

# Securitisation Data Report

## European Structured Finance

Q1: 2016

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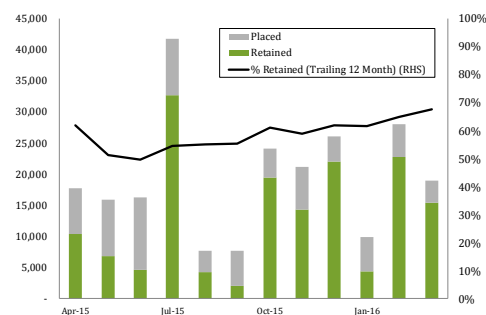


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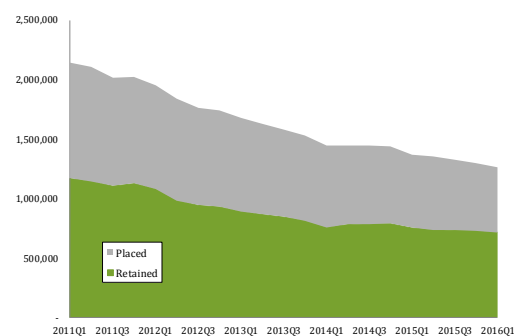
## European Securitisation Issuance (EUR m)



Sources: AFME/SIFMA Members, AFME, Bloomberg, Dealogic, Thomson Reuters, SIFMA

*“In Q1 2016, EUR 56.9 billion of securitised product was issued in Europe”*

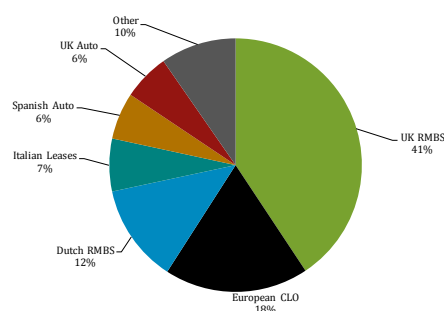
## European Securitisation Outstanding (EUR m)



Sources: AFME/SIFMA Members, AFME, Bloomberg, Dealogic, Thomson Reuters, SIFMA

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

## Placed European Issuance: 1Q 16



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

## Market Highlights and Commentary

### Market Environment

#### Economic conditions

According to Eurostat, GDP rose by 0.6% quarter-over-quarter (QoQ) in the Euro zone (EU19) and by 0.5% in the EU28 during the first quarter of 2016. Unemployment was 10.2% (EU19) and 9.7% (EU28) as of the end of March 2016, the lowest rate recorded since 2011 (EU19) and 2009 (EU28).

#### Term Issuance and Outstanding Volumes

In Q1 2016, EUR 56.9 billion of securitised product was issued in Europe, a decline of 20.4% from Q4 2015 (EUR 71.4 billion) but an increase of 61.2% from Q1 2015 (EUR 35.3 billion). Of the EUR 56.9 billion issued, EUR 14.3 billion was placed, representing 25.2% of issuance, compared to EUR 15.6 billion placed in Q4 2015 (representing 21.8%) and EUR 19.7 billion placed in Q1 2015 (representing 55.9%).

For the first quarter, UK RMBS continued to lead placed totals (EUR 5.8 billion), followed by European CLOs (EUR 2.6 billion) and Dutch RMBS (EUR 1.8 billion).

Net issuance remained negative, with EUR 1.27 trillion outstanding at the end of 1Q'16, down from EUR 1.30 trillion at the end of 4Q'15. Of this, EUR 718.1 billion, or 56.8%, was retained.

#### Credit Quality

In Europe, upgrades outpaced downgrades in Q1 2016 among European securitised product, with upgrades concentrated in European CLOs and RMBS.

#### ABCP Trends

European asset backed commercial paper (ABCP) issuance was EUR 95.8 billion in Q1 2016, a decrease of 16.2% QoQ and an increase of 16.5% YoY. Multiseller conduits continue to dominate as the largest category of issuer in the ABCP market, particularly from Ireland and France. European ABCP outstandings decreased slightly from the previous quarter, ending the first quarter at EUR 17.9 billion, down by 2.2% from EUR 18.3 billion in Q4 2015.

## Major upcoming regulatory, legislative and policy initiatives

The European Commission's (EC) proposal for a securitisation regulation, defining "Simple, Standard and Transparent securitisation" (STS) was published on 30 September 2015, as part of the wider CMU Action Plan.

On 30 September the EC also published a Proposal for a regulation introducing a revised regulatory framework for capital charges for credit institutions and investment firms originating, sponsoring or investing in securitisation products (CRR Amendment). The EC's proposals were followed by the Council's General Approach published on 1 December. The speed

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*“The speed of proceedings in the Council has been unprecedentedly fast and the attention has now moved to the European Parliament. Here, however, the pace has slowed: the first exchange of views on Securitisation Regulation and CRR Amendment took place on 24 May 2016 and the publication of the draft report is expected at the beginning of June 2016”*

of proceedings in the Council has been unprecedentedly fast and the attention has now moved to the European Parliament. Here, however, the pace has slowed: the first exchange of views on Securitisation Regulation (SR) and CRR Amendment took place on 24 May 2016 and the publication of the draft report is expected at the beginning of June 2016. As next steps, the ECON hearing is scheduled for 13 June 2016 and the vote on the SR and CRR Amendment is currently planned for November 2016.

On the 11 March 2016, the ECB issued its Opinion on the proposed SR and CRR Amendment. ECB conveys a strong message of support for securitisation and the objectives of the EC proposals.

At the same time, ESMA’s work on disclosures in securitisation has been postponed until finalisation of the STS framework. At the end of April 2016 ESMA issued a statement on their progress towards reporting SFI information under Article 8b CRA. According to the statement, it is unlikely that the SFI website will be available to reporting entities by 1 January 2017 because it is unlikely that ESMA will be in a position to publish the technical instructions by 1 July 2016 in order to receive the relevant SFI information from 1 January 2017.

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 of STC securitisations. AFME (via GFMA) responded to this consultation on 5 February 2016.

On 17 December 2015, the Basel Committee released a new consultation focused on “step in risk” which is defined as “the risk that a bank may provide financial support to an entity beyond or in the absence of any contractual obligations, should the entity experience financial stress”. AFME via GFMA, together with other trade associations, responded to the consultation on 17 March 2016.

On 14 January 2016 the Basel final rules on Fundamental Review of the Trading Book (FRTB) were published. Despite the BCBS’s reiteration not to significantly increase overall capital requirements, trading book capital will increase by 40% under the new rules based on the BCBS’s impact assessment.

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*“Despite the BCBS’s reiteration not to significantly increase overall capital requirements, trading book capital will increase by 40% under the new rules based on the BCBS’s impact assessment.”*

On 20 January 2016 the EBA launched a consultation on draft Guidelines on implicit support for securitisation transactions. The objective of the Guidelines is to provide clarity on what constitutes arm’s length conditions and when a transaction is not structured to provide support for securitisations. AFME responded to the consultation on 20 April 2016.

On 15 February 2016 the EBA published final draft Implementing Technical Standards (ITS) on the mapping of External Credit Assessment Institutions’ (ECAIs) credit assessments for securitisation positions. The ITS in principal maintains the current mapping in place for all ECAIs.

On 8 March 2016 European Supervisory Authorities (ESAs) published final draft regulatory technical standards (RTS) on

## Major upcoming regulatory, legislative and policy initiatives

margin requirements for non-centrally cleared derivatives under the European Market Infrastructure Regulation (EMIR). The RTS cover the risk mitigation techniques related to the exchange of collateral to cover exposures arising from non-centrally cleared over-the-counter (OTC) derivatives.

On 24 March 2016 Basel Committee released a new consultation on removing internal modelling flexibility. The proposal does not address this sector directly. It does, however, contain some provisions which may have an effect of securitisations. AFME will be responding to the consultation by its deadline on 24 June 2016.

On 6 April 2016 the Basel Committee proposed revision to the Basel III leverage ratio framework which contains a securitisation aspect. The consultation is open until 6 July to which AFME will be responding via GFMA.

The Council negotiations on Money Market Funds have recently resumed following a long interval. AFME is currently focused on the securitisation/ABCP aspects of the proposals. The expectation is that final sign-off of the Council proposal by Finance Ministers will take place at the June ECOFIN meeting.

# 1 Issuance

€ BILLIONS

## 1.1 Issuance European Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL
2006	69.0	114.3	112.8	184.9	481.0
2007	151.9	167.2	96.0	179.9	594.9
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	60.2	63.9	253.4
2013	32.8	53.2	38.4	56.4	180.8
2014	20.0	99.5	37.7	59.8	217.0
2015	35.3	49.9	57.1	71.4	213.8
2016	56.9				56.9

## 1.2 US and Australia Historical Issuance

	US	AU
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	1,620.7	19.9
2016	308.9	2.9

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

## 1.3 European Issuance by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
ABS	10.5				10.5
CDO/CLO	2.8				2.8
CMBS	0.3				0.3
RMBS	38.6				38.6
SME	4.6				4.6
WBS/PFI	0.0				0.0
Total	56.9				56.9

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	9.9	17.6	11.5	25.9	64.8
	3.2	5.0	2.5	3.5	14.2
	0.7	3.0	1.9	0.4	6.0
	16.6	19.6	35.7	29.1	101.0
	4.1	4.8	5.5	12.6	27.0
	0.8				0.8
Total	35.3	49.9	57.1	71.4	213.8

## 1.4 European Issuance by Retention

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Placed	14.3				14.3
Retained	42.5				42.5
Total <sup>2</sup>	56.9				56.9

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	19.7	28.1	18.1	15.5	81.5
	15.5	21.8	39.0	55.9	132.2
Total	35.3	49.9	57.1	71.4	213.7

## 1.5 Australia Issuance by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
ABS	0.6				0.6
RMBS	2.3				2.3
CMBS	-				0.0
Total	2.9				2.9

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	1.4	1.0	0.5	1.3	4.2
	6.4	3.4	4.7	1.0	15.5
	-	0.0	0.19	-	0.2
Total	7.8	4.4	5.4	2.3	19.9

## 1.6 US Issuance by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
ABS	33.2				33.2
CDO	5.1				5.1
Agency MBS	251.0				251.0
Non-Agency CMBS	14.3				14.3
Non-Agency RMBS	5.1				5.1
Total	308.9				308.9

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	55.4	54.6	35.5	30.6	176.1
	25.4	22.5	16.8	13.9	78.6
	267.6	335.6	325.9	275.0	1,204.2
	26.5	23.9	22.1	20.0	92.5
	24.8	16.7	12.4	15.4	69.4
Total	399.8	453.3	412.7	354.8	1,620.7

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

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
Belgium	-				0.0	0.0	-	-	1.2	1.2
Denmark	-				0.0	-	-	-	-	-
France	-				0.0	1.3	2.9	0.7	12.2	17.0
Germany	2.2				2.2	3.6	7.8	25.5	8.2	45.1
Greece	-				0.0	-	-	-	-	-
Ireland	2.0				2.0	0.2	0.2	-	0.3	0.7
Italy	11.8				11.8	1.3	8.9	10.0	12.3	32.5
Netherlands	9.6				9.6	9.9	3.9	6.6	1.1	21.4
Portugal	-				0.0	1.6	0.8	0.6	1.8	4.9
Spain	17.3				17.3	3.0	10.6	2.7	9.9	26.2
UK	11.0				11.0	10.9	7.8	8.0	19.0	45.7
PanEurope	2.6				2.6	3.2	5.2	3.0	3.6	15.0
Other Europe	0.2				0.2	0.2	0.7	0.1	1.8	2.8
Multinational	-				0.0	-	1.2	-	-	1.2
European Total	56.9				56.9	35.3	49.9	57.1	71.4	213.7
Australia Total	2.9				2.9	7.8	4.4	5.4	2.3	19.9
US Total	308.9				308.9	407.5	445.9	412.7	354.8	1,621.0

### 1.8 Issuance by Collateral Type and Country of Collateral: 1Q 16

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Belgium	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-
Germany	1.9	-	0.3	-	-	-	2.2
Greece	-	-	-	-	-	-	-
Ireland	-	-	-	2.0	-	-	2.0
Italy	5.9	0.1	-	1.3	4.6	-	11.8
Netherlands	-	-	-	9.6	-	-	9.6
Portugal	-	-	-	-	-	-	-
Spain	1.7	0.1	-	15.5	-	-	17.3
UK	1.0	-	-	10.0	-	-	11.0
PanEurope	-	2.6	-	-	-	-	2.6
Other Europe	-	-	-	0.2	-	-	0.2
Multinational	-	-	-	-	-	-	-
European Total	10.5	2.8	0.3	38.6	4.6	-	56.9

	ABS	CDO	AGENCY MBS	NON-AGENCY CMBS	NON-AGENCY RMBS	TOTAL
Australia Total	0.6	-	-	-	2.3	2.9
US Total	33.2	5.1	251.0	14.3	5.1	308.9

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

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
AAA	21.7				21.7
AA	4.5				4.5
A	20.0				20.0
BBB & Below	4.7				4.7
Not Rated	6.1				6.1
<b>European Total2</b>	<b>56.9</b>				<b>56.9</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	24.4	17.2	16.4	33.5	91.5
	1.7	11.6	25.2	13.3	51.7
	4.9	7.4	6.0	10.7	29.1
	2.1	4.3	1.9	4.0	12.4
	2.2	9.4	7.6	9.8	29.0
	35.3	49.9	57.1	71.4	213.7

### 1.10 Australia Issuance by Rating

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
AAA	2.3				2.3
AA	0.4				0.4
A	0.1				0.1
BBB & Below	0.0				0.0
Not Rated	0.1				0.1
<b>US Total</b>	<b>2.9</b>				<b>2.9</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	7.1	3.6	4.9	1.9	17.5
	0.3	0.4	0.2	0.3	1.2
	0.2	0.1	0.1	0.0	0.4
	0.0	0.1	0.1	0.0	0.2
	0.2	0.2	0.1	0.1	0.6
	7.8	4.4	5.4	2.3	19.9

### 1.11 US Issuance by Rating

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
AAA	29.6				29.6
AA	3.2				3.2
A	4.0				4.0
BBB & Below	4.2				4.2
Not Rated	16.8				16.8
Agency MBS	251.0				251.0
<b>US Total</b>	<b>308.9</b>				<b>308.9</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	61.2	42.4	38.7	40.8	183.1
	6.3	4.5	4.6	5.4	20.8
	8.2	6.1	3.3	5.2	22.8
	12.3	8.0	5.4	7.7	33.3
	51.8	49.2	35.0	20.7	156.7
	267.6	335.6	325.9	275.0	1,204.2
	407.5	445.9	412.7	354.8	1,621.0

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: 4Q15

INCLUDING RETAINED DEALS						
	EUROPE		Australia		US	
	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions
<b>Less than 0.01 Billion</b>	10%	0%	0%	0%	8%	0%
<b>0.01-0.1 Billion</b>	44%	7%	0%	0%	49%	13%
<b>0.1-1.0 Billion</b>	44%	69%	100%	100%	22%	34%
<b>More than 1.0 Billion</b>	2%	24%	0%	0%	0%	2%
<b>Agency MBS</b>	0%	0%	N/A	N/A	20%	52%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## 1Q16

	EXCLUDING RETAINED DEALS						INCLUDING RETAINED DEALS					
	EUROPE		Australia		US		EUROPE		Australia		US	
	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions	# of Issues	€ Billions
<b>Less than 0.01 Billion</b>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>0.01-0.1 Billion</b>	4%	1%	0%	0%	7%	1%	4%	1%	0%	0%	7%	1%
<b>0.1-1.0 Billion</b>	62%	40%	100%	100%	67%	41%	62%	41%	83%	64%	67%	41%
<b>More than 1.0 Billion</b>	33%	59%	0%	0%	5%	7%	34%	58%	17%	36%	6%	8%
<b>Agency MBS</b>	N/A	N/A	N/A	N/A	21%	51%	N/A	N/A	N/A	N/A	20%	50%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

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

## 2 Outstanding

€ BILLIONS

### 2.1 European Outstandings by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
ABS	185.5			
CDO/CLO	109.0			
CMBS	77.1			
RMBS	736.9			
SME	88.2			
WBS/PFI	68.7			
<b>Total</b>	<b>1,265.4</b>			

2015:Q1	2015:Q2	2015:Q3	2015:Q4
196.0	202.4	191.6	199.4
108.5	108.1	102.1	105.0
82.9	82.9	81.7	79.3
812.5	791.9	786.8	751.5
100.1	97.0	95.8	94.5
72.5	72.4	70.2	69.6
<b>1,372.6</b>	<b>1,354.7</b>	<b>1,328.4</b>	<b>1,299.2</b>

### 2.2 Australia Outstandings by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
ABS	6.6			
CMBS	0.3			
RMBS	49.3			
<b>Total</b>	<b>56.2</b>			

2015:Q1	2015:Q2	2015:Q3	2015:Q4
7.7	7.5	6.4	7.1
0.3	0.3	0.4	0.3
57.4	54.9	49.6	50.4
<b>65.4</b>	<b>62.7</b>	<b>56.4</b>	<b>57.8</b>

### 2.3 US Outstandings by Collateral

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
ABS	1,213.4			
Agency MBS	5,502.6			
Non-Agency RMBS	752.0			
Non-Agency CMBS	516.5			
<b>Total</b>	<b>7,984.6</b>			

2015:Q1	2015:Q2	2015:Q3	2015:Q4
1,284.7	1,268.4	1,257.4	1,283.6
5,609.3	5,449.7	5,499.5	5,725.9
893.4	842.1	812.3	814.9
587.3	563.3	552.0	553.7
<b>8,374.7</b>	<b>8,123.4</b>	<b>8,121.2</b>	<b>8,378.1</b>

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: 2014-2015

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	2014:Q1	2014:Q2	2014:Q3	2014:Q4
Austria	2.2	1.9	1.8	2.1	2.3	2.2	2.2	2.2
Belgium	69.8	67.7	65.8	65.7	80.3	77.2	76.6	74.5
Finland	1.1	1.0	1.0	1.2	1.0	0.9	0.8	1.2
France	70.3	70.4	69.6	78.6	32.9	68.8	69.3	72.0
Germany	71.2	68.5	88.7	88.1	73.4	70.5	74.7	72.0
Greece	24.2	24.2	21.4	20.6	26.3	25.7	25.1	25.1
Ireland	35.9	34.7	33.5	32.0	37.3	36.7	35.3	36.6
Italy	157.1	158.3	155.1	149.5	176.1	170.2	169.7	165.5
Netherlands	247.0	243.5	240.3	222.3	258.7	259.5	258.2	254.7
Portugal	34.5	34.0	32.1	32.1	37.7	36.1	36.0	35.2
Russia	0.5	0.4	0.4	0.4	1.2	1.1	0.9	0.5
Spain	170.4	170.5	163.6	161.7	168.7	162.5	167.6	176.3
Turkey	1.6	1.5	1.5	1.5	2.0	1.8	1.8	1.7
UK	374.0	365.2	347.4	334.6	420.7	411.7	408.4	406.5
Other	4.4	4.7	4.1	4.7	4.7	4.7	5.1	4.7
PanEurope	52.0	54.2	54.0	59.4	49.0	46.9	50.1	50.9
Multinational	56.5	53.8	47.9	44.7	74.7	68.0	65.0	61.4
European Total	1,372.6	1,354.7	1,328.4	1,299.2	1,446.9	1,444.6	1,446.8	1,441.0
Australia Total	65.4	62.7	56.4	57.8	57.9	59.6	60.2	59.8
US Total	8,374.7	8,123.4	8,121.2	8,378.1	6,449.1	6,439.8	7,057.3	7,407.5

## 2016

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
Austria	2.1			
Belgium	64.5			
Finland	1.1			
France	76.7			
Germany	84.2			
Greece	20.4			
Ireland	33.4			
Italy	143.1			
Netherlands	207.5			
Portugal	29.8			
Russia	0.4			
Spain	163.7			
Turkey	1.4			
UK	324.9			
Other	4.6			
PanEurope	64.1			
Multinational	43.6			
European Total	1,265.4			
Australia Total	56.2			
US Total	7,984.6			

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)

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

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

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	46.37%				44.63%	45.48%	46.42%	47.29%
Aa/AA	28.46%				23.14%	26.00%	28.49%	28.69%
A/A	13.82%				17.61%	15.63%	13.43%	13.18%
Baa/BBB	5.26%				8.01%	6.65%	5.74%	5.14%
Ba/BB	2.08%				2.95%	2.13%	1.96%	1.91%
B/B	1.19%				1.62%	2.04%	1.16%	1.21%
Caa/CCC	1.82%				0.97%	1.02%	1.73%	1.63%
Ca/CC	0.64%				0.75%	0.71%	0.73%	0.62%
C/C	0.36%				0.33%	0.34%	0.35%	0.34%
<b>Total</b>	<b>100.00%</b>				<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

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

(as a percentage of total S&P rated securitisations)

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	86.54%				88.44%	87.80%	87.99%	87.30%
Aa/AA	6.26%				4.92%	5.34%	5.20%	5.58%
A/A	2.53%				2.63%	2.66%	2.51%	2.60%
Baa/BBB	0.76%				0.79%	0.76%	0.74%	0.73%
Ba/BB	0.29%				0.33%	0.32%	0.32%	0.31%
B/B	0.11%				0.07%	0.08%	0.09%	0.10%
Caa/CCC	0.00%				0.00%	0.00%	0.00%	0.00%
Ca/CC	0.00%				0.00%	0.00%	0.00%	0.00%
C/C	0.02%				0.02%	0.02%	0.02%	0.02%
D	0.00%				0.00%	0.00%	0.00%	0.00%
NR	3.49%				2.80%	3.02%	3.13%	3.36%
<b>Total</b>	<b>100.00%</b>				<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

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

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

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	2015:Q1	2015:Q2	2015:Q3	2015:Q4
Aaa/AAA	28.68%				28.30%	28.67%	28.90%	28.72%
Aa/AA	4.99%				4.61%	4.88%	4.61%	4.79%
A/A	6.20%				6.20%	6.21%	6.36%	6.38%
Baa/BBB	8.04%				7.65%	7.55%	7.68%	7.82%
Ba/BB	6.15%				6.67%	6.55%	6.37%	6.25%
B/B	6.55%				6.85%	6.79%	6.61%	6.55%
Caa/CCC	19.49%				19.85%	19.62%	19.66%	19.65%
Ca/CC	11.67%				11.22%	11.23%	11.43%	11.55%
C/C	8.22%				8.64%	8.50%	8.39%	8.30%
<b>Total</b>	<b>100.00%</b>				<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

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

€ BILLIONS

## 2.8 Australian Outstandings by Vintage

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
2016	2.6			
2015	15.9			
2014	13.4			
2013	9.1			
2012	3.6			
2011	4.1			
2010	2.4			
2009	1.2			
2008	0.3			
2007	2.2			
2006	0.9			
2005	0.2			
2004	0.2			
2003	0.0			
2002	0.0			
2001	0.1			
Prior	0.0			
<b>Total</b>	<b>53.6</b>			

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
	7.8	11.5	14.7	17.0
	7.8	11.5	14.7	17.0
	19.2	17.3	14.5	14.3
	13.5	12.1	10.0	9.8
	5.8	5.0	4.1	4.0
	6.1	5.4	4.3	4.3
	3.6	3.2	2.6	2.6
	1.7	1.6	1.3	1.3
	0.4	0.4	0.3	0.3
	3.6	3.3	2.4	2.3
	2.6	2.0	1.4	1.2
	0.5	0.4	0.3	0.3
	0.3	0.3	0.2	0.2
	0.0	0.0	0.0	0.0
	0.1	0.1	0.0	0.0
	0.1	0.1	0.1	0.1
	0.0	0.0	0.0	0.0
	65.4	62.7	56.4	56.4

## 2.9 European Outstandings by Vintage

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
2016	56.5			
2015	196.8			
2014	168.8			
2013	99.4			
2012	98.1			
2011	79.2			
2010	104.7			
2009	59.9			
2008	101.6			
2007	101.0			
2006	88.5			
2005	34.9			
2004	27.5			
2003	18.7			
2002	7.9			
2001	8.4			
Prior	13.3			
<b>Total</b>	<b>1,208.9</b>			

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
	N/A	N/A	N/A	N/A
	35.7	84.3	135.1	200.6
	193.3	186.9	181.5	174.8
	141.9	135.6	130.4	121.5
	137.9	127.1	117.0	104.4
	132.0	126.1	117.3	95.3
	139.2	133.0	125.3	114.9
	82.9	79.7	68.5	66.4
	130.1	117.4	112.3	104.5
	133.1	125.6	113.9	105.8
	111.3	107.7	101.7	93.5
	48.4	46.4	44.3	39.4
	31.6	30.8	29.9	28.1
	21.6	21.0	19.9	19.4
	9.0	8.9	8.5	8.2
	10.5	10.3	8.7	8.5
	14.3	14.1	14.0	13.8
	1,372.3	1,354.4	1,328.1	1,245.6

Sources: Bloomberg, Macquarie, AFME, SIFMA

€ BILLIONS

## 2.10 European Outstandings by Country and Collateral: 4Q 2015

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Austria	0.5			1.6			2.1
Belgium	0.2		0.1	47.7	17.6		65.7
Finland	0.7					0.5	1.2
France	18.0		0.4	59.3	0.3	0.5	78.6
Germany	48.2	0.3	6.3	26.6	6.8	0.0	88.1
Greece	9.7	1.8	0.2	2.6	6.3		20.6
Ireland	0.3	0.1	0.2	31.5			32.0
Italy	48.4	1.7	8.9	69.5	20.6	0.3	149.5
Netherlands	3.8	0.6	1.5	209.6	6.8		222.3
Portugal	3.3			22.7	6.1		32.1
Russia				0.4			0.4
Spain	20.5	0.4	0.1	118.6	22.0	0.0	161.7
Turkey	1.5						1.5
UK	38.7	8.5	51.7	160.7	7.5	67.5	334.6
Other	3.9	0.2		0.5			4.7
PanEurope	1.2	50.4	6.9	0.2	0.5	0.2	59.4
Multinational	0.5	41.0	2.8			0.5	44.7
<b>European Total</b>	<b>199.4</b>	<b>105.0</b>	<b>79.3</b>	<b>751.5</b>	<b>94.5</b>	<b>69.6</b>	<b>1299.2</b>

## 1Q16

	ABS	CDO/CLO	CMBS	RMBS	SME	WBS/PFI	TOTAL
Austria	0.5			1.6			2.1
Belgium	0.2		0.1	46.7	17.4		64.5
Finland	0.6					0.5	1.1
France	17.1		0.4	58.4	0.2	0.5	76.7
Germany	44.4	0.2	6.4	26.3	6.7	0.0	84.2
Greece	9.6	1.8	0.2	2.5	6.3		20.4
Ireland	0.27	0.0	0.2	33.0			33.4
Italy	46.8	1.7	8.7	66.4	19.1	0.3	143.1
Netherlands	3.7	0.6	1.3	195.6	6.4		207.5
Portugal	3.1			20.7	6.0		29.8
Russia				0.4			0.4
Spain	14.6	0.5	0.1	130.1	18.3	0.0	163.7
Turkey	1.4						1.4
UK	37.9	8.5	50.3	154.3	7.3	66.6	324.9
Other	3.6	0.2		0.7			4.6
PanEurope	1.2	55.6	6.5	0.2	0.4	0.2	64.1
Multinational	0.5	39.8	2.7			0.5	43.6
<b>European Total</b>	<b>185.5</b>	<b>109.0</b>	<b>77.1</b>	<b>736.9</b>	<b>88.2</b>	<b>68.7</b>	<b>1265.4</b>

Sources: Bloomberg, AFME, SIFMA

## 3 Credit Quality – Rating Changes

### Upgrades/Downgrades by Country

#### 3.1 DBRS

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
France	0/0				0/0
Germany	2/0				2/0
Italy	9/0				9/0
Netherlands	0/0				0/0
Spain	3/1				3/1
UK	0/0				0/0
Multinational	2/0				2/0
European Total	16/1				16/1
US	413/3				413/3

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	0/0	0/0	0/0	0/0	0/0
	1/0	0/0	5/0	0/0	6/0
	3/0	5/1	8/0	9/0	25/1
	0/0	0/0	0/0	0/0	0/0
	0/3	20/0	1/7	5/8	26/18
	0/0	1/1	0/0	0/0	1/1
	0/3	0/7	2/5	4/0	6/15
	4/6	26/9	16/12	18/8	64/35
	391/18	485/36	12/4	24/9	912/67

#### 3.2 Fitch Ratings

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
France	1/0				1/0
Germany	8/6				8/6
Italy	3/0				3/0
Netherlands	1/2				1/2
Spain	4/7				4/7
UK	51/11				51/11
Multinational	0/1				0/1
European Total	69/27				69/27
US	436/400				436/400

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	0/0	0/2	0/0	5/0	5/2
	19/10	3/6	8/12	22/14	52/42
	2/7	5/10	9/7	1/6	17/30
	2/3	3/3	2/3	1/8	8/17
	11/24	35/6	24/17	18/4	88/51
	34/17	76/28	102/8	28/13	148/66
	0/0	0/0	0/0	0/0	0/0
	68/62	127/67	167/69	85/47	447/245
	330/602	365/109	364/690	1,251/332	2,310/1,733

#### 3.3 Moody's Investors Service

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
France	4/0				4/0
Germany	0/2				0/2
Italy	0/0				0/0
Netherlands	2/0				2/0
Spain	0/0				0/0
UK	0/9				0/9
Multinational	152/2				152/2
European Total	167/13				167/13
US	1562/628				1562/628

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	1/2	0/0	0/0	0/0	1/2
	4/3	1/2	6/4	1/1	12/10
	124/6	69/0	7/2	31/5	231/13
	3/7	8/0	30/0	0/0	41/7
	420/7	0/0	257/7	14/5	691/19
	12/12	223/1	59/12	219/0	513/25
	107/7	86/10	87/2	132/3	412/22
	671/44	387/13	446/27	407/14	1,911/98
	1,258/440	1,744/404	1,183/261	1,707/336	5,892/1,441

#### 3.4 Standard & Poor's

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
France	0/0				0/0
Germany	0/4				0/4
Italy	0/1				0/1
Netherlands	17/7				17/7
Spain	51/7				51/7
UK	33/5				33/5
Multinational	161/17				161/17
European Total	262/41				262/41
US	395/378				395/378

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	2/2	1/1	0/0	2/0	5/3
	2/2	2/8	4/7	3/2	11/19
	9/47	0/4	3/0	0/4	12/55
	0/0	1/2	0/0	1/5	2/7
	17/99	0/0	0/0	35/16	52/115
	31/18	56/40	30/316	26/84	143/458
	68/37	115/24	113/24	138/24	434/109
	129/205	175/79	150/347	205/135	659/766
	403/482	290/726	738/729	943/695	2,374/2,632

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



Upgrades/Downgrades by Collateral

3.5 DBRS - Europe

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	2/0				2/0
CDO	8/0				8/0
CMBS	0/0				0/0
Credit Card	0/0				0/0
RMBS (prime)	5/1				5/1
RMBS (non-prime)	1/0				1/0
Other ABS	0/0				0/0
<b>Total</b>	<b>16/1</b>				<b>16/1</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	1/0	4/0	6/0	3/0	14/0
	3/1	18/0	1/1	6/4	28/6
	0/2	1/8	0/5	0/0	1/15
	0/0	0/0	6/0	5/2	11/2
	0/3	0/0	3/5	4/2	7/10
	0/0	0/1	0/1	0/0	0/2
	0/0	3/0	/0	0/0	3/0
	4/6	26/9	16/12	18/8	64/35

3.6 Fitch Ratings - Europe

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	0/0				0/0
Credit Card	0/0				0/0
Other ABS	9/1				9/1
CDO	5/3				5/3
CMBS	4/11				4/11
RMBS (prime)	16/12				16/12
RMBS (non-conforming)	35/0				35/0
<b>Total</b>	<b>69/27</b>				<b>69/27</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	2/0	2/0	6/0	3/0	13/0
	0/0	2/0	0/0	0/1	2/1
	5/3	7/4	5/5	8/1	25/13
	15/4	33/16	35/8	32/8	115/36
	11/18	1/26	2/16	2/21	16/81
	18/27	82/14	46/40	21/9	167/90
	17/10	0/7	73/0	19/7	109/24
	68/62	127/67	167/69	85/47	447/245

3.7 Moody's Investors Service - Europe

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	0/0				0/0
CDO	152/2				152/2
CMBS	0/2				0/2
Credit Card	0/0				0/0
RMBS (prime)	14/1				14/1
RMBS (non-conforming)	1/8				1/8
<b>Total</b>	<b>167/13</b>				<b>167/13</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	17/0	2/0	2/0	0/1	21/1
	102/5	85/8	87/0	132/3	406/16
	7/15	2/2	12/19	12/1	33/37
	0/0	1/0	0/0	0/0	1/0
	595/43	151/18	335/19	51/8	1132/88
	38/9	165/1	65/1	212/1	480/12
	759/72	406/29	501/39	407/14	2073/154

3.8 Standard & Poor's - Europe

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	1/0				1/0
CDO	191/13				191/13
CMBS	1/12				1/12
Credit Card	0/0				0/0
RMBS (prime)	67/14				67/14
RMBS (non-conforming)	2/2				2/2
<b>Total</b>	<b>262/41</b>				<b>262/41</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	2/0	2/0	1/0	1/0	6/0
	84/37	139/26	137/18	161/27	521/108
	6/32	3/28	2/20	9/37	20/117
	0/0	0/0	0/0	0/0	0/0
	26/136	0/3	6/127	34/19	66/285
	11/0	31/22	4/182	0/52	46/256
	129/205	175/79	150/347	205/135	659/766

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

Upgrades/Downgrades by Collateral

3.9 DBRS - US

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	40/0				40/0
CDO	0/0				0/0
CMBS	13/3				13/3
Credit Card	0/0				0/0
RMBS	339/0				339/0
Other ABS	21/0				21/0
<b>Total</b>	<b>413/3</b>				<b>413/3</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	22/0	21/0	0/1	0/0	43/1
	4/0	2/0	0/0	4/1	10/1
	7/4	14/9	12/3	20/7	53/23
	0/0	0/0	0/0	0/0	0/0
	346/14	446/26	0/0	0/0	792/40
	12/0	2/1	0/0	0/1	14/2
	391/18	485/36	12/4	24/9	912/67

3.10 Fitch Ratings - US

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	0/0				0/0
Credit Card	0/0				0/0
Other ABS	26/70				26/70
CDO	22/15				22/15
CMBS	148/115				148/115
RMBS (prime)	0/93				0/93
RMBS (subprime)	20/24				20/24
Other RMBS	220/83				220/83
<b>Total</b>	<b>436/400</b>				<b>436/400</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	0/0	0/0	1/0	0/0	1/0
	0/0	0/0	0/0	0/0	0/0
	25/3	51/5	50/12	38/1	164/21
	34/6	58/18	49/10	29/14	170/48
	159/97	114/64	65/56	99/55	437/272
	4/171	0/0	180/500	11/100	195/771
	20/90	3/1	0/37	933/43	956/171
	88/235	139/21	19/75	141/119	387/450
	330/602	365/109	364/690	1,251/332	2310/1733

3.11 Moody's Investors Service - US

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	101/0				101/0
CDO	132/28				132/28
CMBS	210/85				210/85
Credit Card	13/0				13/0
RMBS	1106/515				1106/515
<b>Total</b>	<b>1562/628</b>				<b>1562/628</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	95/0	36/0	78/0	110/0	319/0
	273/5	388/2	249/2	320/1	1230/10
	226/61	246/70	143/53	370/73	985/257
	0/0	17/0	0/0	0/0	17/0
	664/374	1057/332	713/206	907/262	3341/1174
	1258/440	1744/404	1183/261	1707/336	5892/1441

3.12 Standard & Poor's - US

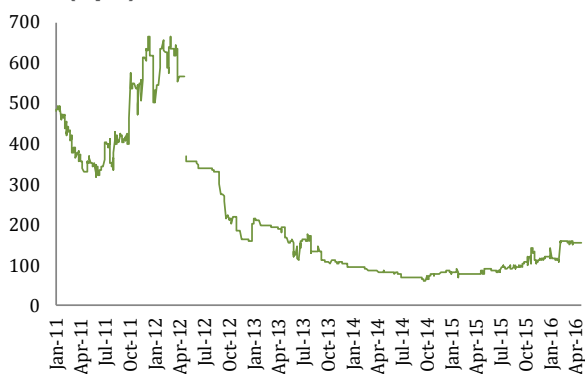
	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Auto	9/0				9/0
CDO	235/10				235/10
CMBS	64/13				64/13
Credit Card	0/0				0/0
RMBS (prime)	36/244				36/244
RMBS (subprime)	51/111				51/111
<b>Total</b>	<b>395/378</b>				<b>395/378</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	5/0	54/0	87/0	22/0	168/0
	296/11	136/24	176/12	122/22	730/69
	28/19	36/72	76/52	120/63	260/206
	0/0	0/0	0/0	0/0	0/0
	37/334	19/322	240/460	121/265	417/1381
	37/118	45/308	159/205	558/345	799/976
	403/482	290/726	738/729	943/695	2374/2632

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

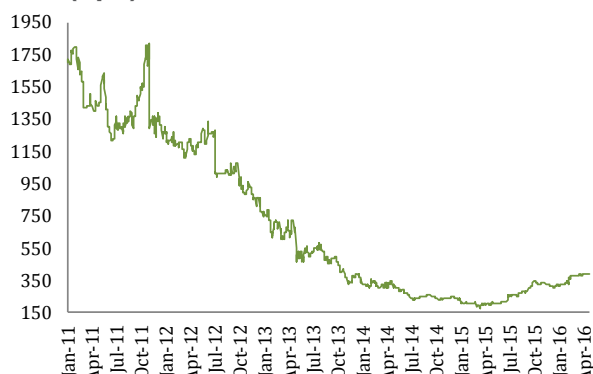
## 4 CMBS Spreads

### 4.1 European 3-5 Yr AAA CMBS Spreads (bps)



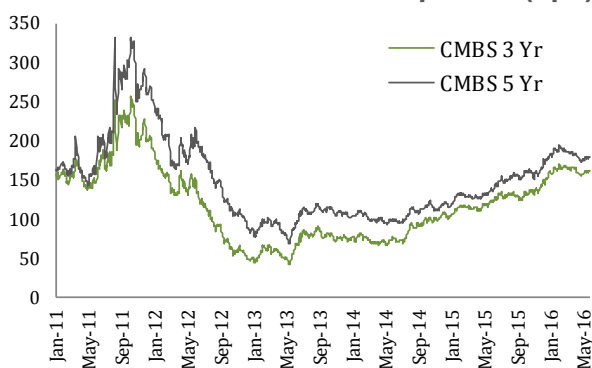
Sources: Markit

### 4.2 European 3-5 Yr BBB CMBS Spreads (bps)



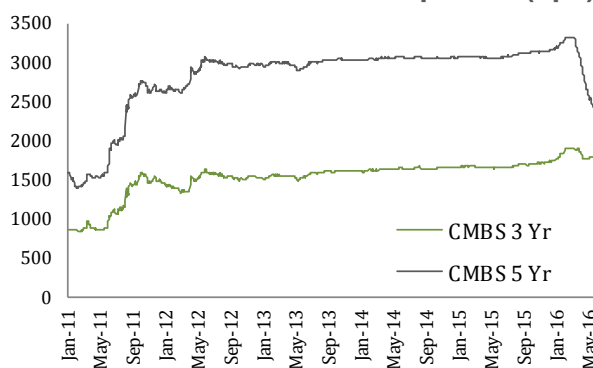
Sources: Markit

### 4.3 US 3 & 5 Yr AAA CMBS Spreads (bps)



Sources: Trepp LLC

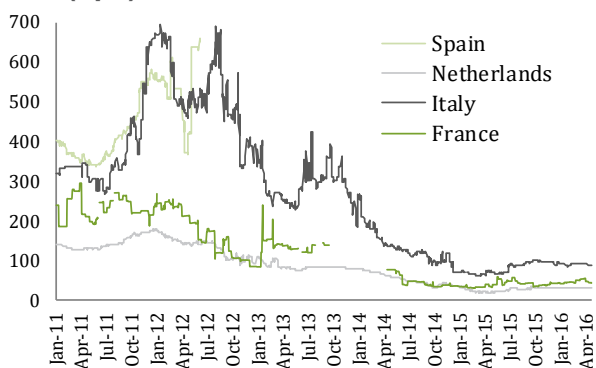
### 4.4 US 3 & 5 Yr BBB CMBS Spreads (bps)



Sources: Trepp LLC

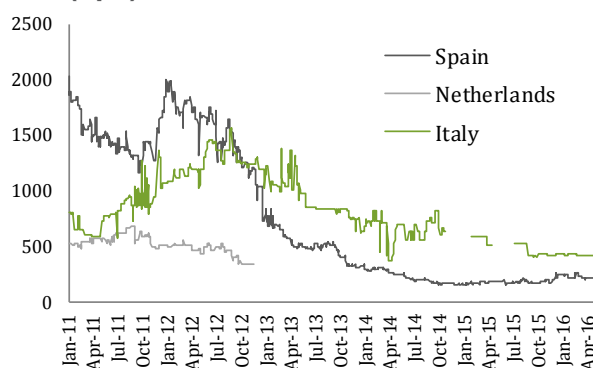
## 5 RMBS Spreads

**5.1 European 3-5 Yr AAA RMBS Spreads (bps)**



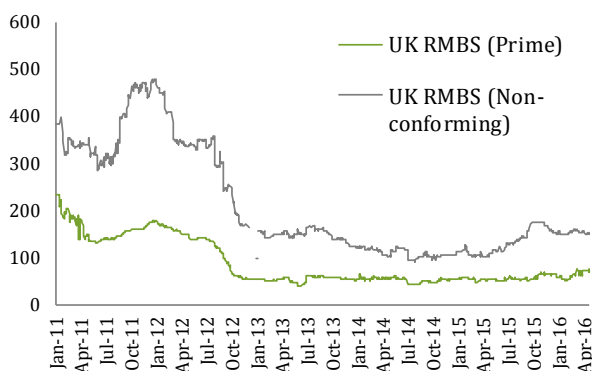
Sources: Markit

**5.2 European 3-5 Yr BBB RMBS Spreads (bps)**



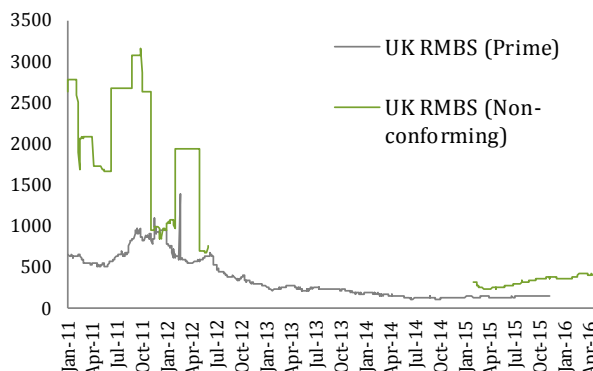
Sources: Markit

**5.3 UK 3-5 Yr AAA RMBS Spreads (bps)**



Sources: Markit

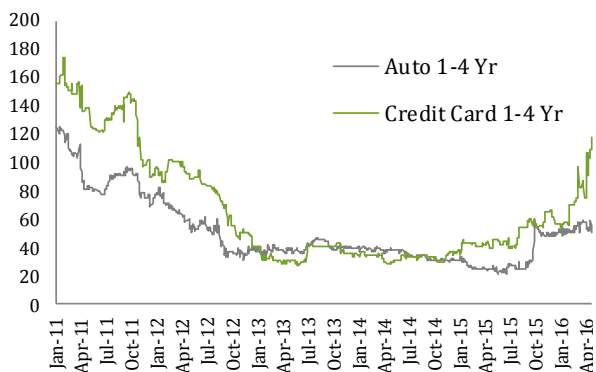
**5.4 UK 3-5 Yr BBB RMBS Spreads (bps)**



Sources: Markit

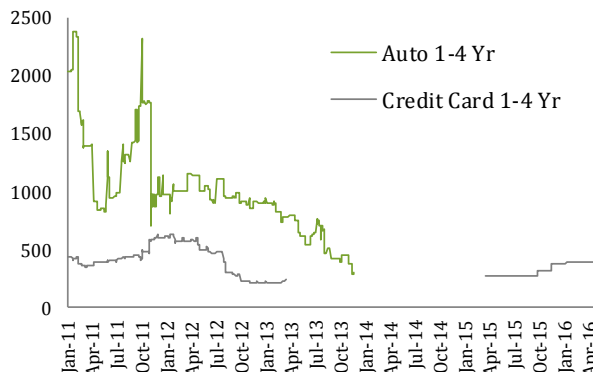
## 6 ABS Spreads

### 6.1 European 1-4 Yr AAA ABS Spreads (bps)



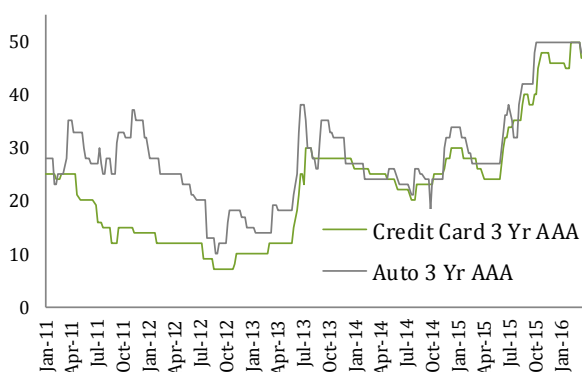
Sources: Markit

### 6.2 US 3 Yr AAA ABS Spreads (bps)



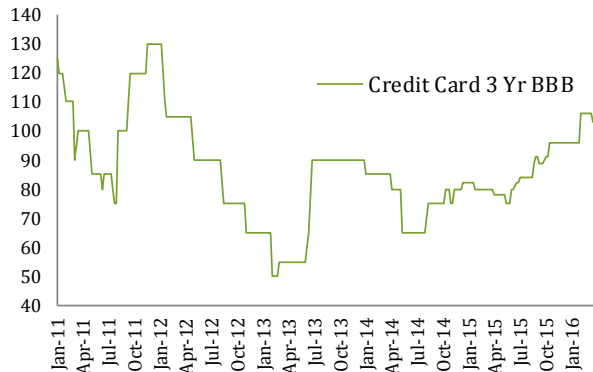
Sources: Markit

### 6.3 US 3 Yr AAA ABS Spreads (bps)



Sources: JP Morgan

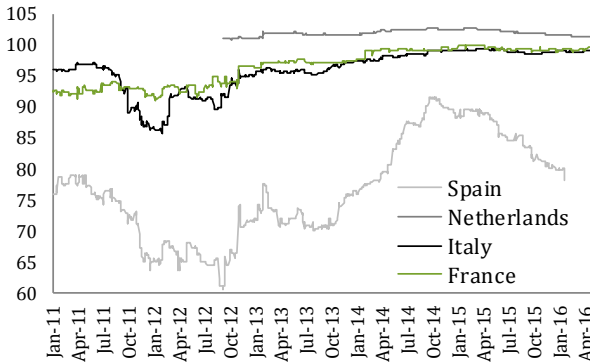
### 6.4 US 3 Yr BBB - AA ABS Spreads (bps)



Sources: JP Morgan

# 7 RMBS Prices

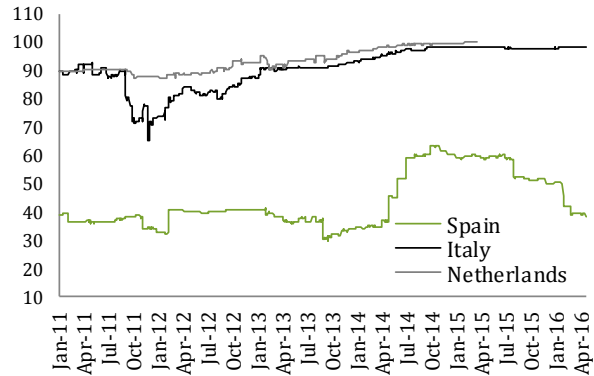
## 7.1 European 3-5 Yr AAA RMBS Prices



Sources: Markit

1. 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.
3. French AAA RMBS provided: FCC Loggias Compartment 2003, Class A, Series 1. ISIN# FR0010029231. EUR-denominated.
4. Dutch AAA RMBS provided: Storm 2012-IV BV, Class A2, Series 4. ISIN# XS0815105472. EUR-denominated.

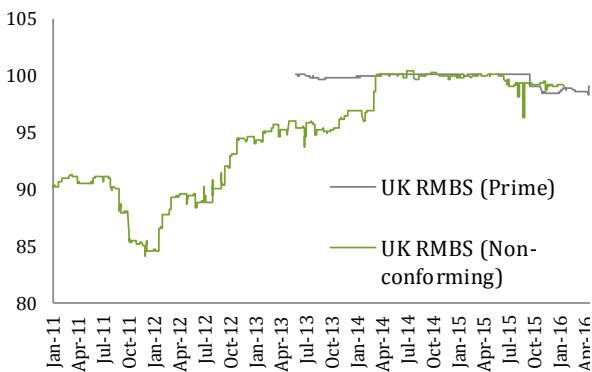
## 7.2 European 3 - 5 Yr BBB RMBS Prices



Sources: Markit

1. Spanish BBB RMBS provided: Hipocat 8, Fondo de Titulizacion Activos, Class D, Series 1: ISIN# ES0345784047. EUR-denominated
2. 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.

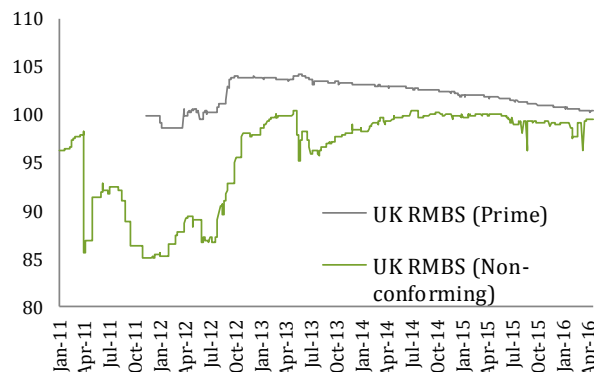
## 7.3 UK 3-5 Yr AAA RMBS Prices



Sources: Markit

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

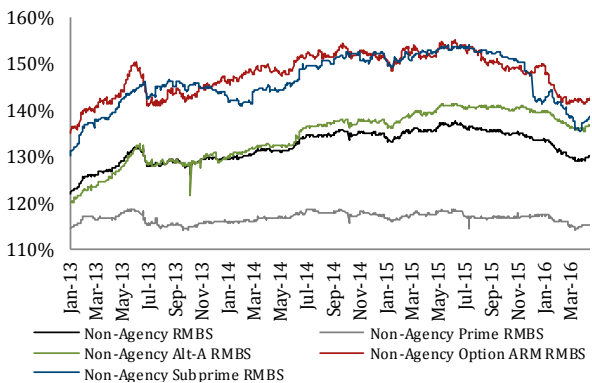
## 7.4 UK 3 - 5 Yr BBB RMBS Prices



Sources: Markit

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

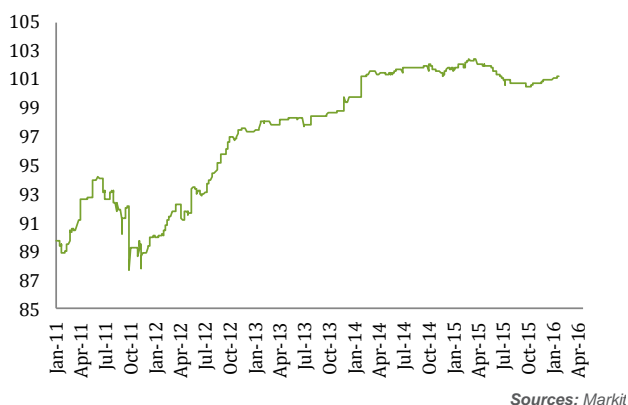
## 7.5 Markit RMBS iBoxx



Sources: Markit

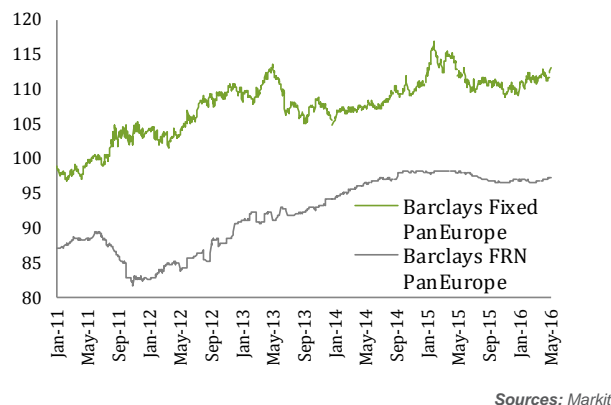
## 8 CMBS and ABS Prices

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



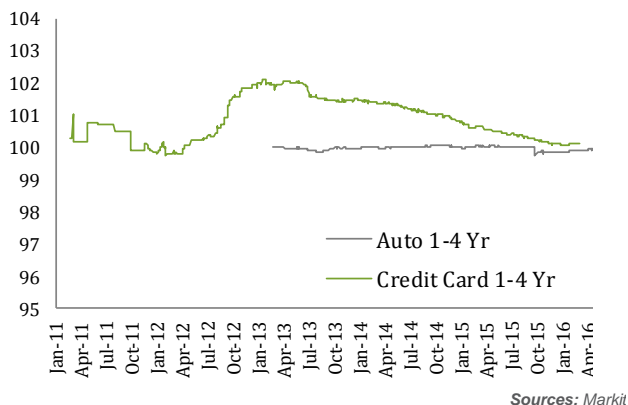
1. Pan-European AAA CMBS provided: German Residential Funding, Class A, Series 2013-1. ISIN# XS0944452563. EUR-denominated

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



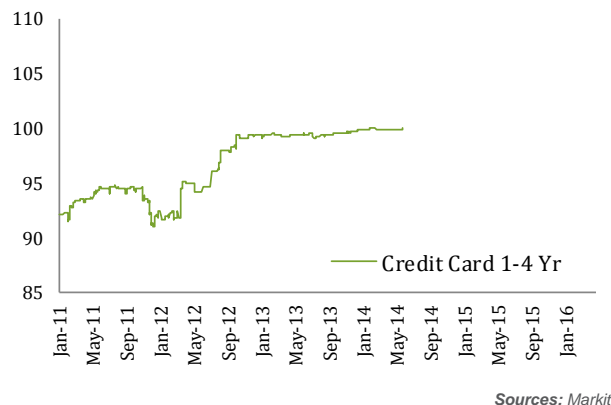
1. Pan-European BBB CMBS provided: German Residential Funding, Class D, Series 2013-1. ISIN# XS0944454858. EUR-denominated.

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



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

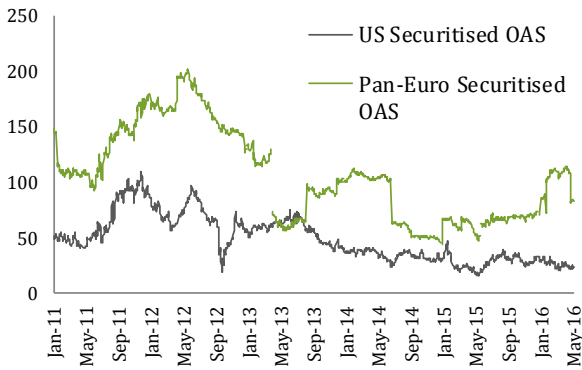
### 8.4 Pan-European 1-4 Yr BBB ABS Prices



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

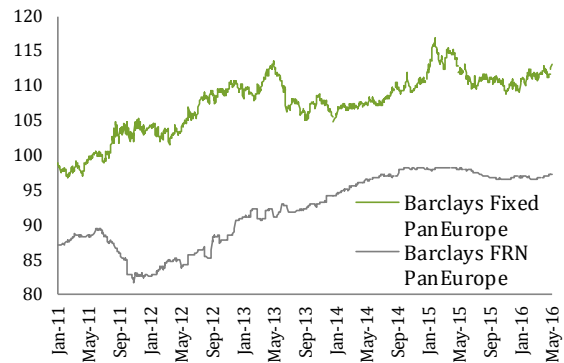
# 9 Indices Data

## 9.1 Securitized Index Option-Adjusted Spreads (bps)



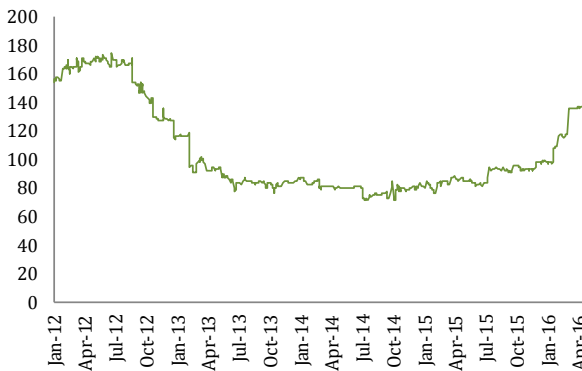
Sources: Barclays Capital

## 9.2 Barclays PanEurope Fixed and Floating Prices



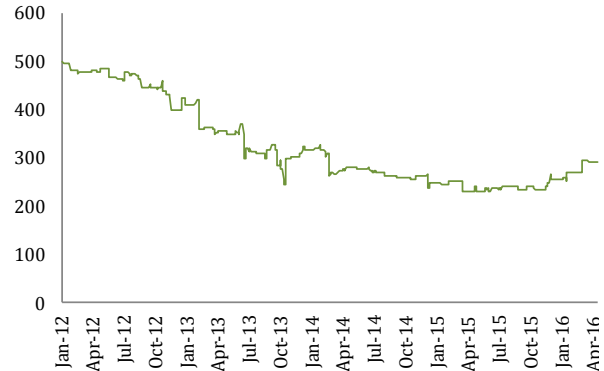
Sources: Barclays Capital

## 9.3 Australia AAA



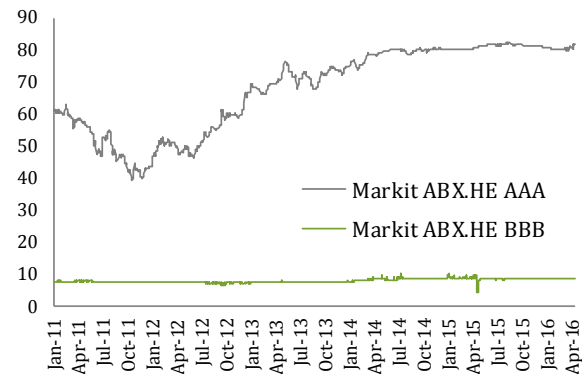
Sources: Macquarie

## 9.4 Australia AA



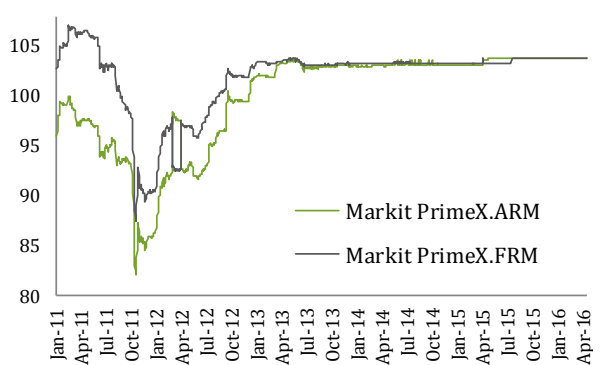
Sources: Macquarie

## 9.5 ABX.HE and CMBX Prices



Sources: Markit

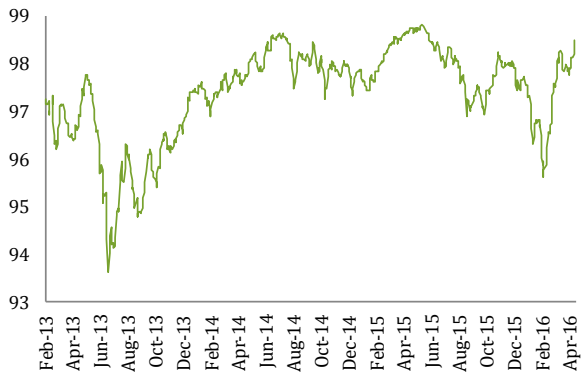
## 9.6 PrimeX.ARM and FRM Prices



Sources: Markit



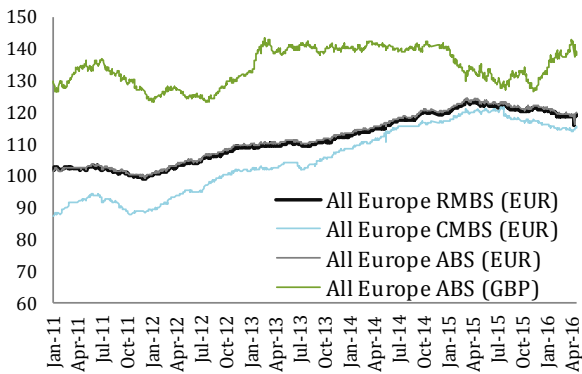
### 9.7 CMBX 6 AAA Prices



Sources: Markit

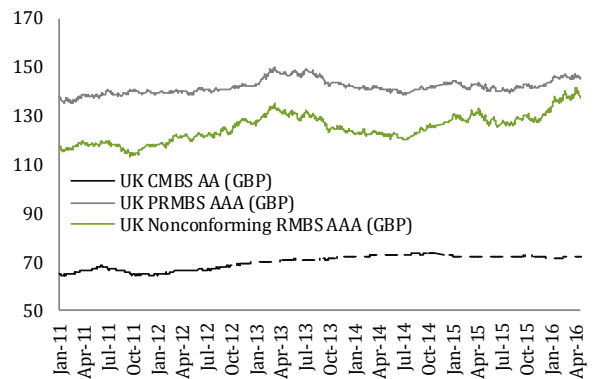
# 10 Total Return Benchmark Data

## 10.1 European Total Return



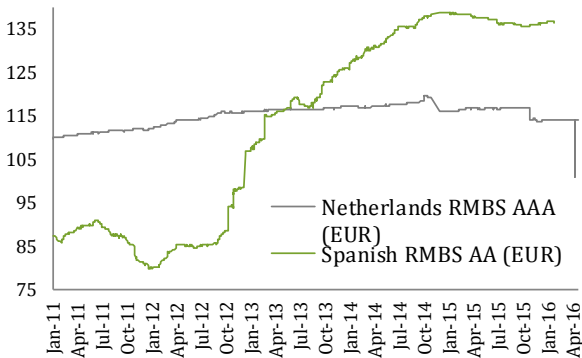
Sources: Markit

## 10.2 UK Total Return



Sources: Markit

## 10.3 Europe ex UK RMBS AAA



Sources: Markit

# 11 Asset-Backed Commercial Paper

€ BILLIONS

## 11.1 European ABCP Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL
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	100.1	114.3	399.5
2016	95.8				95.8

## 11.2 European ABCP Issuance by Nationality of Issuer

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
France	55.8				55.8
Germany	3.0				3.0
Ireland	34.7				34.7
Italy	-				0.0
Luxembourg	1.6				1.6
Netherlands	-				0.0
Spain	-				0.0
UK	0.7				0.7
Total	95.8				95.8

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	31.3	49.4	47.3	54.5	182.5
	4.1	5.0	4.4	6.1	19.7
	44.0	46.1	45.1	51.4	186.5
	-	-	-	-	0.0
	2.9	2.3	2.1	1.4	8.7
	-	-	-	-	0.0
	-	-	-	-	0.0
	-	-	1.2	0.9	2.1
	82.3	102.9	100.1	114.3	399.5

## 11.3 European ABCP Issuance by Programme Type

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
Hybrid	1.2				1.2
SIVs	-				0.0
Single-Seller Conduits	-				0.0
Multi-Seller Conduits	82.4				82.4
Unspecified	12.2				12.2
Total	95.8				95.8

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	-	3.44	1.96	1.05	6.5
	-	-	-	-	0.0
	-	-	-	-	0.0
	63.8	83.5	82.6	98.7	328.6
	18.5	15.9	15.5	14.5	64.4
	82.3	99.4	98.1	113.2	393.0

## 11.4 ABCP Outstandings by Nationality of Issuer

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
France	6.5			
Germany	1.2			
Ireland	9.0			
Italy	-			
Luxembourg	0.6			
Netherlands	-			
Spain	-			
UK	0.6			
European Total	17.9			
US Total	215.8			

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
	6.1	6.8	8.1	7.2
	1.0	1.0	0.9	0.9
	10.7	10.9	9.9	9.0
	-	-	-	-
	1.0	0.8	0.7	0.6
	-	-	-	-
	-	-	-	-
	-	-	0.6	0.6
	18.8	19.4	20.2	18.3
	218.1	190.6	205.3	219.2

Sources: Dealogic, Moody's Investors Service

11.5 European ABCP Outstandings by Programme Type

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
Hybrid	1.0			
SIVs	-			
Single-Seller	-			
Multi-Seller	14.2			
Unspecified	2.7			
<b>Total</b>	<b>17.9</b>			

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
	-	1.69	1.04	0.20
	-	-	-	-
	-	-	-	-
	13.1	13.9	15.8	14.9
	5.7	3.8	3.4	3.2
<b>Total</b>	<b>18.8</b>	<b>19.4</b>	<b>20.2</b>	<b>18.3</b>

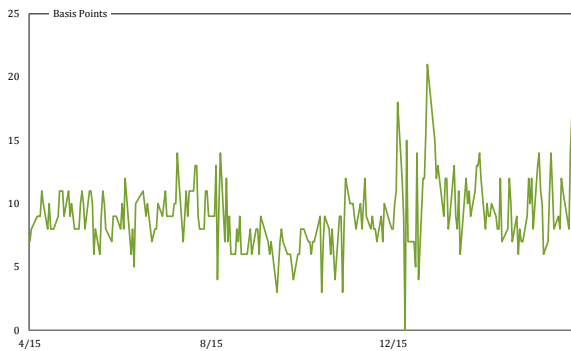
11.6 US ABCP Outstandings by Programme Type

	2016:Q1	2016:Q2	2016:Q3	2016:Q4
Loan-Backed	-			
SIVs	-			
Single-Seller	6.6			
Multi-Seller	176.5			
Other	32.7			
<b>Total</b>	<b>215.8</b>			

	2015:Q1	2015:Q2	2015:Q3	2015:Q4
	-	-	-	-
	-	-	-	-
	6.1	7.7	6.0	6.4
	157.0	140.8	155.9	178.9
	55.0	42.1	43.4	33.9
<b>Total</b>	<b>18.3</b>	<b>18.3</b>	<b>18.3</b>	<b>18.3</b>

Sources: Dealogic, Moody's Investors Service

11.7 US ABCP to AA Non-financial CP Spread



Sources: US Federal Reserve

## 12 Global Comparative Data

€ BILLIONS

### 12.1 Global Securitisation Issuance

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
US	90.5				90.5
Europe	14.3				14.3
Asia	21.7				21.7
<b>Total</b>	<b>126.5</b>				<b>126.5</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	125.8	132.8	117.1	111.0	486.8
	26.7	24.4	29.9	31.5	112.5
	16.4	24.2	16.7	22.4	79.6
	168.9	181.3	163.7	164.9	678.9

### 12.2 Global High Grade Corporate Bond Issuance

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
US	220.1				220.1
Europe	208.9				208.9
Asia	238.9				238.9
<b>Total</b>	<b>667.9</b>				<b>667.9</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	236.8	235.3	178.2	168.4	818.6
	199.0	140.3	99.6	111.1	550.0
	158.7	220.5	206.9	236.3	822.4
	594.6	596.1	484.6	515.7	2191.0

### 12.3 Global Government Bond Issuance

	2016:Q1	2016:Q2	2016:Q3	2016:Q4	TOTAL
US	100.3				100.3
Europe	176.1				176.1
Asia	39.3				39.3
<b>Total</b>	<b>315.7</b>				<b>315.7</b>

	2015:Q1	2015:Q2	2015:Q3	2015:Q4	TOTAL
	98.6	97.7	82.8	87.7	366.9
	196.9	95.1	91.0	79.2	462.2
	40.5	35.8	41.3	39.1	156.7
	336.0	228.6	215.1	206.0	985.8

## 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 obligations/collateralised loan obligations (CDOs/CLOs), commercial mortgage-backed securities (CMBS), and residential mortgage-backed 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 multi-jurisdictional 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 initiatives (“PFI”) have 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 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
Q4 2015	0.9210	0.6711
Q1 2016	0.8787	0.6729

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 US-denominated 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, Switzerland, Sweden, and Hungary.

PanEurope has been pulled out of the Multinational parent category and will be retroactively displayed for European 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 accordingly. Tranches that are non-EUR-denominated 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 segmented 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 Cayman 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 quarter. 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 securities 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 effective 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. – 7.4. 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. - 9.8. 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, multi-seller 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.

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## Annex

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