

# Securitisation Data Report Q3:2015



# **Table of Contents**

Market Highlights and Commentary1
1. Issuance       4         1.1. European Historical Issuance       4         1.2. US and Australia Historical Issuance       4         1.3. European Issuance by Collateral       4         1.4. European Issuance by Retention       4         1.5. Australia Issuance by Collateral       4         1.6. US Issuance by Collateral       4         1.7. Issuance by Country of Collateral       5         1.8. Issuance by Collateral Type and Country of Collateral       5         1.9. European Issuance by Rating       6         1.10. Australia Issuance by Rating       6         1.11. US Issuance by Rating       6         1.12. Securitisation Issuance by Deal Size       7
2. Balances Outstanding
3. Credit Quality – Rating Changes       13         Upgrades/Downgrades by Country       13         3.1. DBRS       13         3.2. Fitch Ratings       13         3.3. Moody's Investors Service       13         3.4. Standard & Poor's       13         Upgrades/Downgrades by Collateral       14         3.5. DBRS – Europe       14         3.6. Fitch Ratings – Europe       14         3.7. Moody's Investors Service – Europe       14         3.8. Standard & Poor's – Europe       14         3.9. DBRS – US       15         3.10. Fitch Ratings – US       15         3.11. Moody's Investors Service – US       15         3.12. Standard & Poor's – US       15
4. CMBS Spreads       16         4.1. European 3-5 Yr AAA CMBS Spreads       16         4.2. European 3-5 Yr BBB CMBS Spreads       16         4.3. US 3 & 5 Yr AAA CMBS Spreads       16         4.4. US 3 & 5 Yr BBB CMBS Spreads       16
5. RMBS Spreads       17         5.1. European 3-5 Yr AAA RMBS Spreads       17         5.2. European 3-5 Yr BBB RMBS Spreads       17         5.3. UK 3-5 Yr AAA RMBS Spreads       17         5.4. UK 3-5 Yr BBB RMBS Spreads       17
6. ABS Spreads       18         6.1. European 1-4 Yr AAA ABS Spreads       18         6.2. European 1-4 Yr BBB ABS Spreads       18         6.3. US 3 Yr AAA ABS Spreads       18         6.4. US 3-Yr BBB ABS Spreads       18
7. RMBS Prices       19         7.1. European 3-5 Yr AAA RMBS Prices       19         7.2. European 3-5 Yr BBB RMBS Prices       19         7.3. UK 3-5 Yr AAA RMBS Prices       19         7.4. UK 3-5 Yr BBB RMBS Prices       19         7.5. iBoyy US PMBS Prices       19

8. CMBS and ABS Prices	20
8.1. 1 Pan-European 3-5 Yr AAA CMBS Prices	
8.2. Pan-European 3-5 Yr BBB CMBS Prices	
8.3. Pan-European 1-4 Yr AAA ABS Prices	
8.4. Pan-European 1-4 Yr BBB ABS Prices	
9. Indices Data	21
9.1. Securitised Index Option Adjusted Spreads	
9.2. Barclays PanEurope Fixed and Floating Prices	
9.3. Australia AAA	
9.4. Australia AA	
9.5. ABX.HE and CMBX Prices	21
9.6. PrimeX.ARM and FRM Prices	
9.7. CMBX 6 AAA Prices	22
10. Total Return Benchmark Data	23
10.1. European Total Return	
10.2. UK Total Return	
10.3. Europe ex UK RMBS AAA	
·	
11. Asset-Backed Commercial Paper	
11.1. European ABCP Historical Issuance	
11.2. European ABCP Issuance by Nationality of Issuer	
11.3. European ABCP Issuance by Programme Type	
11.4. ABCP Outstandings by Nationality of Issuer	
11.5. European ABCP Outstandings by Programme Type	
11.6. US ABCP Outstandings by Programme Type	
11.7. US ABCP to AA Non-financial CP Spread	25
12. Global Comparative Data	26
12.1. Global Securitisation Issuance	26
12.2. Global Corporate Bond Issuance	26
12.3. Global Government Bond Issuance	
Annex	27

# European Securitisation, 2015 Q3

#### Market Environment Economic Conditions

According to Eurostat, gross domestic product (GDP) rose by 0.3% quarter-over-quarter (QoQ) in the Euro area (EU 19) and by 0.4% QoQ in the EU 28 in the third quarter of 2015, down and unchanged, respectively, from the 0.4% growth in the prior quarter (both EU 19 and EU 28).

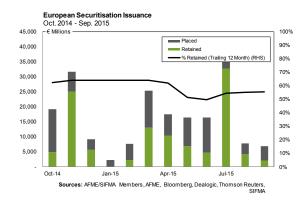
According to the October 2015 European Central Bank lending survey, credit standards for loans to enterprises, consumer credit and loans to households other than for house purchase eased in net terms. In 3Q'15, Euro area banks reported a further net easing of credit standards on loans to enterprises for the sixth consecutive quarter, driven by bank competition and risk perceptions. Across firm size, credit standards were eased mainly on loans to small and medium-sized enterprises (SMEs) and were broadly unchanged for large firms.

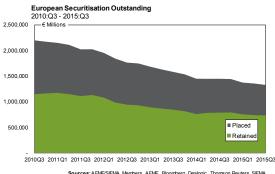
Net demand for loans to enterprises continued to increase in 3Q'15 mostly due to low interest rates. The net percentage of banks reporting an increase in demand for loans to enterprises was 16%, up from 13% in the previous quarter.

#### Term Issuance and Outstanding Volumes

In 3Q'15, EUR 56.3 billion of term securitised product was issued in Europe, an increase of 12.4% from 2Q'15 (EUR 50.1 billion) and an increase of 50.9% from 3Q'14 (EUR 37.3 billion). Of the EUR 56.3 billion total, EUR 17.3 billion was placed, representing 30.7% of the total, compared to EUR 28.3 billion placed in 2Q'15 (56.4%) and EUR 19.6 billion placed in 3Q'14 (52.5%).

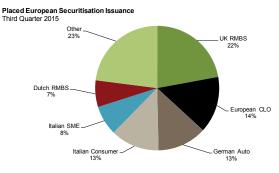
Net issuance of securitized product remained negative, with EUR 1.32 trillion outstanding at the end of 3Q'15, down from EUR 1.35 trillion at the end of 2Q'15. Of this, EUR 728.21 billion, or 54.9%, were retained.





Note: Retained outstandings do not contain retained, then subsequently placed, issues when data are available. Raced deals include bank tenders

UK residential mortgage backed securities (RMBS) continued to lead placed totals (EUR 3.8 billion) in the third quarter, followed by European collateralised loan obligations (CLOs) (EUR 2.5 billion) and German auto (EUR 2.2 billion).



Sources: Bloomberg, AFME & SIFMA Member Firms, Dealogic, AFME, SIFMA

#### **Credit Quality**

In Europe, upgrades outpaced downgrades in Q3 2015 among European securitised product, with upgrades concentrated in European CLOs.

#### **ABCP Trends**

European asset backed commercial paper (ABCP) issuance was EUR 100.1 billion in 3Q'15, a decrease of 2.7% but an increase of 45.6%, respectively, QoQ and YoY. Multiseller conduits continue to lead as the largest category of issuer in the

#### Market Highlights and Commentary

ABCP market, particularly from Ireland and France. European ABCP outstandings rose slightly from the prior quarter, ending the third quarter at EUR 20.2 billion, up 4.1% from EUR 19.4 billion in 20'15.

# Major Regulatory, Legislative and Policy Initiatives

The plenary vote on the Report on Money Market Funds took place in the European Parliament on April 2015. Further legislative process is pending on the finalisation of the EU securitisation framework.

The European Securities and Markets Authority's (ESMA) consultation on complex debt instruments and structured deposits closed on 15 June 2015. The guidelines have not yet been published. AFME's position in relation to this consultation is that asset backed securities (ABS) should be out of scope.

On 10 July AFME submitted a response to Joint European supervisory authorities (ESAs) Second Consultation on draft regulatory technical standards (RTS) on risk-mitigation techniques. Joint ESAs' work on RTS has not been finalised yet.

The European Banking Authority (EBA) consultation on draft implementing technical standards (ITS) on the mapping of external credit assessment institutions' (ECAI) credit assessment for securitisation positions closed on 7 August 2015. The final ITS have not been adopted yet.

On 6 August 2015 the European Commission adopted the RTS on a clearing obligation for OTC interest rate derivative contracts to be cleared through a central counterparty (CCP). The RTS on risk mitigation techniques for OTC derivatives not cleared through a CCP are still to be developed by the EBA.

On 13 August 2015 AFME submitted a response to the EC European Market Infrastructure Regulation (EMIR) review in which the Commission asked for input on the implementation of and first experience with EMIR.

The Commission's proposal for new regulation, defining "Simple, Standard and Transparent securitisation" ("STS") was published on 30 Septem-

ber 2015, as part of the wider Capital Markets Union Action Plan, along with a proposal for a regulation introducing a revised regulatory framework for capital charges for credit institutions and investment firms originating, sponsoring or investing in STS. The Commission's proposals were followed by the finalisation of the European Council's General Approach on 1 December. The Council has moved with unprecedented speed and attention is now on the European Parliament, which is expected to start work on both regulations early in 2016. We understand that ESMA's work on disclosures will now await finalisation of the STS framework.

At the global level, following its final report on criteria for identifying Simple, Transparent and Comparable (STC) securitisations, on 10 November 2015 the Basel/IOSCO Task Force on Securitisation Markets (TFSM) released its consultation paper on capital treatment. The deadline for responses is 5 February 2016.

In the context of financial services regulation more broadly, on 30 September the Commission launched a Call for Evidence on the EU financial regulatory framework. This seeks to gather stakeholders' feedback on the cumulative impact of recently approved financial services regulations in the EU. AFME is preparing a cross-sector response, which is due by 31 January 2016.

ESMA published its technical advice on credit rating agency (CRA) market competition on 5 October 2015. The issue of mandatory rotation of CRAs has been postponed for further assessment in 3-5 years.

On 30 November 2015 the Commission proposed new prospectus rules. The Delegated Regulation will be now discussed in the European Parliament and the European Council.

The EBA published its final guidelines regarding limits on institutions' exposures to 'shadow banking entities' on 15 December 2015. Special purpose vehicles (SPVs) not covered by consolidated prudential supervision are included in the scope of the Guidelines.

On 17 December the EBA published its report to the European Commission on the implementation

# Market Highlights and Commentary

of the calibration and impact of the Net Stable Funding Ratio (NSFR) in Europe. The Basel Committee's Fundamental Review of the Trading Book (FRTB) work-stream is still in process.

#### **€ BILLIONS**

#### 1. Issuance

#### 1.1. European Historical Issuance

II. Europeun motorie					-0-41
	Q1	Q2	Q3	Q4	TOTAL
2001	20.5	43.2	22.7	66.2	152.6
2002	24.3	42.6	35.7	55.1	157.7
2003	43.3	51.9	39.7	82.4	217.3
2004	55.8	59.0	53.2	75.5	243.5
2005	47.8	94.4	41.5	143.3	327.0
2006	69.0	114.3	112.8	184.9	481.0
2007	151.9	166.8	95.1	179.9	593.6
2008	47.3	194.7	157.5	419.2	818.7
2009	131.0	83.8	113.2	95.8	423.8
2010	75.5	32.5	110.7	159.2	377.9
2011	115.2	67.1	57.1	136.5	375.9
2012	61.6	67.7	60.1	63.9	253.2
2013	32.8	52.9	38.4	56.4	180.5
2014	19.9	99.5	37.3	59.8	216.5
2015	34.9	50.1	56.3		141.3

#### 1.3. European Issuance by Collateral

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
ABS	9.5	18.0	10.7		38.3
CDO/CLO	3.2	5.0	2.5		10.8
CMBS	0.7	3.0	1.8		5.4
RMBS	16.6	19.6	35.7		71.9
SME	4.1	4.6	5.5		14.2
WBS/PFI	0.8	-	-		0.8
Total	34.9	50.1	56.3		141.3

#### 1.4. European Issuance by Retention

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL		
Placed	19.7	28.3	17.3		65.3		
Retained	15.2	21.8	38.9		76.0		
Total <sup>2</sup>	34.9	50.1	56.3		141.3		

#### 1.5. Australia Issuance by Collateral

or read turne localities by Collection						
	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL	
ABS	1.4	1.0	0.5		2.9	
RMBS	6.4	3.4	4.7		14.5	
CMBS	-	-	0.2			
Total	7.8	4.4	5.4		17.4	

#### 1.6. US Issuance by Collateral

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
ABS	55.3	54.1	33.0	2010.04	142.5
CDO	22.4	17.2	9.9		49.5
Agency MBS	267.6	335.5	325.8		929.0
Non-Agency CMBS	26.5	24.0	18.9		69.4
Non-Agency RMBS	24.9	16.7	8.0		49.6
Total	396.7	447.7	395.7		1,240.0

#### 1.2. US and Australia Historical Issuance

	US	AU
2001	2,308.4	15.5
2002	2,592.7	19.4
2003	2,914.5	24.9
2004	1,956.6	31.7
2005	2,650.6	31.5
2006	2,455.8	36.8
2007	2,080.5	34.3
2008	934.9	6.6
2009	1,385.3	9.7
2010	1,203.7	15.5
2011	1,056.6	20.4
2012	1,579.2	14.8
2013	1,515.1	22.4
2014	1,131.5	22.1
2015	1,240.0	17.4

:	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
	5.4	12.1	13.2	16.8	47.5
	3.1	3.1	4.3	4.3	14.8
	1.4	0.3	1.6	3.0	6.3
	6.5	65.4	15.5	23.4	110.8
	1.7	17.6	2.5	11.4	33.3
	1.8	1.0	0.2	0.8	3.7
	19.9	99.5	37.3	59.8	216.5

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
14.6	19.6	19.6	24.3	78.2
5.3	79.9	17.7	35.5	138.4
19.9	99.5	37.3	59.8	216.5

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
0.4	0.9	0.7	1.0	3.0
3.9	4.5	5.3	5.4	19.0
-	0.1	-	-	0.1
4.3	5.4	6.0	6.4	22.1

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
40.2	51.3	42.7	35.7	169.8
15.7	25.9	22.7	18.0	82.3
142.4	162.7	223.2	229.8	758.1
14.6	16.2	25.6	22.0	78.4
5.9	7.0	11.5	18.6	43.0
218.7	263.0	325.7	324.1	1,131.5

Sources: Bank of America Merrill Lynch, Bloomberg, Citigroup, Dealogic, Deutsche Bank, JP Morgan, Macquarie, Thomson Reuters, Unicredit, AFME, SIFMA

#### **€ BILLIONS**

1.7. Issuance by Country of Collateral

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Belgium	0.0	-	-		0.0
Denmark	-	-	-		0.0
France	1.3	3.3	0.7		5.2
Germany	3.2	7.6	25.5		36.3
Greece	-	-	-		0.0
Ireland	0.2	0.2	-		0.4
Italy	1.3	8.9	10.0		20.2
Netherlands	9.9	3.9	6.6		20.3
Portugal	1.6	0.8	0.6		3.1
Spain	3.0	10.6	2.0		15.5
UK	10.9	7.8	7.8		26.5
PanEurope	3.2	5.2	3.0		11.4
Other Europe	0.2	0.7	0.1		1.0
Multinational		1.2			1.2
European Total	34.9	50.1	56.3		141.3
Australia Total	7.8	4.4	5.4		17.5
US Total	396.7	447.7	395.7		1,240.0

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
-	4.1	-	-	4.1
-	-	-	0.0	0.0
-	45.0	0.4	5.2	50.6
3.4	5.1	6.8	3.1	18.3
-	-	0.2	-	0.2
-	-	-	2.1	2.1
1.1	8.7	4.9	4.6	19.2
6.0	11.8	3.0	4.4	25.2
1.6	0.4	0.9	-	2.9
-	3.9	7.7	15.7	27.2
4.8	16.7	8.3	19.4	49.1
3.1	3.3	4.4	4.6	15.4
-	0.6	0.8	0.5	1.9
-	-	-	0.2	0.2
19.9	99.5	37.3	59.8	216.5
4.3	5.4	6.0	6.4	22.1
218.7	263.0	325.7	324.1	1,131.5

# 1.8. Issuance by Collateral Type and Country of Collateral 2015:Q3

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Belgium	-	-	-	-	-	-	0.0
Denmark	-	-	-	-	-	-	0.0
France	0.7	-	-	-	-	-	0.7
Germany	3.0	-	-	20.5	2.0	-	25.5
Greece	-	-	-	-	-	-	0.0
Ireland	-	-	-	-	-	-	0.0
Italy	4.3	-	0.3	2.0	3.4	-	10.0
Netherlands	0.1	-	-	6.5	-	-	6.6
Portugal	0.6	-	-	-	-	-	0.6
Spain	1.5	-	-	0.5	-	-	2.0
UK	0.5	-	1.1	6.2	-	-	7.8
PanEurope	-	2.5	0.5	-	-	-	3.0
Other Europe	0.1	-	-	-	-	-	0.1
Multinational	-	-	-	-	-	-	0.0
European Total	10.7	2.5	1.8	35.7	5.5	0.0	56.3

				NON-	NON-	
			AGENCY	AGENCY	AGENCY	
	ABS	CDO	MBS	CMBS	RMBS	TOTAL
Australia Total	0.5	-	-	0.2	4.7	5.4
US Total	33.0	9.9	325.8	18.9	8.0	395.7

Sources: Bloomberg, Citigroup, Dealogic, Bank of America Merrill Lynch, Deutsche Bank, JP Morgan, Macquarie, Thomson Reuters, Unicredit, AFME, SIFMA

#### **€ BILLIONS**

#### 1.9. European Issuance by Rating

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
AAA	24.4	17.6	16.4		58.4
AA	1.7	11.6	24.5		37.8
Α	4.6	7.4	6.0		18.0
BBB & Below	2.1	4.3	1.9		8.3
Not Rated	2.1	9.2	7.5	7.5	
European Total <sup>2</sup>	34.9	50.1	56.3		141.3

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
9.9	66.4	16.1	22.6	115.0
1.8	4.6	1.8	5.3	13.6
3.2	11.1	13.4	18.3	46.0
2.6	3.0	1.9	6.0	13.4
2.4	14.4	4.1	7.6	28.5
19.9	99.5	37.3	59.8	216.5

#### 1.10. Australia Issuance by Rating

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL					
AAA	7.1	3.6	4.9		15.6					
AA	0.3	0.4	0.2		0.9					
Α	0.2	0.1	0.1		0.4					
BBB & Below	0.0	0.1	0.1		0.2					
Not Rated	0.2	0.2	0.1		0.5					
US Total	7.8	4.4	5.4		17.5					

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
4.0	4.5	5.5	5.9	20.0
0.1	0.6	0.1	0.1	0.9
0.1	0.0	0.2	0.0	0.4
0.0	0.1	0.0	0.1	0.2
0.1	0.2	0.1	0.3	0.6
4.3	5.4	6.0	6.4	22.1

#### 1.11. US Issuance by Rating

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
AAA	61.9	44.2	32.8		138.9
AA	6.2	4.7	4.1		15.0
Α	8.0	6.7	2.7		17.4
BBB & Below	12.3	8.9	4.0		25.2
Not Rated	40.6	47.5	26.3		114.4
Agency MBS	267.6	335.5	325.8		929.0
US Total	396.7	447.7	395.7		1240.0

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
50.8	53.8	50.6	51.3	206.5
5.7	6.6	6.0	5.7	24.1
3.9	6.4	5.5	7.4	23.1
5.6	8.8	8.3	6.8	29.5
10.4	24.8	32.0	23.1	90.3
142.4	162.7	223.2	229.8	758.1
218.7	263.0	325.7	324.1	1131.5

Sources: Bank of America Merrill Lynch, Bloomberg, Citigroup, Dealogic, Deutsche Bank, JP Morgan, Macquarie, Thomson Reuters, Unicredit, AFME, SIFMA

# 1.12. Securitisation Issuance by Deal Size 2015:Q2

INCLUDING RETAINED DEALS									
	EUR	OPE	Aust	ralia	US				
	# of Issues € Billions #		# of Issues	€ Billions	# of Issues	€ Billions			
Less than 0.01 Billion	0%	0%	N/A	N/A	0%	0%			
0.01-0.1 Billion	2%	0%	N/A N/A		4%	1%			
0.1-1.0 Billion	86%	84%	N/A	N/A	65%	39%			
More than 1.0 Billion	12%	16%	N/A	N/A	10%	12%			
Agency MBS	N/A N/A		N/A	N/A	20%	49%			
Total <sup>3</sup>	100%	100%	100%	100%	100%	100%			

#### 2015:Q3

	EXCLUDING RETAINED DEALS						INCLUDING RETAINED DEALS					
	EUROPE		Aust	ralia	U	S	EUR	EUROPE Australia		US	US	
	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions
Less than 0.01 Billion	0%	0%	0%	0%	0%	0%	0%	0%	N/A	N/A	0%	0%
0.01-0.1 Billion	0%	1%	0%	0%	2%	1%	0%	1%	N/A	N/A	3%	1%
0.1-1.0 Billion	12%	61%	56%	27%	55%	39%	12%	61%	N/A	N/A	56%	39%
More than 1.0 Billion	2%	39%	44%	73%	7%	8%	3%	38%	N/A	N/A	8%	9%
Agency MBS	N/A	N/A	N/A	N/A	19%	52%	N/A	N/A	N/A	N/A	19%	52%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sources: Dealogic, Macquarie

# 2. Balances Outstanding € BILLIONS

#### 2.1. European Outstandings by Collateral

ii zaropouri outoturiunigo by ooriutotur					
	2015:Q1	2015:Q2	2015:Q3	2015:Q4	
ABS	194.6	201.0	188.3		
CDO/CLO	108.5	108.1	102.1		
CMBS	82.9	82.9	81.6		
RMBS	812.5	791.9	786.8		
SME	100.1	97.0	95.8		
WBS/PFI	72.5	72.4	70.2		
Total	1,371.3	1,353.3	1,324.9		

2014:Q1	2014:Q2	2014:Q3	2014:Q4
193.1	188.0	193.7	198.9
130.5	121.1	121.2	118.7
95.7	87.3	85.5	86.0
849.8	869.6	866.7	855.7
104.3	104.3	104.4	106.9
73.2	74.0	73.7	73.9
1,446.5	1,444.3	1,445.1	1,440.0

#### 2.2. Australia Outstandings by Collateral

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
ABS	7.7	7.5	6.4	
CMBS	0.3	0.3	0.4	
RMBS	57.4	54.9	49.6	
Total	65.4	62.7	56.4	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
6.4	6.7	6.7	6.8
0.4	0.3	0.4	0.3
51.0	52.6	53.1	52.7
57.9	59.6	60.2	59.8

#### 2.3. US Outstandings by Collateral

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
ABS	1,283.2	1,266.4	1,245.8	
Agency MBS	5,609.3	5,449.7	5,499.5	
Non-Agency RMBS	892.1	840.8	806.6	
Non-Agency CMBS	589.9	565.9	551.3	
Total	8,374.4	8,122.8	8,103.3	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
931.8	935.0	1,052.2	1,118.1
4,296.5	4,329.6	4,721.7	4,966.6
768.6	727.7	786.3	803.2
452.1	447.5	497.0	520.8
6,449.1	6,439.8	7,057.3	7,408.6

Sources: Bloomberg (US & Europe), Fannie Mae (US), Federal Reserve (US), Freddie Mac (US), Ginnie Mae (US), Loan Performance (US), Dealogic (US), Macquarie (Australia), Thomson Reuters (US), AFME &SIFMA Estimates (US & Europe)

#### **€ BILLIONS**

# 2.4. Outstandings by Country of Collateral 2013 - 2014

	2014:Q1	2014:Q2	2014:Q3	2014:Q4
Austria	2.3	2.2	2.2	2.2
Belgium	80.3	77.2	76.6	74.5
Finland	1.0	0.9	0.8	1.2
France	32.9	68.8	69.3	72.0
Germany	73.0	70.1	74.0	71.4
Greece	26.3	25.7	25.1	25.1
Ireland	37.3	36.7	35.3	36.6
Italy	170.9	165.7	164.4	161.2
Netherlands	258.7	259.5	258.2	254.7
Portugal	37.3	35.8	35.8	35.0
Russia	1.2	1.1	0.9	0.5
Spain	168.7	162.5	167.6	176.3
Turkey	2.0	1.8	1.8	1.7
UK	414.4	405.5	402.2	399.8
Other	4.7	4.7	5.1	4.7
PanEurope	47.9	45.8	49.0	50.2
Multinational	74.7	68.1	65.1	61.5
European Total	1,433.7	1,432.1	1,433.3	1,428.5
Australia Total	57.9	59.6	60.2	59.8
US Total	6,422.2	6,414.9	7,031.1	7,380.6

2013:Q1	2013:Q2	2013:Q3	2013:Q4
2.1	2.1	2.1	2.3
88.3	86.7	85.2	81.4
0.3	0.2	0.2	1.1
42.2	42.7	37.8	38.2
85.8	85.6	78.2	78.5
33.4	30.3	29.3	27.6
47.1	46.4	44.0	38.5
200.2	192.8	189.4	182.3
277.7	279.1	281.6	263.8
40.2	39.6	39.5	38.4
1.8	1.6	1.6	1.3
200.2	186.4	181.6	183.7
2.0	1.8	1.6	2.2
478.4	463.3	447.5	439.5
4.7	4.6	4.7	5.2
57.6	54.1	52.4	51.6
106.4	96.9	89.9	83.3
1,668.6	1,614.2	1,566.4	1,518.9
69.2	60.3	59.8	56.3
6,849.6	6,749.6	6,494.9	6,431.7

#### 2015

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Austria	2.2	1.9	1.8	
Belgium	69.8	67.7	65.8	
Finland	1.1	1.0	1.0	
France	70.3	70.4	69.6	
Germany	70.7	67.9	88.2	
Greece	24.2	24.2	21.4	
Ireland	35.9	34.7	33.5	
Italy	156.3	157.5	153.1	
Netherlands	247.0	243.5	240.3	
Portugal	34.5	34.0	32.1	
Russia	0.5	0.4	0.4	
Spain	170.4	170.5	162.9	
Turkey	1.6	1.5	1.5	
UK	374.0	365.2	347.3	
Other	4.4	4.7	4.1	
PanEurope	52.0	54.2	54.1	
Multinational	56.5	53.8	47.9	
European Total	1,371.3	1,353.3	1,324.9	
Australia Total	65.4	62.7	56.4	
US Total	8,374.4	8,122.8	8,103.3	

Sources: Bloomberg (US & Europe), Fannie Mae (US), Federal Reserve (US), Freddie Mac (US), Ginnie Mae (US), Loan Performance (US), Dealogic (US), Macquarie (Australia), Thomson Reuters (US), AFME &SIFMA Estimates (US & Europe)

#### 2.5. European Outstandings by Moody's Investors Service Ratings

(as a percentage of total Moody's rated securitisations)

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	44.63%	45.48%	0.35%	
Aa/AA	23.14%	26.00%	2.02%	
A/A	17.61%	15.63%	1.25%	
Baa/BBB	8.01%	6.65%	1.38%	
Ba/BB	2.95%	2.13%	4.63%	
B/B	1.62%	2.04%	9.06%	
Caa/CCC	0.97%	1.02%	29.53%	
Ca/CC	0.75%	0.71%	5.50%	
C/C	0.33%	0.34%	46.27%	
Total	100.00%	100.00%	100.00%	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
45.56%	44.30%	44.79%	44.63%
7.59%	9.21%	9.88%	9.56%
25.35%	23.44%	26.33%	29.39%
12.95%	15.34%	11.52%	9.63%
3.91%	3.43%	3.58%	2.99%
1.37%	1.89%	1.62%	1.67%
1.72%	1.32%	1.22%	1.06%
0.93%	0.71%	0.70%	0.75%
0.62%	0.34%	0.35%	0.32%
100.00%	100.00%	100.01%	99.99%

#### 2.6. Australia Outstandings by Standard and Poor's Ratings

(as a percentage of total Moody's rated securitisations)

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	88.44%	87.80%	87.99%	
Aa/AA	4.92%	5.34%	5.20%	
A/A	2.63%	2.66%	2.51%	
Baa/BBB	0.79%	0.76%	0.74%	
Ba/BB	0.33%	0.32%	0.32%	
B/B	0.07%	0.08%	0.09%	
Caa/CCC	0.00%	0.00%	0.00%	
Ca/CC	0.00%	0.00%	0.00%	
C/C	0.02%	0.02%	0.02%	
D	0.00%	0.00%	0.00%	
NR	2.80%	3.02%	3.13%	
Total	100.00%	100.00%	100.00%	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
88.04%	87.58%	87.97%	88.17%
6.71%	6.92%	6.52%	5.45%
1.82%	1.82%	1.79%	2.38%
0.87%	0.87%	0.84%	0.82%
0.38%	0.37%	0.37%	0.35%
0.05%	0.06%	0.05%	0.07%
0.01%	0.01%	0.01%	0.00%
0.00%	0.00%	0.00%	0.00%
0.02%	0.02%	0.02%	0.02%
0.00%	0.00%	0.00%	0.00%
2.11%	2.34%	2.42%	2.73%
100.00%	100.00%	100.00%	100.00%

#### 2.7. US Outstandings by Moody's Investors Service Ratings

(as a percentage of total Moody's rated securitisations)

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	28.30%	28.67%	8.42%	
Aa/AA	4.61%	4.88%	27.45%	
A/A	6.20%	6.21%	8.44%	
Baa/BBB	7.65%	7.55%	5.65%	
Ba/BB	6.67%	6.55%	6.92%	
B/B	6.85%	6.79%	7.54%	
Caa/CCC	19.85%	19.62%	4.81%	
Ca/CC	11.22%	11.23%	2.08%	
C/C	8.64%	8.50%	28.70%	
Total	100.00%	100.00%	100.00%	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
27.41%	27.45%	27.51%	27.94%
6.02%	4.82%	4.89%	4.92%
7.20%	6.50%	6.33%	6.23%
6.24%	7.67%	7.73%	7.75%
5.93%	6.28%	6.45%	6.44%
6.75%	7.19%	7.08%	7.00%
20.34%	19.97%	19.97%	19.74%
10.50%	11.22%	11.30%	11.31%
9.62%	8.91%	8.75%	8.68%
100.00%	100.00%	100.00%	100.00%

Sources: Macquarie, Moody's Investors Service, Standard and Poor's

#### 2.8. Australian Outstandings by Vintage

or Australian Gatotal				
	2015:Q1	2015:Q2	2015:Q3	2015:Q4
2015	7.8	11.5	14.7	
2014	19.2	17.3	14.5	
2013	13.5	12.1	10.0	
2012	5.8	5.0	4.1	
2011	6.1	5.4	4.3	
2010	3.6	3.2	2.6	
2009	1.7	1.6	1.3	
2008	0.4	0.4	0.3	
2007	3.6	3.3	2.4	
2006	2.6	2.0	1.4	
2005	0.5	0.4	0.3	
2004	0.3	0.3	0.2	
2003	0.0	0.0	0.0	
2002	0.1	0.1	0.0	
2001	0.1	0.1	0.1	
2000	0.0	0.0	0.0	
Prior	0.0	0.0	0.0	
Total	65.4	62.7	56.4	

n	n	Europoon	Outstandings	hy Vintogo	
1	. Э.	ruropean	Ouisianomos	ov viillade	

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
2015	35.4	83.8	132.5	
2014	192.6	186.2	180.8	
2013	141.9	135.6	130.4	
2012	137.6	126.9	116.8	
2011	132.0	126.1	117.3	
2010	139.2	133.0	125.3	
2009	82.9	79.7	68.5	
2008	130.1	117.4	112.3	
2007	133.1	125.6	113.9	
2006	111.3	107.7	101.7	
2005	48.4	46.4	44.3	
2004	31.6	30.8	29.9	
2003	21.6	21.0	19.9	
2002	9.0	8.9	8.5	
2001	10.5	10.3	8.7	
2000	4.1	4.0	4.0	
Prior	10.2	10.1	10.1	
Total	1,371.3	1,353.3	1,324.9	

2014:Q1	2014:Q2	2014:Q3	2014:Q4
N/A	N/A	N/A	NΑ
4.3	9.5	14.7	19.7
17.1	16.3	15.3	13.9
7.9	7.4	6.8	6.0
8.4	7.8	7.1	6.3
4.8	4.6	4.2	3.8
2.8	2.4	2.2	1.8
0.6	0.5	0.5	0.4
5.3	5.1	4.3	3.9
4.4	4.2	3.5	2.8
1.4	1.2	1.0	0.7
0.4	0.4	0.3	0.3
0.0	0.0	0.0	0.0
0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
57.9	59.6	60.2	59.8

2014:Q1	2014:Q2	2014:Q3	2014:Q4
N/A	N/A	N/A	N/A
19.3	108.4	143.9	199.2
159.7	152.0	150.5	146.4
186.2	168.9	164.0	156.2
193.6	179.4	170.2	159.3
167.3	158.1	156.5	150.8
112.4	103.6	100.8	91.1
151.9	144.3	143.2	136.1
161.3	149.9	146.9	140.3
134.9	127.6	123.0	116.5
58.9	55.7	53.4	51.9
37.1	35.5	33.8	34.0
25.3	23.9	23.6	23.2
10.3	10.0	9.7	9.6
11.0	10.7	10.6	10.7
6.4	5.4	4.2	4.1
11.0	10.9	10.8	10.6
1,446.5	1,444.3	1,445.1	1,440.0

Sources: Bloomberg, Macquarie, AFME, SIFMA

#### **€ BILLIONS**

# 2.10. European Outstandings by Country and Collateral 2015:Q2

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Austria	0.2	-	0.0	1.6	-	-	1.9
Belgium	0.0	-	0.2	49.6	17.9	-	67.7
Finland	0.5	-	-	-	-	0.5	1.0
France	18.7	-	0.5	50.3	0.3	0.6	70.4
Germany	46.3	0.8	7.0	11.7	2.0	0.0	67.9
Greece	12.5	1.8	0.2	3.4	6.3	-	24.2
Ireland	0.0	0.1	0.2	34.5	-	-	34.7
Italy	48.4	1.9	9.3	77.0	20.5	0.3	157.5
Netherlands	4.0	0.6	1.7	229.5	7.7	-	243.5
Portugal	3.3	-	-	23.9	6.7	-	34.0
Russia	0.0	-	-	0.4	-	-	0.4
Spain	21.4	0.4	0.1	121.3	27.2	0.0	170.5
Turkey	1.5	-	-	-	-	-	1.5
UK	38.5	8.6	52.7	187.7	7.8	70.0	365.2
Other	3.9	0.3	-	0.6	-	-	4.7
PanEurope	1.2	44.1	8.0	0.2	0.6	0.2	54.2
Multinational	0.5	49.6	3.0	-	-	0.8	53.8
European Total	201.0	108.1	82.9	791.9	97.0	72.4	1353.3

#### 2015:Q3

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Austria	0.2	-	-	1.6	-	-	1.8
Belgium	0.0	-	0.2	47.9	17.7	-	65.8
Finland	0.5	-	-	-	-	0.5	1.0
France	18.1	-	0.5	50.1	0.3	0.5	69.6
Germany	44.9	0.4	6.5	31.8	4.4	0.0	88.2
Greece	9.8	1.8	0.2	3.3	6.3	-	21.4
Ireland	-	0.1	0.2	33.3	-	-	33.5
Italy	44.7	1.7	9.3	74.6	22.4	0.3	153.1
Netherlands	3.9	0.6	1.6	226.9	7.3	-	240.3
Portugal	3.5	-	-	21.9	6.6	-	32.1
Russia	0.0	-	-	0.4	-	-	0.4
Spain	20.2	0.4	0.1	119.5	22.7	0.0	162.9
Turkey	1.5	-	-	-	-	-	1.5
UK	36.0	8.5	52.4	174.6	7.6	68.2	347.3
Other	3.3	0.3	-	0.6	-	-	4.1
PanEurope	1.2	44.3	7.7	0.2	0.5	0.2	54.1
Multinational	0.5	44.0	2.9	-	-	0.5	47.9
European Total	188.3	102.1	81.6	786.8	95.8	70.2	1324.9

Sources: Bloomberg, AFME,SIFMA

# Credit Quality - Rating Changes

# 3. Credit Quality – Rating Changes UPGRADES/DOWNGRADES BY COUNTRY

#### 3.1. DBRS

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
France	0/0	0/0	0/0		0/0
Germany	1/0	0/0	5/0		6/0
Italy	3/0	5/1	8/0		16/1
Netherlands	0/0	0/0	0/0		0/0
Spain	0/3	20/0	1/7		21/10
UK	0/0	1/1	0/0		1/1
Multinational	0/3	0/7	2/5		2/15
European Total	4/6	26/9	16/12		46/27
US	391/18	485/36	12/4		888/58

#### **TOTAL** 1/0 0/0 1/0 4/0 3/2 1/0 10/2 3/0 0/0 8/1 0/0 0/0 0/0 0/0 20/1 0/0 3/0 23/4 4/0 0/0 0/0 4/0 0/0 1/0 0/0 5/2 5/3 34/4 8/2 4/0 51/9 177/16 264/25 549/64 30/13 1020/118

#### 3.2. Fitch Ratings

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
France	0/0	0/2	0/0		0/2
Germany	19/10	3/6	8/12		30/28
Italy	2/7	5/10	9/7		16/24
Netherlands	2/3	3/3	2/3		7/9
Spain	11/24	35/6	24/17		70/47
UK	34/17	76/28	102/8		212/53
Multinational	0/0	0/0	0/0		0/0
European Total	68/62	127/67	167/69		362/198
US	330/602	365/109	364/690		1059/1401

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
2/6	3/0	0/4	2/3	7/13
11/23	7/15	19/4	11/8	48/50
7/6	1/9	5/6	11/9	24/30
0/0	0/4	9/17	7/4	16/25
14/12	136/26	52/12	37/17	239/67
33/36	90/33	61/17	69/22	253/108
0/0	0/0	2/0	0/1	2/1
67/84	242/139	198/67	157/90	664/380
569/1353	528/612	210/396	1822/909	3129/3270

#### 3.3. Moody's Investors Service

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
France	1/2	0/0	0/0		1/2
Germany	4/3	1/2	6/4		11/9
Italy	124/6	69/0	7/2		200/8
Netherlands	3/7	8/0	30/0		41/7
Spain	420/7	0/0	257/7		677/14
UK	12/12	223/1	59/12		294/25
Multinational	107/7	86/10	87/2		280/19
European Total	671/44	387/13	446/27		1504/84
US	1258/440	1744/404	1183/261		4185/1105

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
0/0	0/0	0/0	0/0	0/0
1/7	0/1	4/13	0/7	5/28
0/3	1/3	2/0	0/0	3/6
0/1	0/10	0/1	0/0	0/12
63/8	9/1	158/17	174/4	404/30
124/58	30/32	63/39	34/53	251/182
196/29	174/43	149/8	163/7	682/87
384/106	214/90	376/78	371/71	1345/345
1172/434	1960/441	1886/444	1036/318	6054/1637

#### 3.4. Standard & Poor's

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
France	2/2	1/1	0/1		3/4
Germany	2/2	2/8	4/7		8/17
Italy	9/46	0/4	3/0		12/50
Netherlands	0/0	1/0	0/0		1/0
Spain	15/102	0/0	0/0		15/102
UK	31/18	64/45	28/339		123/402
Multinational	68/37	115/24	116/23		299/84
European Total	127/207	183/82	151/370		461/659
US	403/480	290/726	738/723		1431/1929

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
0/3	2/3	1/0	0/0	3/6
11/1	7/24	0/12	3/8	21/45
0/11	2/5	6/5	6/164	14/185
0/2	3/0	5/17	4/3	12/22
2/22	57/15	5/11	8/74	72/122
29/34	105/18	28/24	43/21	205/97
67/53	140/66	150/55	92/37	449/211
109/126	316/131	195/124	156/307	776/688
466/743	526/878	528/553	467/511	1987/2685

Sources: DBRS, Fitch Ratings, Moody's Investors Service, Standard & Poor's

# Credit Quality – Rating Changes

#### UPGRADES/DOWNGRADES BY COLLATERAL

#### 3.5. DBRS - Europe

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	1/0	4/0	6/0		11/0
CDO	3/1	18/0	1/1		22/2
CMBS	0/2	1/8	0/5		1/15
Credit Card	0/0	0/0	6/0		6/0
RMBS (prime)	0/3	0/0	3/5		3/8
RMBS (non-prime)	0/0	0/1	0/1		0/2
Other ABS	0/0	3/0	0/0		3/0
Total	4/6	26/9	16/12		46/27

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
2/0	4/0	5/0	1/0	12/0
3/2	14/0	2/0	3/0	22/2
0/0	1/0	0/0	0/0	1/0
0/0	0/0	0/0	0/0	0/0
0/1	2/3	0/0	0/0	2/4
0/0	3/1	0/0	0/0	3/1
0/0	10/0	1/2	0/0	11/2
5/3	34/4	8/2	4/0	51/9

#### 3.6. Fitch Ratings - Europe

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	2/0	2/0	6/0		10/0
Credit Card	0/0	2/0	0/0		2/0
Other ABS	5/3	7/4	5/5		17/12
CDO	15/4	33/16	35/8		83/26
CMBS	11/18	1/26	2/16		14/60
RMBS (prime)	18/27	82/14	46/40		146/81
RMBS (non-conforming)	17/10	0/7	73/0		90/17
Total	68/62	127/67	167/69		362/198

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
0/0	15/0	4/0	3/0	22/0
0/0	0/0	0/0	0/0	0/0
12/5	50/47	1/5	13/5	76/62
15/28	67/15	26/7	17/13	125/63
13/29	3/36	13/21	4/19	33/105
15/22	103/23	102/28	58/45	278/118
12/0	4/18	52/6	62/8	130/32
67/84	242/139	198/67	157/90	664/380

#### 3.7. Moody's Investors Service - Europe

- moday o mitodolo odi vico - Laropo							
	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL		
Auto	17/0	2/0	2/0		21/0		
CDO	102/5	85/8	87/0		198/13		
CMBS	7/15	2/2	12/19		21/36		
Credit Card	0/0	1/0	0/0		1/0		
RMBS (prime)	595/43	151/18	335/19		1081/80		
RMBS (non-conforming)	38/9	165/1	65/1		268/11		
Total	759/72	406/29	501/39		1666/140		

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
7/0	1/0	12/0	0/0	20/0
196/29	173/38	148/8	162/7	679/82
2/8	3/22	6/43	8/15	19/88
0/0	0/0	5/0	0/0	5/0
155/41	24/21	214/29	226/38	619/129
36/28	25/9	65/1	28/21	154/59
396/106	226/90	450/81	424/81	1496/358

#### 3.8. Standard & Poor's – Europe

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	2/0	2/0	1/0		5/0
CDO	84/37	139/25	140/18		363/80
CMBS	6/32	3/27	2/19		11/78
Credit Card	0/0	0/0	0/1		0/1
RMBS (prime)	24/138	8/8	6/143		38/289
RMBS (non-conforming)	11/0	31/22	2/189		44/211
Total	127/207	183/82	151/370		461/659

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
8/1	7/0	0/0	3/5	18/6
70/44	196/72	166/40	107/32	539/188
11/38	15/38	2/54	6/62	34/192
0/0	0/0	0/0	0/0	0/0
0/36	51/21	17/18	14/204	82/279
20/7	47/0	10/12	26/4	103/23
109/126	316/131	195/124	156/307	776/688

# Credit Quality – Rating Changes

#### 3.9. DBRS - US

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	22/0	21/0	0/1		43/1
CDO	4/0	2/0	0/0		6/0
CMBS	7/4	14/9	12/3		33/16
Credit Card	0/0	0/0	0/0		0/0
RMBS	346/14	446/26	0/0		792/40
Other ABS	12/0	2/1	0/0		14/1
Total	391/18	485/36	12/4		888/58

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
6/1	15/0	0/0	11/0	32/1
8/0	0/1	11/0	3/6	22/7
0/6	12/14	7/17	12/7	31/44
0/0	0/0	0/0	0/0	0/0
143/9	236/9	531/47	0/0	910/65
20/0	1/1	0/0	4/0	25/1
177/16	264/25	549/64	30/13	1020/118

#### 3.10. Fitch Ratings - US

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	0/0	0/0	1/0		1/0
Credit Card	0/0	0/0	0/0		0/0
Other ABS	25/3	51/5	50/12		126/20
CDO	34/6	58/18	49/10		141/34
CMBS	159/97	114/64	65/56		338.217
RMBS (prime)	4/171	0/0	180/500		184/671
RMBS (subprime)	20/90	3/1	0/37		23/128
Other RMBS	88/235	139/21	19/75		246/331
Total	330/602	365/109	364/690		1059/1401

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
1/0	0/0	0/0	0/0	1/0
0/0	3/0	0/0	12/0	15/0
65/10	66/25	47/57	39/2	217/94
23/29	55/37	76/14	40/6	194/86
111/122	146/121	39/66	46/88	342/397
120/1,014	3/117	0/143	211/686	334/1960
18/50	156/48	12/24	1,305/23	1491/145
231/128	99/264	36/92	169/104	535/588
569/1,353	528/612	210/396	1,822/909	3011/3270

#### 3.11. Moody's Investors Service - US

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	95/0	36/0	78/0		209/0
CDO	273/5	388/2	249/2		910/9
CMBS	226/61	246/70	143/53		615/184
Credit Card	0/0	17/0	0/0		17/0
RMBS	664/374	1057/332	713/206		2434/912
Total	1258/440	1744/404	1183/261		4185/1105

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
84/0	14/0	113/0	40/0	251/0
425/13	465/10	589/13	342/1	1821/37
182/112	303/112	283/106	187/80	955/410
0/0	0/0	23/0	17/0	40/0
481/309	1178/319	878/325	450/237	2987/1190
1172/434	1960/441	1886/444	1036/318	6054/1637

#### 3.12. Standard & Poor's - US

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Auto	5/0	54/0	87/0		146/0
CDO	296/11	136/24	176/12		608/47
CMBS	28/19	36/72	76/52		140/143
Credit Card	0/0	0/0	0/0		0/0
RMBS (prime)	37/332	19/324	240/458		296/1114
RMBS (subprime)	37/118	45/306	159/201		241/625
Total	403/480	290/726	738/723		1431/1929
•					

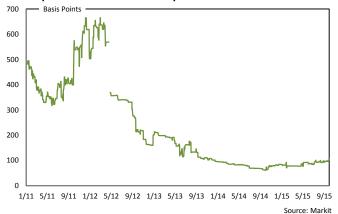
2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
17/0	38/0	13/0	28/0	96/0
263/63	396/69	415/35	289/25	1363/192
112/92	58/68	55/40	73/46	298/246
0/1	1/1	0/0	12/2	13/4
8/354	23/547	32/325	31/281	94/1507
66/233	10/193	13/153	34/157	123/736
466/743	526/878	528/553	467/511	1987/2685

Sources: DBRS, Fitch Ratings, Moody's Investors Service, Standard & Poor's

# **CMBS** Spreads

#### 4. CMBS Spreads

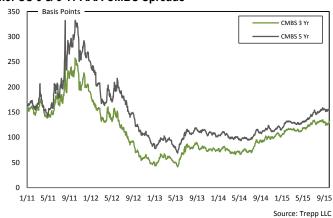
#### 4.1. European 3-5 Yr AAA CMBS Spreads



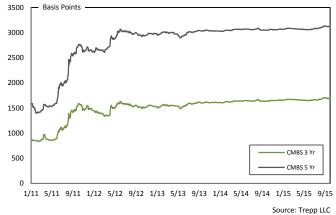
#### 4.2. European 3-5 Yr BBB CMBS Spreads



#### 4.3. US 3 & 5 Yr AAA CMBS Spreads



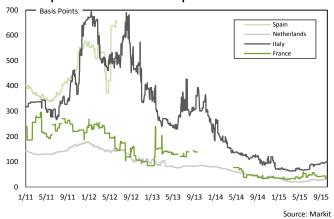
#### 4.4. US 3 & 5 Yr BBB CMBS Spreads



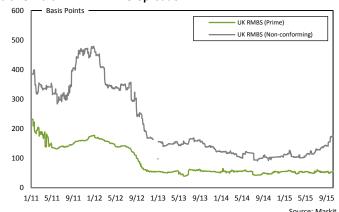
# **RMBS Spreads**

#### 5. RMBS Spreads

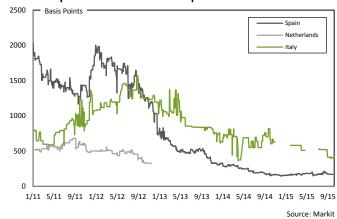
#### 5.1. European 3-5 Yr AAA RMBS Spreads



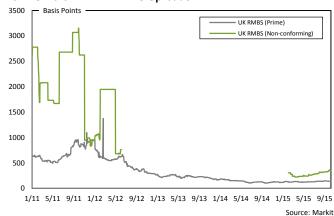
#### 5.3. UK 3-5 Yr AAA RMBS Spreads



#### 5.2. European 3-5 Yr BBB RMBS Spreads



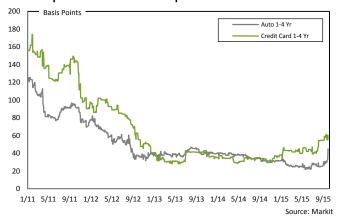
#### 5.4. UK 3-5 Yr BBB RMBS Spreads



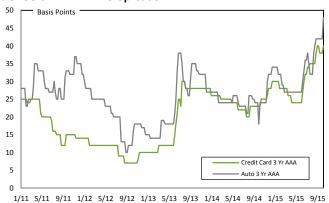
# **ABS Spreads**

#### 6. ABS Spreads

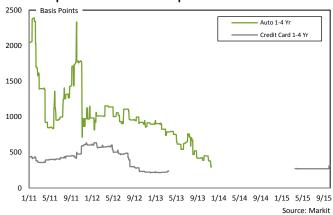
#### 6.1. European 1-4 Yr AAA ABS Spreads



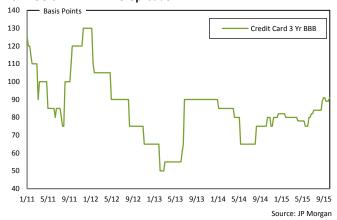
#### 6.3. US 3 Yr AAA ABS Spreads



#### 6.2. European 1-4 Yr BBB ABS Spreads



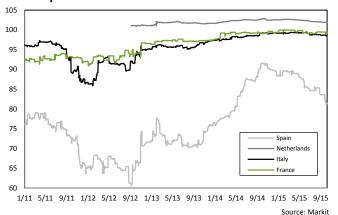
#### 6.4. US 3-Yr BBB ABS Spreads



#### **RMBS** Prices

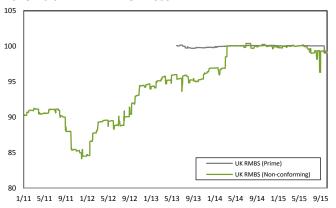
#### 7. RMBS Prices

#### 7.1. European 3-5 Yr AAA RMBS Prices



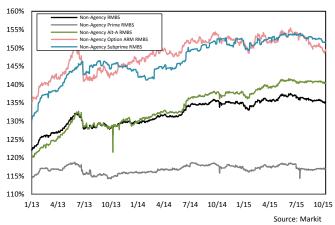
- Spanish AAA RMBS provided: IM Pastor 3, Fondo de Titulizacion Hipotecaria, Class A, Series 3. ISIN# ES0347862007. EUR-denominated.
- 2. Italian AAA RMBS provided: Vela Home S.r.l. 3, Class A, Series 3. ISIN# IT0003933998. EUR-denominated.
- French AAA RMBS provided: FCC Loggias Compartment 2003, Class A, Series 1. ISIN# FR0010029231. EUR-denominated.
- Dutch AAA RMBS provided: Storm 2012-IV BV, Class A2, Series 4. ISIN# XS0815105472. EUR-denominated.

#### 7.3. UK 3-5 Yr AAA RMBS Prices

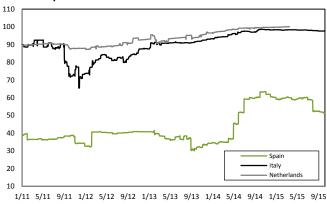


- UK AAA prime RMBS provided: Permanent Financing (No. 9) PLC, Class A3, Series 2009-1. ISIN# XS0454744458. EUR-denominated.
- UK AAA non-conforming RMBS provided: First Flexible No. 4 PLC, Class A, Series 4. ISIN#XS0132692384. GBP-denominated.

#### 7.5. iBoxx US RMBS Prices

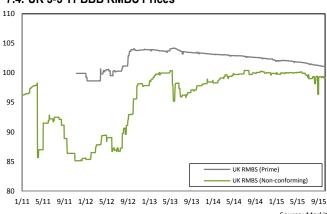


#### 7.2. European 3-5 Yr BBB RMBS Prices



- Spanish BBB RMBS provided: Hipocat 8, Fondo de Titulizacion Activos, Class D, Series 1: ISIN# ES0345784047. EUR-denominated.
- Dutch BBB RMBS provided: Holland Mortgage-Backed Securities (HERMES) X B.V., Class C, Series 10. ISIN# XS0228806831. EURdenominated.
- 3. Italian BBB RMBS provided: Vela Home S.r.l. 4, Class A2, Series 4, ISIN# IT0004102007. EUR-denominated.

#### 7.4. UK 3-5 Yr BBB RMBS Prices



- UK BBB prime RMBS provided: Permanent Financing PLC, Class 2A, Series 2011-2, ISIN# XS0700016750, GBP-denominated,
- UK BBB subprime RMBS provided: Leek Finance Number Seventeen Plc, Class Cc, Series 1. ISIN# XS0249478073. EUR-denominated.

#### **CMBS** and ABS Prices

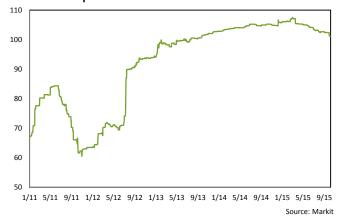
#### 8. CMBS and ABS Prices

#### 8.1. 1 Pan-European 3-5 Yr AAA CMBS Prices



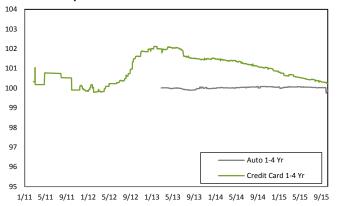
 Pan-European AAA CMBS provided: German Residential Funding, Class A, Series 2013-1. ISIN# XS0944452563. EUR-denominated

#### 8.2. Pan-European 3-5 Yr BBB CMBS Prices



 Pan-European BBB CMBS provided: German Residential Funding, Class D, Series 2013-1. ISIN# XS0944454858. EUR-denominated.

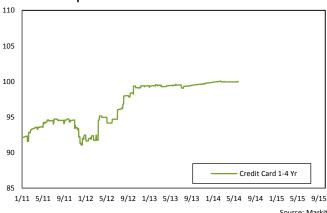
#### 8.3. Pan-European 1-4 Yr AAA ABS Prices



- Pan-European AAA Auto ABS provided: Driver Three GmbH, Class A, Series 3. ISIN# XS0270108573. EUR-denominated.
- Pan-European AAA Credit Card ABS provided: Chester Asset Receivables DGS 2004-1, Class A, Series UK2004-1. ISIN# XS0188611783. GBP-denominated.

#### 8.4. Pan-European 1-4 Yr BBB ABS Prices

GBP-denominated.

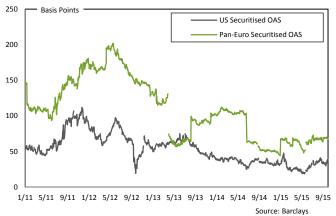


 Pan-European BBB Credit Card ABS provided: Chester Asset Receivables DGS 2004-1, Class C, Series UK2004-1. ISIN# XS0188612245.

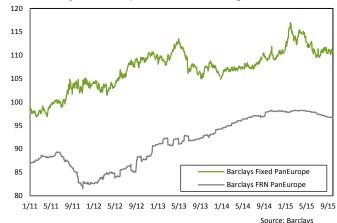
#### **Indices Data**

#### 9. Indices Data

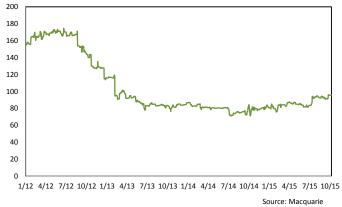
#### 9.1. Securitised Index Option Adjusted Spreads



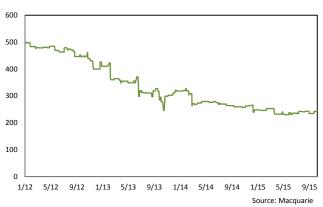
#### 9.2. Barclays PanEurope Fixed and Floating Prices



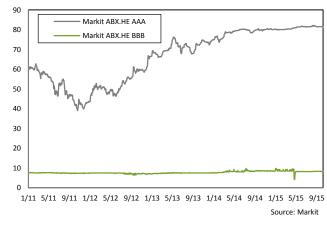
#### 9.3. Australia AAA



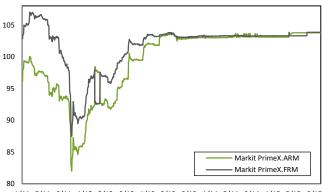
#### 9.4. Australia AA



#### 9.5. ABX.HE and CMBX Prices



#### 9.6. PrimeX.ARM and FRM Prices



1/11 5/11 9/11 1/12 5/12 9/12 1/13 5/13 9/13 1/14 5/14 9/14 1/15 5/15 9/15 Source: Mark

# Indices Data

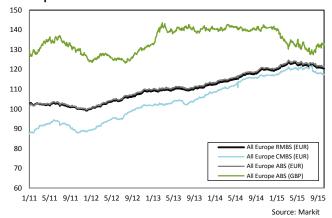
#### 9.7. CMBX 6 AAA Prices



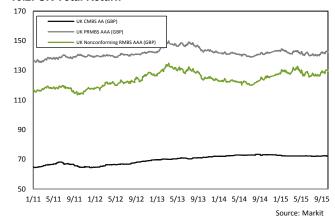
#### **Total Return Data**

#### 10. Total Return Benchmark Data

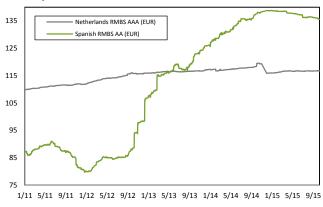
#### 10.1. European Total Return



#### 10.2. UK Total Return



#### 10.3. Europe ex UK RMBS AAA



# **Asset Backed Commercial Paper**

# 11. Asset-Backed Commercial Paper € BILLIONS

11.1. European ABCP Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL
2005	44.9	52.4	51.2	46.6	195.1
2006	61.6	65.8	76.1	84.7	288.2
2007	111.0	108.5	100.9	129.9	450.2
2008	75.0	66.8	73.8	86.2	301.8
2009	46.1	39.9	39.0	32.1	157.2
2010	32.1	35.7	38.8	38.8	145.4
2011	35.4	38.6	56.7	100.0	230.7
2012	117.0	106.1	80.3	53.8	357.2
2013	45.4	50.2	54.0	38.1	187.7
2014	53.9	62.6	68.7	81.8	267.2
2015	82.3	102.9			185.1

11.2. European ABCP Issuance by Nationality of Issuer

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
France	31.3	49.4			80.8
Germany	4.1	5.0			9.1
Ireland	44.0	46.1			90.1
Italy					0.0
Luxembourg	2.9	2.3			5.2
Netherlands					0.0
Spain					0.0
UK					0.0
Total	82.3	102.9			185.1

11.3. European ABCP Issuance by Programme Type

ioi =aiiopoaii i = oi iooaaiioo ay i iogiaiiiiio iypo						
	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL	
Hybrid		3.4			3.4	
SIVs					0.0	
Single-Seller Conduits					0.0	
Multi-Seller Conduits	63.8	83.5			147.3	
Unspecified	18.5	15.9			34.4	
Total	82.3	102.9			185.1	

11.4. ABCP Outstandings by Nationality of Issuer

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
France	6.1	6.8		
Germany	1.0	1.0		
Ireland	10.7	10.9		
Italy				
Luxembourg	1.0	8.0		
Netherlands				
Spain				
UK				
European Total	18.8	19.4		
US Total	218.1	190.6	205.3	

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
17.8	25.0	23.0	26.8	92.6
4.8	5.1	7.4	4.7	22.0
29.2	30.2	35.7	48.7	143.7
				0.0
2.1	2.3	2.6	1.7	8.8
				0.0
				0.0
				0.0
53.9	62.6	68.7	81.8	267.2

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
				N/A
				0.0
				0.0
38.8	47.3	55.9	65.9	207.8
15.2	15.3	12.9	16.0	59.4
53.9	62.6	68.7	81.8	267.2

2014:Q1	2014:Q2	2014:Q3	2014:Q4
5.3	5.7	4.9	6.8
0.6	0.7	0.7	0.9
8.0	8.2	8.7	9.5
0.8	1.0	0.7	0.8
14.6	15.7	15.0	18.0
152.2	158.3	169.2	193.9

Sources: Dealogic, Moody's Investors Service

# **Asset Backed Commercial Paper**

#### **€ BILLIONS**

#### 11.5. European ABCP Outstandings by Programme Type

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Hybrid		1.7		
SIVs				
Single-Seller				
Multi-Seller	13.1	13.9		
Unspecified	5.7	3.8		
Total	18.8	19.4		

#### 11.6. US ABCP Outstandings by Programme Type

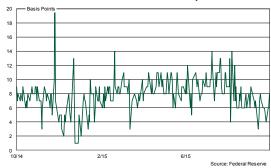
The second secon							
	2015:Q1	2015:Q2	2015:Q3	2015:Q4			
Loan-Backed							
SIVs							
Single-Seller	6.1	7.7	6.0				
Multi-Seller	157.0	140.8	155.9				
Other	55.0	42.1	43.4				
Total	218.1	190.6	205.3				

# 2014:Q1 2014:Q2 2014:Q3 2014:Q4 11.2 11.9 11.2 13.4 3.4 3.8 3.8 4.6 14.6 15.7 15.0 18.0

2014:Q1	2014:Q2	2014:Q3	2014:Q4
21.6	18.2	19.4	18.6
105.6	113.4	120.8	139.2
25.0	26.7	29.1	36.0
152.2	158.3	169.2	193.8

Sources: Dealogic, Moody's Investors Service

#### 11.7. US ABCP to AA Non-financial CP Spread



# **Global Comparative Data**

# 12. Global Comparative Data € BILLIONS

#### 12.1. Global Securitisation Issuance

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
US	119.6	121.3	94.7		335.5
Europe	15.6	23.6	14.8		54.0
Asia	26.3	24.3	27.9		78.6
Total	161.5	169.2	137.4		468.1

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
115.4	94.3	107.5	92.3	409.4
10.7	15.2	14.4	20.2	60.4
17.5	17.0	24.0	34.5	93.1
143.6	126.5	145.9	147.0	562.9

#### 12.2. Global Corporate Bond Issuance

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
US	235.1	234.0	174.5		643.6
Europe	198.3	137.2	96.2		431.7
Asia	157.4	220.8	197.1		575.3
Total	590.8	592.0	467.9		1650.7

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
144.7	138.1	114.1	150.5	547.4
189.1	166.1	110.9	114.1	580.1
124.0	203.6	201.3	162.0	690.8
457.7	507.8	426.2	426.6	1818.3

#### 12.3. Global Government Bond Issuance

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
US	98.6	97.7	82.7		279.0
Europe	195.9	95.2	89.9		380.9
Asia	40.5	35.7	37.7		113.9
Total	335.0	228.6	210.2		773.8

2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
320.5	614.6	588.9	861.1	600.6
523.4	532.6	456.5	457.3	577.1
176.7	229.4	165.9	182.2	141.4
1020.6	1376.6	1211.3	1500.6	1319.1

Source: Dealogic

# Summary of the Methodologies Adopted for this Report

#### 1. Issuance

# 1.1. – 1.2. European, Australian, and US Historical Issuance

The tables covering historical issuance in Europe and the US are denominated in EUR billions. Historical issuance volumes are calculated by adding all transactions in different asset classes including, among others, asset-backed securities (ABS). collateralised debt obligaobligations tions/collateralised loan (CDOs/CLOs), commercial mortgage-backed securities (CMBS), and residential mortgage-back securities (RMBS). Please note that numbers may not add due to independent rounding and that historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data sources after the prior period cut-off dates.

Australian data are contributed by Macquarie.

#### 1.3. -1.6. Issuance by Collateral

The European issuance volumes are determined based on the review of several data sources: Bloomberg, JP Morgan, Thomson Reuters, and UniCredit starting from Q1 2009; and Deutsche Bank starting from Q1 2010; Citigroup from Q2 2010; and Dealogic from Q1 2011. In prior quarters our sources were Bloomberg, JP Morgan, Merrill Lynch, RBS, and Thomson Reuters. RMBS, CMBS and ABS are defined as European by having underlying assets located in a European country. European securities included in the calculation are the ones for which there is a specific match in terms of size, name, country of collateral and collateral type from at least two sources. Securities that fail to meet these criteria are excluded. With respect to CDOs/CLOs, securities are designated as European if they are issued in any European currency, regardless of their country of collateral. A substantial percentage of CDOs/CLOs are backed by multijurisdictional collateral. Historical CDO/CLO issuance totals have been revised due to periodic updates of the sector.

European ABS issuance includes auto, credit card, leases, loans, receivables and other.

European whole business securitisation ("WBS") are securitisations where cashflows derive from the whole operating revenues generated by an entire business or segmented part of a larger

business. Certain WBS deals may be bucketed in the ABS or CMBS class based on deal specifics. As of 2013 Q4, certain public finance initaitves ("PFI") hav been moved from ABS to WBS and the category renamed "PFI/WBS".

Placed and retained European issuance collateral are sourced from AFME and/or SIFMA dealer member research, Dealogic, Bloomberg, and Thomson Reuters. Placed issuance includes all tranches placed in the public market, private placements, and preplacements. Partial issuance of a tranche is considered to be placed if half or more by euro amount of the tranche is reported placed. Placed and retained issuance will not retroactively consider securities originally issued retained and then placed in the marketplace, and are estimates.

The US non-agency RMBS, CMBS, ABS and CDO/CLO issuance data sources are Dealogic and Thomson Reuters. Agency mortgage-backed securities (MBS) are defined as securities issued by Fannie Mae, Freddie Mac, and Ginnie Mae and are acquired from company statements. US issuance data are generally based on the sum of securities with US collateral; agency issuance numbers do not include securitisations of existing agency securities. US CDO/CLO data are defined as USD-denominated CDOs/CLOs regardless of the country of collateral.

Australian securitisation volumes are contributed by Macquarie.

The US and Australia issuance data are converted to Euros based on the exchange rate at each quarter-end indicated below.

Quarter	USD to EUR	AUD to EUR
Q1 2012	0.7495	0.7753
Q2 2012	0.7899	0.8084
Q3 2012	0.7777	0.8071
Q4 2012	0.7580	0.7879
Q1 2013	0.7802	0.8128
Q2 2013	0.7687	0.7025
Q3 2013	0.7393	0.6889
Q4 2013	0.7277	0.6488
Q1 2014	0.7263	0.6728
Q2 2014	0.7305	0.6889
Q3 2014	0.7917	0.6925
Q4 2014	0.8226	0.6753
Q1 2015	0.9318	0.7088
Q2 2015	0.8979	0.6917
Q3 2015	0.8947	0.6278

These same conversion rates, sourced from Bloomberg, are used on all US issuance and outstanding volume data.

US ABS issuance includes auto, credit card, home equity, student loan, equipment leases, manufactured housing, and other. Historical ABS issuance totals have been revised due to periodic updates of the sector.

US CDO issuance numbers only include USdenominated issuance regardless of the country of collateral and may include European transactions which are denominated in US dollars. Historical CDO issuance totals have been revised due to periodic updates of the sector.

#### 1.7. Issuance by Country of Collateral

The tables covering issuance in the US and Europe are presented in EUR billions. For Europe the information is segmented by country of collateral.

The European issuance is segmented by country to the extent that a determination can be made. Securities with the underlying collateral originating from more than one jurisdiction are categorised as Multinational. Almost all CDOs/CLOs are classified under this Multinational group due to the complexity involved in identifying origin of collateral for each specific tranche. The European issuance volumes are determined based on the review of multiple data sources: Deutsche Bank and Bank of America-Merrill Lynch as of Q1 2010, Bloomberg, JP Morgan, Thomson Reuters and UniCredit starting from Q1 2009; and RBS starting from Q3 2009. In prior quarters the sources were Bloomberg, JP Morgan, Thomson Reuters and Merrill Lynch.

US CDO/CLO data are defined as USD-denominated issues regardless of country of collateral.

Other includes countries with outstanding securities that are too small to be displayed, such as Georgia, Iceland, Ukraine, Swit-zerland, Sweden, and Hungary.

PanEurope has been pulled out of the Multinational parent category and will be retroactively displayed for Euro-pean outstandings.

Multinational includes all deals in which assets originate from a variety of jurisdictions. This includes the majority of CDOs/CLOs denominated in a European currency.

Australian data are contributed by Macquarie.

# 1.8. Issuance by Collateral Type and Country of Collateral

Issuance information is further specified by country of collateral for European issuance only and by asset class. CDO/CLO classification is the same as above.

#### 1.9. - 1.11. Issuance by Rating

Issuance is presented by credit rating classification (AAA; AA; A; BBB and below; and Not Rated) on a quarterly basis. The credit rating assigned is the lowest of the ratings provided by Fitch Ratings, Moody's Investors Service and/or Standard & Poor's. These ratings are intended to represent their corresponding equivalent at each agency; e.g., an AAA rating is equal to an Aaa Moody's rating, AA equal to Aa1, etc. Securities are classified 'Not Rated' if none of the credit rating agencies have provided an opinion on the underlying credit quality of a particular tranche, or if the ratings are unknown. US agency MBS issues are generally not rated and therefore grouped separately under Agency MBS.

Australian securitisation data are contributed by Macquarie.

#### 1.12. Issuance by Deal Size

European and US securitisation issuance volume is segmented by transaction size based on data provided by Dealogic. The European data covers all asset classes and EUR-denominated CDOs/CLOs. US non-Agency data includes ABS, non-agency CMBS and RMBS, and USD-denominated CDOs/CLOs. US agency MBS, which includes agency CMBS and RMBS, is shown separately.

All data, except for CDOs/CLOs, are included according to the country of collateral. The number of issues refers to the number of deals, not the number of tranches within each deal.

Dealogic data for retained deals are based on available information from both European and US dealers' syndicate desks. Further statistics on retained deals are added based on intelligence from other market participants such as regulatory bodies and newswires across Europe.

Australian securitisation issuance volumes are contributed by Macquarie.

#### 2. Balances Outstanding

#### 2.1. - 2.3. Outstandings by Collateral

The outstanding volumes are reported by asset class. Subtotals may not add to totals due to independent rounding and historical or prior period numbers are continuously revised to reflect

changes in classification, refined selection methodology, or information submitted to our data sources after the prior period cut-off dates. For Europe, balances outstanding are calculated by the principal balance outstanding on structured product transactions including public, private, rated, unrated, listed and unlisted securities provided by Bloomberg, Balances outstanding are determined by multiplying eligible securities by their pool factor for the quarter and sorted ac-Tranches that are cordingly. non-EURdenominated are converted to EUR by Bloomberg based on the exchange rate at the time of the pricing date (as specified by the lead manager/arranger), or, if missing, the issue date as specified in each security's original offering documentation. Securities included in the calculations, except for CDOs/CLOs, have collateral originated from at least one European country to the extent that a determination can be made. However, for ABS and MBS securities with collateral originated in multiple countries, or where the origin of the underlying collateral is undefined, the following selection criteria apply: securities are considered eligible as European only if they are denominated in a European currency, as defined below, and the country of issuer (considered to be the country in which the issuing SPV is incorporated) is within Europe. In certain limited cases, the Channel Islands and the Cayman Islands are considered eligible as European jurisdictions for ABS and MBS products if underlying collateral is derived from a variety of jurisdictions and the original currency of issue is EUR only.

For our selection criteria, European currencies include the euro (EUR) and all predecessor currencies, as well as the Turkish lira (TRY), the Danish kroner (DKK), the Swedish krona (SEK), the Swiss franc (CHF), the Polish zloty (PLN), the British pound (GBP), and the Russian ruble (RUB).

Furthermore, our selection criteria consider Europe to include all European Economic Area (EEA) countries and certain non-EEA countries located on the geographic European continent. We have included Turkey, Kazakhstan, Iceland, Georgia and the Russian Federation in these criteria.

European ABS outstanding collateral types include auto loans, credit cards, loans (consumer and student), and other.

For the CDO/CLO sector, only issuance denominated in a European currency (as specified

above) is included, regardless of the country of collateral.

Beginning in Q2 2010, the CDO/CLO asset class has been further broken down into the CDO/CLO and SME asset classes. SME securities follow the same criteria application as non-CDOs/CLOs. Revisions during this quarter were retroactively applied and balances outstanding from prior quarters have all been restated accordingly.

The US outstanding calculations are based on information derived from Bloomberg for ABS, non-agency RMBS, and non-agency CMBS; agency balance statements for agency MBS. The following asset classes are segmented: agency MBS, non-agency RMBS, non-agency CMBS, and ABS. The agency MBS figures include both agency RMBS and agency CMBS (i.e., multifamily). US ABS outstanding collateral types include auto loans, credit cards, loans (equipment and student loans), CDOs, and other. CDOs outstanding are included in ABS outstandings and represents dollar-denominated tranches. As of 2013 Q4 home equity and certain other mortgage-related debt has been moved into Non-Agency RMBS.

Australian outstanding figures are contributed by Macquarie. Reverse mortgages are included in RMBS figures, while small balance CMBS are included in CMBS figures.

#### 2.4. Outstandings by Country of Collateral

The European outstanding volumes are seqmented by country of collateral based on the above methodology. For our selection criteria, Europe is considered to include all European Economic Area (EEA) countries and certain non-EEA countries located on the geographic European continent (Georgia, Iceland, Turkey, Kazakhstan and the Russian Federation). In certain limited cases, the Channel Islands and the Cavman islands are considered eligible for ABS and MBS products if underlying collateral is derived from a variety of jurisdictions and the original currency of issue is European. CDOs/CLOs issued in a European currency with either collateral from multiple jurisdictions or for which the underlying location of collateral is undefined are categorized under 'Multinational' for the purpose of determining outstanding balances by country. Collateral from multiple European countries is now categorised under 'PanEurope' unless collateral is predominantly (over 90%) from one country.

The US outstandings include both agency and non-agency securities.

# 2.5. – 2.7. Outstandings by Moody's Rating

The percentage rating distribution for Europe and the US is based on Moody's Investors Service data for balances outstanding, and from Standard and Poor's for Australian data. The data provides current ratings as of the end of the guarter. The data presented are based on original issuance volumes for European, US, and Australian securities, and therefore do not reflect amortised balances. Information on current ratings by outstanding volumes is not currently available. Moody's and Standard and Poor's data have been converted to percentages based on the original issuance size to make it easily comparable with the outstanding volumes provided in this report. Defaulted and unrated issues are excluded from these data.

#### 2.8. - 2.9. Outstandings by Vintage

Outstanding volumes by vintage are determined by year of original pricing date. Restructurings are counted from original pricing date rather than remarketed date.

# 2.10. Outstandings by Country and Collateral

European outstanding volumes are segmented by country and collateral based on above methodology.

# 3. Credit Quality – Rating Changes 3.1. – 3.4. Upgrades/Downgrades by Country

These tables present the aggregate number of upgrades and downgrades for securitisation (including CDOs/CLOs) by country of collateral for European deals and in total for US deals. The information is based on data provided by DBRS, Fitch Ratings, Moody's Investors Service and Standard & Poor's. The upgrade number is shown first followed by the downgrade number. The upgrades and downgrades of each of credit rating agency is shown in separate tables and presented as the number of rating changes. Because the credit rating agencies track different securities and apply different credit rating methodologies, these numbers are not directly comparable.

According to Moody's Investors Service, a security is classified as European or American based on if it is monitored out of Moody's office in Europe or the US. More specifically, European se-

curities are classified within a particular country if all of its assets are located within that country.

Fitch's US category may contain non-US issues (e.g., Canada) from the North American continent.

The Multinational category includes CDOs/CLOs and all other cross-jurisdictional securitisations for both Moody's Investors Service and Standard & Poor's. The Fitch Ratings Multinational classification includes cross-jurisdictional CMBS as well as the aggregated sum of rating actions in other countries including Austria, Belgium, Greece, Ireland, Portugal and the Russian Federation. Fitch Ratings assigns CDO issues to the country in which the majority of the underlying assets are located.

DBRS' "ABS Other" category may include student loans, equipment lease and other securities.

# 3.5. – 3.12. Upgrades/Downgrades by Collateral

These tables present aggregate upgrades and downgrades for securitisation and CDO/CLO issues by securitised product type for Europe and the US. The upgrade number is shown first followed by the downgrade number. The upgrades and downgrades of each agency are shown in separate tables and presented by number rating changes. For Fitch Ratings, the category Other RMBS includes other categories of RMBS transactions such as ALT-A, reverse mortgage, government RMBS, etc. The category 'Other ABS' may include student loans and the whole business securitisations/public finance initiatives (WBS/PFI). For Moody's Investors Service and Standard & Poor's, the total number of European upgrades/downgrades reported by collateral type are not always comparable with the upgrades/downgrades presented by country because there may be securities that experience rating migrations that are backed by collateral originated from a country outside of those specified and will not be captured under the "Multinational" category.

#### 4 - 6 Spreads 4.1. - 4.4. CMBS Spreads

These graphs present credit spread data for European and US AAA and BBB 3-5 Yr CMBS. European 3-5 year AAA & BBB CMBS data are provided by Markit. Composite spread levels are calculated from dealer contributions which have been subjected to multiple cleaning algorithms. Spread levels are equivalent to the discount margin. The discount margin is defined as the ef-

fective spread to maturity of a floating rate security after discounting the yield value of a price other than par over the life of the security. The spread calculation is based on data provided by dealer trading desks.

US CMBS 3 and 5 year spreads are provided by Trepp LLC. US CMBS spreads are quoted as fixed rate bonds based on the yield of US treasury bonds with the same average life.

#### 5.1. - 5.4. RMBS Spreads

European RMBS credit spreads are provided for 3-5 year AAA and BBB securities based on data provided by Markit. European credit spreads cover Spain, Netherlands, Italy, Germany and France. UK RMBS spreads are provided for both prime and non-conforming transactions. Markit spread calculations are based on data provided by dealer trading desks.

As of April 2012, Italian AAA has been replaced with Italian AA due to downgrades. Spanish RMBS 3-5 year AAA and BBB spreads have been replaced with 5-8 years due to lack of bonds.

Due to a lack of bonds populating the WAL 3-5 year sector for UK Prime RMBS BBB, the sector has been replaced with WAL 5-15 UK Granite BBB Float. The UK non-conforming RMBS BBB sector will continue to remain WAL 3-5 years. As of November 2012, UK non-conforming AAA has been replaced with non-conforming AA due to downgrades, while BBB UK non-conforming RMBS are no longer available.

#### 6.1. - 6.4. ABS Spreads

European ABS credit spreads are provided for 1-4 year AAA and BBB securities based on data provided by Markit based on the same calculations described above.

US spreads reflect levels for AAA autos, AAA credit cards, and BBB credit cards; spreads are fixed against swaps and are provided by JP Morgan. US 3 Yr Auto ABS BBB spreads are not available.

#### 7 - 8 Prices

#### 7.1. - 7.5. RMBS Prices

These graphs represent price data for specific European and UK RMBS selected as benchmarks in the respective jurisdictions. The price calculations are provided by Markit and are based on data provided by dealer trading desks.

#### 8.1. - 8.4. CMBS and ABS Prices

The graphs represent price data for specific pan-European CMBS and ABS selected as benchmarks. The price calculations provided by Markit and are based on data provided by dealer trading desks.

#### 9.1. - 9.7. Indices Data

The first graph presents daily option-adjusted spreads provided by Barclays Capital for Europe from a cross-section of securitised products. The second graph, provided by Barclays Capital, presents daily fixed and floating prices of pan-European deals.

The third and fourth graphs present daily prices provided by Macquarie for the Australian AAA and AA securitised market.

The fifth, sixth, and seventh graphs present daily prices provided by Markit for the US synthetic ABS, RMBS, and CMBS indices. The final graph present daily prices, also provided by Markit, for the US cash non-agency RMBS market.

# 10 Total Return Benchmark Data 10.1. – 10.3. Total Return Data

These graphs represent historical return composites generated by tracking the aggregate asset value on an underlying portfolio of single name bonds. Data are provided by Markit and are preliminary.

# 11. Asset-Backed Commercial Paper (ABCP)

# 11.1. – 11.2. ABCP Historical Issuance; ABCP Issuance by Nationality of Issuer

Aggregate issuance data covers the period 2008 through 2009 for Europe and the US. European issuance is provided by Dealogic, which identifies the issuer's nationality as the country in which the SPV is domiciled. These data do not represent the seller-servicers of the underlying assets or the bank conduits for the ABCP deals. The US data are provided by Moody's Investors Service. The volumes are converted from dollar to euro based on the end-of-quarter exchange rate.

# 11.3. European ABCP Issuance by Programme Type

ABCP data by programme type is provided by Dealogic. The programme type classifications included are: SIVs, single-seller conduit, multiseller conduit and 'unspecified'.

Dealogic provides the issuer's nationality as the country in which the SPV is domiciled. This data

does not represent the seller-servicers of the underlying assets or the bank conduits for ABCP deals.

# 11.4. ABCP Outstandings by Nationality of Issuer

Outstanding quarterly data are provided from the first quarter of 2008 through 2009 for Europe and the US. The European outstanding is provided by country through the Dealogic database, and the US data are provided by Moody's Investors Service. Dealogic identifies the issuer's nationality as the country in which the SPV is domiciled. The dollar volumes were converted to euro based on the end-of-quarter exchange rate.

US ABCP figures are based on programmes rated by Moody's NY office ABCP Program Index, regardless of market; some euro-denominated ABCP may be included in volume totals.

# 11.5. – 11.6. ABCP Outstandings by Programme Type

Outstanding quarterly data are provided for Europe and the US by, respectively, Dealogic and Moody's Investor Service. The volumes are converted from dollars to euro based on the end-of-quarter exchange rate. The programme type classifications included are: loan-backed, SIVs, single-seller conduit, multi-seller conduit and 'unspecified'.

Unspecified programme types within the US data contain both arbitrage and hybrid programme types.

#### 11.7. ABCP Spreads

The US ABCP spread information is based on data collected and developed by the Federal Reserve. The spread is defined as the difference between AA ABCP and AA nonfinancial CP.

### 12. Global Comparative Data 12.1. - 12.3. Global Securitisation Issuance, Global Corporate Bond Issuance, Global Government Bond Issuance

These statistics are provided by Dealogic and present issuance volumes for securitisation, corporate bonds and government bonds in Asia, the US and Europe. Securitisation and government bond figures represent gross issuance; corporate bond issuance is provided on a gross, not net, basis. All types of securitisation are included; CDOs are included based on the region of the currency in which they are denominated. These statistics do not correspond to the issuance numbers provided elsewhere in this report as different sources and selection methodologies are

used to determine both the European and US securitisation issuance. In terms of geographical description, Europe represents the European, the Middle East and African (EMEA) countries while Asia includes the Pacific countries and Japan.

Global securitisation issuance includes ABS & MBS, both public and private placements, but excludes any retained volumes. Global corporate bond issuance is for investment grade bonds, public placements only. Global government bond issuance includes all agency and non-agency issuances and does not include supranationals.

#### 13. Commentary Sources

Basel Committee on Banking Supervision (BCBS), and International Organization for Securities Commissions (IOSCO), Capital treatment for "simple, transparent and comparable" securitisations published by the Basel Committee, 10 November 2015

http://www.bis.org/press/p151110a.htm

**European Banking Authority (EBA)**, Report on exposures to shadow banking entities, 15 December 2015

http://www.eba.europa.eu/documents/10180/950 548/Report+on+institutions+exposures+to+shad ow+banking+entities.pdf

**European Banking Authority (EBA)**, Consultation paper on draft ITS on the mapping of ECAIs credit assessment for securitisation positions, 7 May 2015

http://www.eba.europa.eu/newspress/calendar?p p id=8& 8 struts action=%2 Fcalendar%2Fview event& 8 eventId=1065439

**European Banking Authority (EBA)**, report to the European Commission on the implementation of the NSFR in Europe, 17 December 2015

http://www.eba.europa.eu/-/eba-recommends-introducing-the-nsfr-in-the-eu

**European Central Bank (ECB),** "The Euro Area Bank Lending Survey – July 2014" <a href="http://www.ecb.int/stats/money/surveys/lend/html/index.en.html">http://www.ecb.int/stats/money/surveys/lend/html/index.en.html</a>

**European Commission,** "Green Paper on building CMU", 18 February 2015

http://ec.europa.eu/finance/consultations/2015/capital-markets-union/docs/green-paperen.pdf

#### **Annex**

**European Commission,** "An EU framework for simple, transparent and standardised securitisation" 30 September 2015

http://ec.europa.eu/finance/securities/securitisation/index en.htm

**European Commission,** Call for Evidence – financial regulatory framework, 30 September 2015

http://ec.europa.eu/finance/consultations/2015/financial-regulatory-framework-review/docs/consultation-document en.pdf

**European Commission**, Delegated Regulation on the Prospectus, 3- November 2015

http://europa.eu/rapid/press-release IP-15-6196 en.htm

**European Commission**, Review of EMIR, 21 May 2015

http://europa.eu/rapid/press-release IP-15-5014 en.htm#932 20150521011842

**European Commission** RTS on a clearing obligation for OTC interest rate derivative contracts, 6 August 2015

http://europa.eu/rapid/press-release\_IP-15-5459 en.htm

**ESAs joint,** "Regulatory Technical Standards (RTS) on risk mitigation techniques for OTC derivatives not cleared by a central counterparty (CCP)", 14 April 2014 and 10 June 2015

http://www.eba.europa.eu/regulation-andpolicy/market-infrastructures/draft-regulatorytechnical-standards-on-risk-mitigationtechniques-for-otc-derivatives-not-cleared-by-acentral-counterparty-ccp-

http://www.eba.europa.eu/newspress/calendar?p p id=8& 8 struts action=%2 Fcalendar%2Fview event& 8 eventId=1106133

**European Securities and Markets Authority (ESMA),** Call for Evidence: The extension of the disclosure requirements to private and bilateral transactions for Structured Finance Instruments, 20 March 2015

http://www.esma.europa.eu/system/files/esma-2015-

558 call for evidence on private and bilateral sfis.pdf

**European Securities and Markets Authority (ESMA),** Guidelines on complex debt instruments and structured deposits, 24 March 2015

http://www.esma.europa.eu/consultation/Consultation-draft-guidelines-complex-debt-instruments-and-structured-deposits

Eurostat, Statistics,

http://epp.eurostat.ec.europa.eu

# www.afme.eu

#### **AFME**

Richard Hopkin, Managing Director Anna Bak, Manager Julio Suarez, Manager www.afme.eu

#### **SIFMA**

**Kyle Brandon**, Managing Director, Director of Research **Sharon Sung**, Assistant Vice President, Research www.sifma.org