% in the previous month
- Dutch unemployment rate is rising steeply and has increased 1.6 percentage points year-over-year in January

Netherlands

Figure 25. House Price Index, Jan 05 – Jan 13 (€ billion)

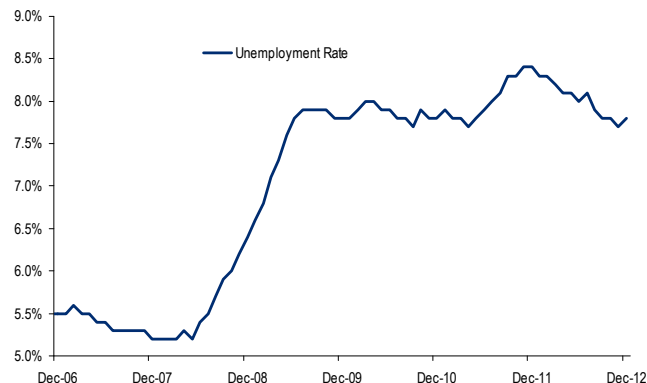


Source: Dutch Statistics Office

- Dutch house price index fell to 86.1 in January 2013 from 88.70 in the previous month
- Dutch house prices are in a steep decline and have fallen 9.65% year-over-year in January

UK

Figure 26. Unemployment Rate, Dec 06 – Dec 12

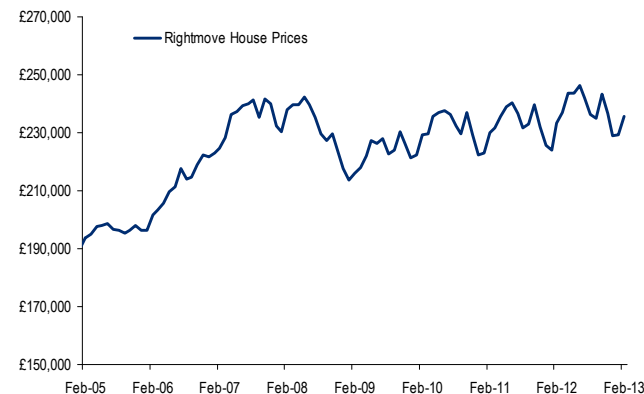


Source: UK ONS

- UK unemployment rate increased to 7.8% in December 2012 from 7.7% in the previous month
- Unemployment rate has improved 60bp year-over-year in December 2012

UK

Figure 27. Rightmove House Prices, Feb 05 – Feb 13

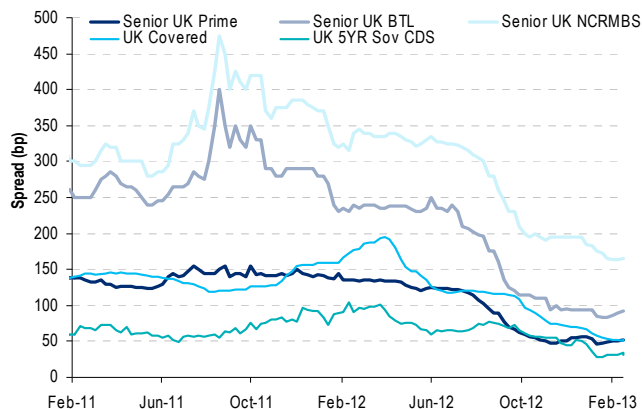


Source: Rightmove

- Rightmove average house price increased to £235,741 in February from £229,429 in the previous month
- Rightmove average house price improved 1.1% year-over-year in February

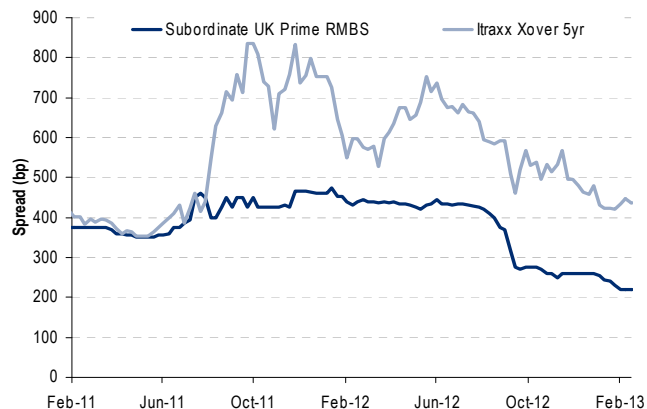
Relative Value Charts

Figure 28. UK RMBS Seniors Versus Indexes, Feb 11 – Feb 13



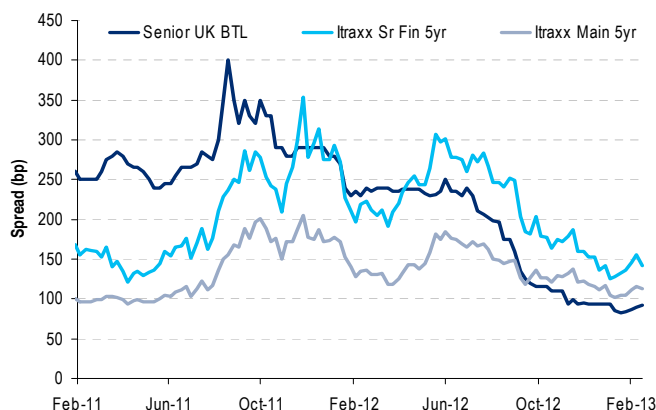
Source: Markit and Citi Research

Figure 29. UK Prime RMBS Subordinates Versus Index, Feb 11 – Feb 13



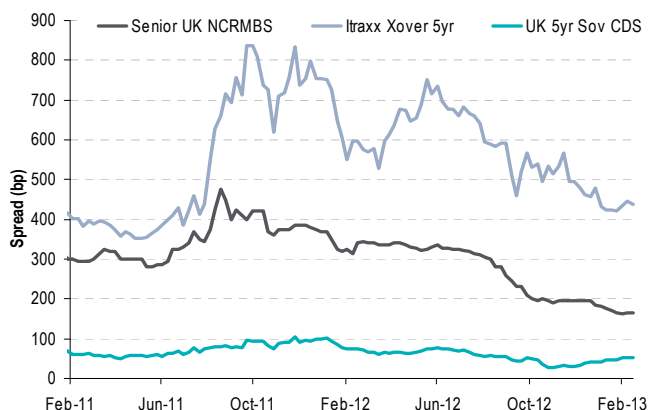
Source: Markit and Citi Research

Figure 30. UK BTL RMBS Seniors Versus Indexes, Feb 11 – Feb 13



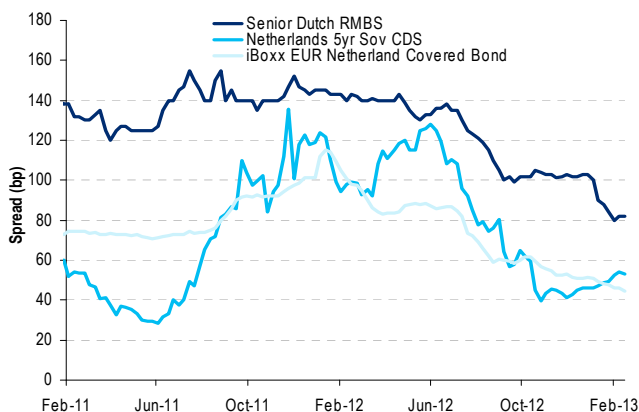
Source: Markit and Citi Research

Figure 31. UK NCRMBS Seniors Versus Indexes, Feb 11 – Feb 13



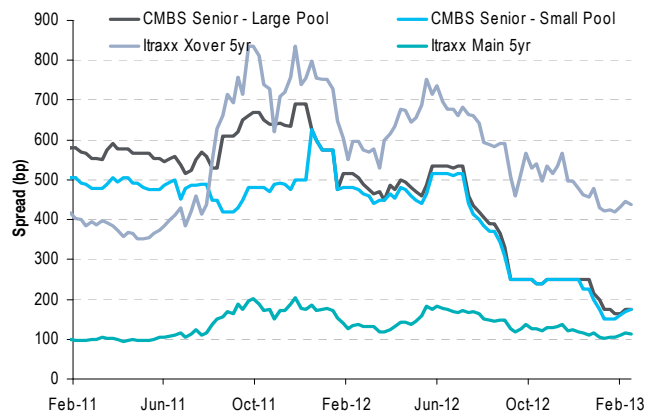
Source: Markit and Citi Research

Figure 32. Dutch RMBS Seniors Versus Indexes, Feb 11 – Feb 13



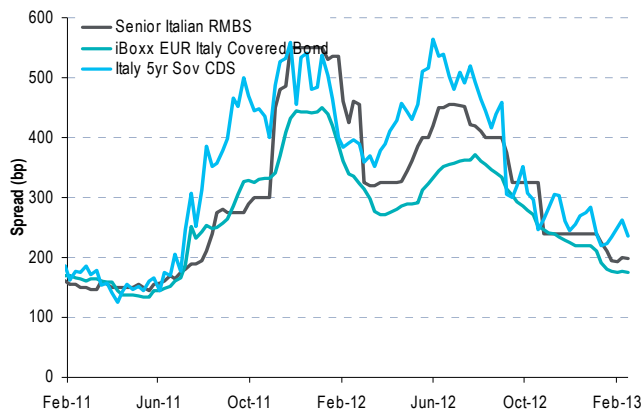
Source: Markit and Citi Research

Figure 33. CMBS Senior Spreads Versus Indexes, Feb 11 – Feb 13



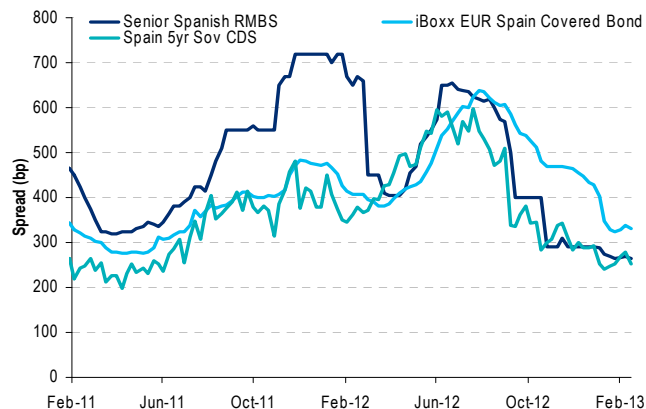
Source: Markit and Citi Research

Figure 34. Italian RMBS Seniors Versus Indexes, Feb 11 – Feb 13



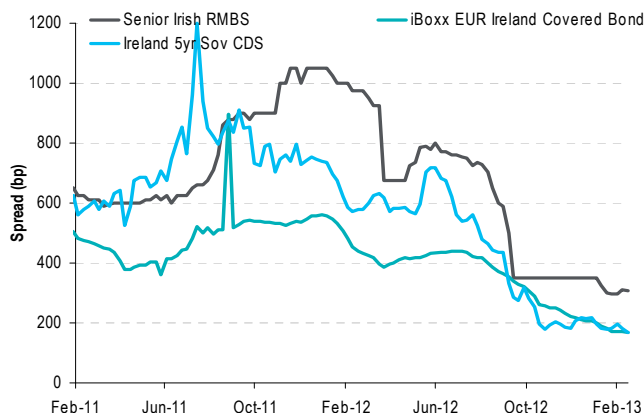
Source: Markit and Citi Research

Figure 35. Spanish RMBS Seniors Versus Indexes, Feb 11 – Feb 13



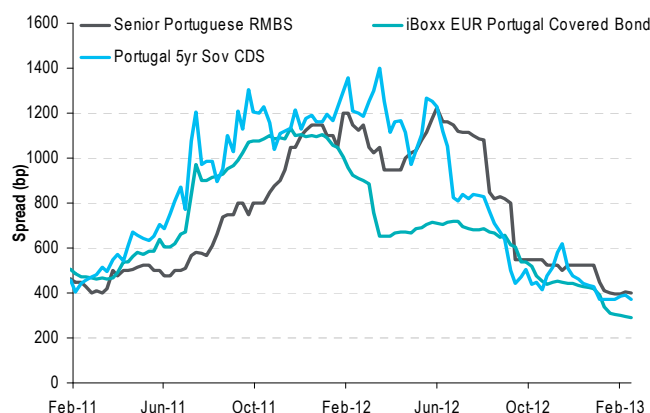
Source: Markit and Citi Research

Figure 36. Irish RMBS Seniors Versus Indexes, Feb 11 – Feb 13



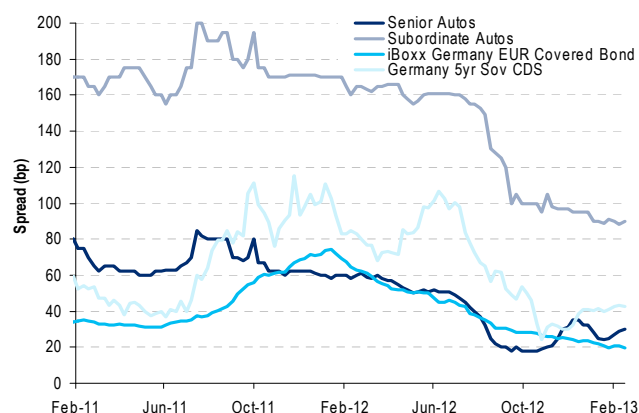
Source: Markit and Citi Research

Figure 37. Portuguese RMBS Seniors Versus Indexes, Feb 11 – Feb 13



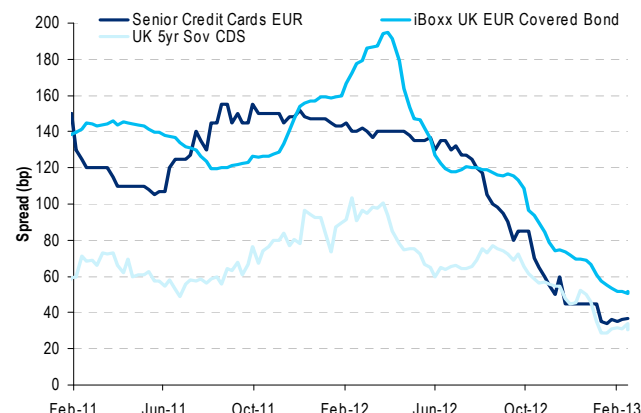
Source: Markit and Citi Research

Figure 38. Auto ABS Spreads Versus Indexes, Feb 11 – Feb 13



Source: Markit and Citi Research

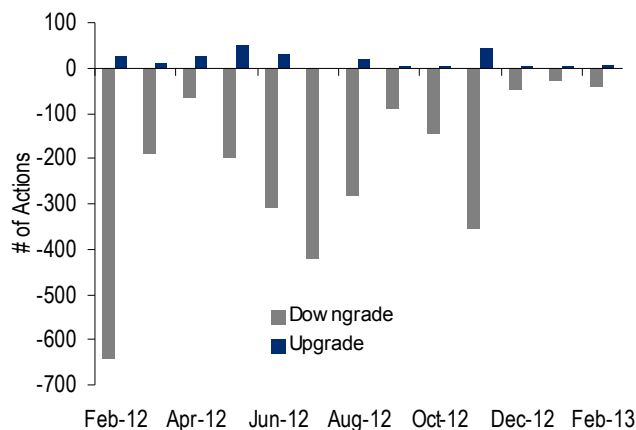
Figure 39. Credit Card ABS Spreads Versus Indexes, Feb 11 – Feb 13



Source: Markit and Citi Research

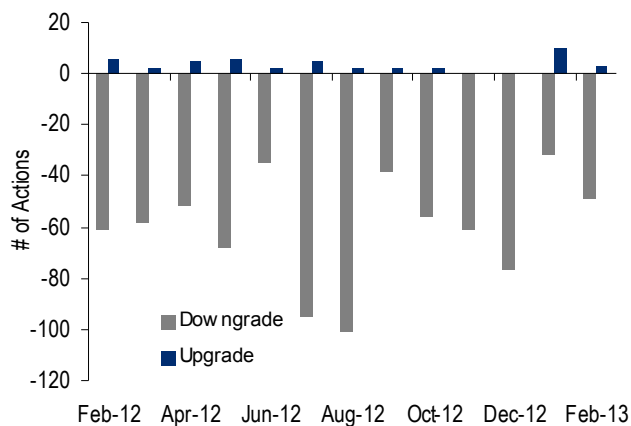
Rating Actions and Trends

Figure 40. European RMBS Rating Actions, Feb 12 — Feb 13



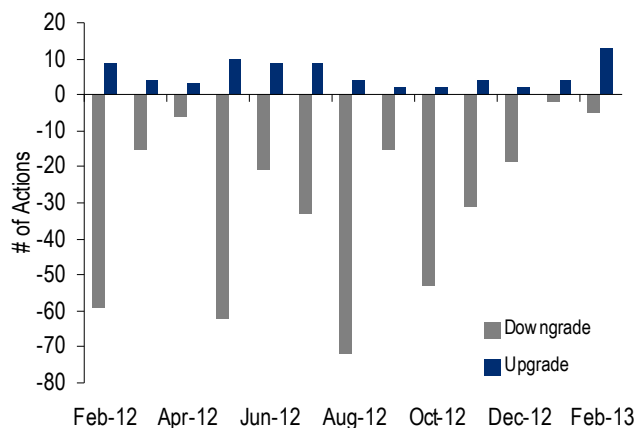
Source: Moody's, S&P and Fitch

Figure 41. European CMBS Rating Actions, Feb 12 — Feb 13



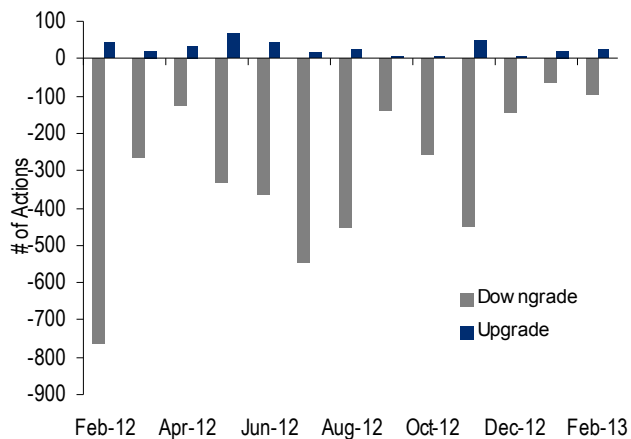
Source: Moody's, S&P and Fitch

Figure 42. European ABS Rating Actions, Feb 12 — Feb 13



Source: Moody's, S&P and Fitch

Figure 43. European Total Securitized Products Rating Actions, Feb 12 — Feb 13



Source: Moody's, S&P and Fitch

Notes

Appendix A-1

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