# afme/esf

Securitisation Data Report Q4:2009



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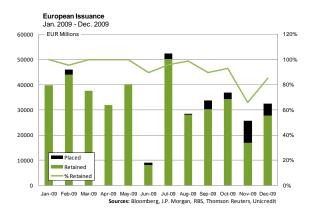
# 2009 Q4: European Securitisation Markets Start to Thaw

# Market Environment Economic Conditions

- According to Eurostat, European unemployment continues to worsen in the last quarter of the year, with the euro area and the EU27 reporting a seasonally adjusted unemployment rates of 9.9% and 9.5% respectively in December 2009, compared to 9.8% and 9.3% respectively in September 2009.
- According to Eurostat, GDP increased by 0.1% in both the euro area and EU27 during Q4 2009 compared to the previous quarter. Seasonally adjusted GDP decreased by 2.1% in the euro area and by 2.3% in the EU 27 in the fourth quarter of 2009 compared with the same quarter of the previous year. Over the whole year 2009, GDP decreased by 4.1% in the euro area and by 4.2% in the EU27, compared with an increase of 0.6% and 0.8% respectively for full year 2008.

# Term Issuance and Outstanding Volumes

• EUR 94.9 billion of securitisation was issued in Q4 2009, with approximately 17.0% publicly or privately placed. Issuance in the last quarter of 2009 was less than a third of the issuance in the same quarter of the previous year, however the percentage of deals retained by originators/sellers was 99.8% in Q4 2008. In 2009, approximately 94.0% of all issuance (EUR 414.1 billion) has been retained.



- Europe experienced a slight improvement in the primary markets in the 3Q and 4Q of 2009, with a few public placements. However some fundamental issues are still preventing a recovery of the securitisation market, including a reduced investor base (e.g., the disappearance of SIVs); the fact that originators utilise, when available, more competitive sources of funding (e.g. covered bonds); and an overhang of retained issuance.
- In the United States, three CMBS issues came to market, although the securitisation market in general remains dominated by agency (Fannie Mae, Freddie Mac, Ginnie Mae) issuance, comprising circa 91.0% of all issuance in

the fourth quarter as well as for the full year. ABS issuance continued to remain relatively strong, supported partly by the Term Asset-Backed Securities Loan Facility (TALF). In Europe, while no CMBS was issued in Q4 2009, commercial real estate continues to remain a concern in Europe for 2010.

# Spread and Price Changes

 According to Markit data, spreads continued to tighten throughout the fourth quarter for European assets, with certain triple-A rated assets reaching spread levels seen prior to Lehman's bankruptcy.

# Credit Quality & Lending

- While the pace of rating actions slowed significantly in the United States, a number of European downgrades happened in the fourth quarter of the year. European CDOs (especially SME CDOs) and CMBS were particularly impacted, while RMBS were affected to a limited extent. The downgrade of Greece by all three credit rating agencies in early December 2009 has triggered rating watches for certain Greek transactions which may possibly lead to downgrades in the following quarters.
- According to the January 2010 bank lending survey from the European Central Bank (ECB), credit standards have continued to tighten, albeit by a significantly smaller net amount than during prior quarters. Demand for corporate loans has continued to remain depressed due to reduced fixed income investment, scarce M&A activity, and competition with alternative sources of financing (e.g., equity and/or debt issuance).
- The ECB published in February 2010 the results of the survey on the access to finance of small and mediumsized enterprises (SMEs) in the euro area for the second half of 2009. According to the survey, while half of the SMEs reported an unchanged need for bank loans, a quarter of them reported an increased need and slightly less than 10% a reduction, therefore on balance 16% of the SMEs (up from 11% in the first half of 2009) reported an increase in their need for bank loans. By contrast, the balance of large firms reporting an increase in the need for bank loans remained lower (6%) and broadly unchanged from the previous period; large firms also had greater recourse to market-based financing, the terms of which became considerably more favourable in the second half of 2009. The availability of bank loans to SMEs deteriorated in the second half of 2009 in line with the trend of the previous half year; by contrast, the assessment provided by large firms was considerably less negative. Bank loan application success remained stable for large firms, while the rejection rate for SMEs increased from 12% in H1 2009 to 18% in H2 2009. Among the four largest euro area countries, the access to finance of

#### MARKET HIGHLIGHTS AND COMMENTARY

- SMEs in Spain remained worse than for those in Germany, France and Italy.
- Commercial real estate in Europe, similarly to the United States, continued to remain at risk. Significant declines in property values, inability to access debt financing, and a significant pipeline of maturing loans are key drivers to defaults, according to Fitch.

#### **ABCP Trends**

- According to Dealogic, European ABCP issuance continued to decline during Q4 2009 to EUR 32.0 billion, primarily from multi-seller conduits, down circa 63.0% from EUR 86.2 billion issued in 4Q 2008.
- According to Fitch, one particular key trend among the European ABCP programmes since January 2009 has been the "removal of, or reduction in, exposure to illiquid, long-term securitised assets, particularly RMBS and CMBS [...] and CDOs." Support for these conduits largely remains funded in the US or by bank sponsors. Overall the European ABCP market remains hindered.

# Major Regulatory, Legislative and Policy Initiatives

- The Committee of European Banking Supervisors (CEBS) published on 3 November 2009 its advice and an impact assessment on the minimum retention requirement for securitisations provided for in Article 122a of the amendments to the Capital Requirements Directive (CRD II). CEBS advice included the following elements: percentage of retention should remain at 5%; all four retention methodologies should continue to exist; a further methodology of retention combining first loss and a vertical slice could be considered; clarification regarding hedging and certain other technical issues; further safeguards regarding disclosures.
- The ECB announced on 20 November 2009 tightening of its eligibility criteria for ABS in the Collateral Framework. In particular, from 1 March 2010 all newly issued ABS are required to have two triple-A ratings at issuance. The "second-best" rule is applied, meaning that also the second-best available rating must comply with the minimum applicable threshold. Moreover, from 1 March 2011 the second-best rule and the requirement to have at least two ratings (minimum rating A-/A3 during the life of the transaction) will be applied to all ABS, regardless of their date of issue.
- On 17 December 2009, the Basel Committee on Banking Supervision published two Consultative Documents on Banking Supervision: "Strengthening the Resilience of the Banking Sector" and "International Framework for Liquidity Risk Measurement, Standards and Monitoring". The documents raised a number of important issues, including specific products and businesses such as securitisation. Deadline for responses is 16 April 2010. The main areas of the consultations included:

- Raising the quality, consistency and transparency of the capital base;
- 2. Strengthening the risk coverage of the capital framework;
- 3. Introducing a leverage ratio as a supplementary measure to the Basel II risk-based framework with a view to migrating to a Pillar 1 treatment based on appropriates review and calibration the definition and calibration of such ratio, including the relationship between accounting and regulatory capital treatment, could have a significant long term impact on securitisation in the European market;
- 4. Introducing a series of measures to promote the build-up of capital buffers in good times that can be drawn upon in periods of stress (i.e. a countercyclical capital framework) and forward-looking provisioning based on expected losses;
- Introducing a global minimum liquidity standard for internationally active banks that includes a 30-day liquidity coverage ratio requirement underpinned by a longer-term structural liquidity ratio.
- On 23 December 2009, the ECB issued a public consultation on the provision of loan-level information on underlying assets backing the ABS bonds that it accepts as collateral for lending through the Eurosystem framework. The consultation has focused on a proposed RMBS loanreporting template including country specific fields and definitions for France, Germany, Italy, the Netherlands, Spain and the United Kingdom. The ECB has also considered introducing a data-handling infrastructure to collect and store loan-by-loan information and to distribute it to market participants. The Eurosystem has envisaged two alternative options that could be potentially combined: (1) a single data portal to handle and process the loan information for all European ABS; (2) a set of registered portal providers for originators and servicers to choose from. The AFME / ESF and ISDA response to the ECB consultation is available here.
- In the US, the Treasury amended the terms of preferred stock purchases of Fannie Mae and Freddie Mac in December 2009 in order to allow the agencies under conservatorship to continue serving the housing market, such as lifting the government assistance cap (previously capped to USD 200 billion per agency) and amending the terms of the mortgage portfolio wind down.

# ISSUANCE

#### € BILLIONS12

# 1.1. European Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL <sup>2</sup>
2000	14.1	16.4	21.4	26.3	78.2
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	128.7	152.0	98.3	74.7	453.7
2008	40.0	169.6	134.1	367.6	711.3
2009	123.2	81.2	114.7	94.9	414.1

# 1.3. European Issuance by Collateral

	2009:Q1   2009:Q2   2009:Q3   2009:Q4   TOTAL <sup>2</sup>						
	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL-		
ABS <sup>3</sup>	17.5	10.4	11.1	13.4	52.5		
CDO <sup>4</sup>	40.5	16.9	18.6	31.2	107.1		
CMBS	8.9	0.5	6.0	0.0	15.5		
RMBS	56.2	53.4	79.0	50.3	239.0		
Total <sup>2</sup>	123.2	81.2	114.7	94.9	414.1		

# 1.4. US Issuance by Collateral

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>1,2</sup>
ABS <sup>5</sup>	12.3	35.7	34.9	20.0	102.9
CDO <sub>6</sub>	0.1	1.0	0.1	0.3	1.6
Agency MBS	259.3	419.7	310.1	241.9	1,231.0
Non-Agency CMBS	0.0	0.2	0.1	0.9	1.2
Non-Agency RMBS	1.7	10.3	7.3	2.9	22.2
Total <sup>1,2</sup>	273.5	466.7	352.6	266.0	1,358.9

# 1.2. US Historical Issuance

	TOTAL <sup>1,2</sup>
2000	1,088.0
2001	2,308.4
2002	2,592.7
2003	2,914.5
2004	1,956.6
2005	2,650.6
2006	2,455.8
2007	2,147.1
2008	933.6
2009	1,358.9

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>2</sup>
10.1	12.7	11.6	38.6	73.0
2.0	10.2	14.0	21.9	48.1
0.7	0.7	3.4	0.1	4.9
27.2	146.0	105.0	307.1	585.3
40.0	169.6	134.1	367.6	711.3

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>1,2</sup>
32.6	40.0	14.2	1.9	88.7
12.4	15.0	9.1	3.6	40.1
204.9	239.8	181.0	153.3	779.0
3.5	4.8	0.1	0.0	8.4
7.6	8.7	0.9	0.1	17.4
261.0	308.3	205.4	158.9	933.6

Source: Bloomberg, JP Morgan, Merrill Lynch, RBS, Thomson Reuters, Unicredit, SIFMA

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$∫€ exchange rates as of quarter-end.

<sup>2</sup> Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.

<sup>&</sup>lt;sup>3</sup> European ABS issuance includes auto, credit card, leases, loans, receivables and other.

<sup>4</sup> European CDO issuance numbers only include euro-denominated issuance regardless of the country of collateral. A substantial percentage of CDOs are backed by multi-jurisdictional collateral. Historical CDO issuance totals have been revised due to periodic updates of the sector.

<sup>&</sup>lt;sup>5</sup> 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.

The sector.

6 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.

# ISSUANCE

#### € BILLIONS1

# 1.5. Issuance by Country of Collateral

· · · J ·				
2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>2</sup>
5.3	8.2		13.9	27.4
	4.4	0.6	1.9	6.9
14.6	3.9	5.2	2.8	26.5
9.7	5.9	6.4	0.5	22.5
3.0	2.4	5.3	3.2	13.9
13.9	8.8	28.7	16.4	67.9
12.0	21.4	0.9	9.5	43.8
8.0	1.6	1.0	2.3	12.9
22.7	18.6	10.1	11.0	62.4
16.2	2.8	47.0	22.4	88.4
17.8	3.2	9.5	11.1	41.6
123.2	81.2	114.7	94.9	414.1
273.5	466.7	352.6	266.0	1,358.9
	5.3 14.6 9.7 3.0 13.9 12.0 8.0 22.7 16.2 17.8 123.2	5.3     8.2       4.4     14.6     3.9       9.7     5.9       3.0     2.4       13.9     8.8       12.0     21.4       8.0     1.6       22.7     18.6       16.2     2.8       17.8     3.2       123.2     81.2	5.3     8.2       4.4     0.6       14.6     3.9     5.2       9.7     5.9     6.4       3.0     2.4     5.3       13.9     8.8     28.7       12.0     21.4     0.9       8.0     1.6     1.0       22.7     18.6     10.1       16.2     2.8     47.0       17.8     3.2     9.5       123.2     81.2     114.7	5.3     8.2     13.9       4.4     0.6     1.9       14.6     3.9     5.2     2.8       9.7     5.9     6.4     0.5       3.0     2.4     5.3     3.2       13.9     8.8     28.7     16.4       12.0     21.4     0.9     9.5       8.0     1.6     1.0     2.3       22.7     18.6     10.1     11.0       16.2     2.8     47.0     22.4       17.8     3.2     9.5     11.1       123.2     81.2     114.7     94.9

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>2</sup>
	15.1		19.7	34.9
			7.5	7.5
	3.5		10.8	14.2
3.8	1.3	3.3	41.7	50.1
1.0	8.0	3.7	7.2	12.7
		0.2		0.2
2.5	14.0	4.6 19.6		40.7
5.9	15.2	17.1	17.1 44.0	
2.8	10.0	9.6 50.1		72.6
2.0	2.6	3.5 6.7		14.8
0.5	0.4			0.9
9.8	22.7	9.1	39.1	80.7
8.8	73.8	79.6	109.7	271.9
2.9	10.1	3.4	11.4	27.8
40.0	169.6	134.1	367.6	711.3
261.0	308.3	205.4	158.9	933.6

# 1.6. Issuance by Collateral Type and Country of Collateral<sup>2</sup>

2009.Q4							
	ABS <sup>3</sup>	CDO⁴	CMBS	RMBS	TOTAL <sup>2</sup>		
Belgium		8.3		5.6	13.9		
France	1.9				1.9		
Germany	1.2	1.6			2.8		
Greece	0.5				0.5		
Ireland	0.0			3.1	3.1		
Italy	5.8			10.6	16.4		
Netherlands		1.3		8.1	9.5		
Portugal	0.4			1.8	2.3		
Spain	2.0	5.3		3.7	11.0		
UK	1.5	3.6		17.3	22.4		
Multinational <sup>7</sup>		11.1			11.1		
European Total <sup>2</sup>	13.4	31.2	0.0	50.3	94.9		

				NON-	NON-	
			AGENCY	AGENCY	AGENCY	
	ABS <sup>5</sup>	CDO <sub>6</sub>	MBS	CMBS	RMBS	TOTAL <sup>1,2</sup>
US Total <sup>1,2</sup>	20.0	0.3	241.9	0.9	2.9	266.0

Source: Bloomberg, JP Morgan, Merrill Lynch, RBS, Thomson Reuters, Unicredit, SIFMA

<sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end.

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

Seuropean CDO issuance numbers only include euro-denominated issuance regardless of the country of collateral. A substantial percentage of CDOs are backed by multi-jurisdictional collateral. Historical CDO issuance totals have been revised due to periodic updates of the sector.

Sus 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.

<sup>&</sup>lt;sup>6</sup> 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.

Multinational includes all deals, including CDOs, in which assets are originated from a variety of jurisdictions, or from countries whose total amounts are too small to display.

# ISSUANCE

#### € BILLIONS1

# 1.7. European Issuance by Rating<sup>3</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>2</sup>
AAA	68.2	66.6	92.6	75.6	303.0
AA	8.5	2.0	1.2	2.2	13.8
Α	21.5	2.7	3.0	4.1	31.3
BBB & Below	4.5	2.4	3.8	3.3	14.0
Not Rated	20.6	7.5	14.0	9.8	51.9
European Total <sup>2</sup>	123.2	81.2	114.7	94.9	414.1

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>2</sup>
27.8	145.2	115.2	266.5	554.7
3.5	2.4	1.4	21.4	28.7
0.9	3.2	7.1	46.9	58.1
1.1	4.1	2.4	3.6	11.2
6.7	14.7	8.0	29.1	58.5
40.0	169.6	134.1	367.6	711.3

#### 1.8. US Issuance by Rating<sup>4</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>1,2</sup>	
AAA	8.1	29.7	28.7	15.8	82.3	
AA	0.0		0.0	0.3	0.3	
Α	0.0	0.4	1.0	0.8	2.2	
BBB & Below	0.6	0.0	0.0	0.2	0.8	
Not Rated	5.4	17.0	12.8	7.1	42.2	
Agency MBS	259.3	419.7	310.1	241.9	1231.0	
US Total <sup>1,2</sup>	273.5	466.7	352.6	266.0	1358.9	

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>1,2</sup>
39.0	46.2	16.2	2.5	103.9
0.5	1.9	1.1	0.4	4.0
0.8	1.9	1.1	0.5	4.4
0.7	1.3	0.8	0.0	2.8
15.1	17.2	5.0	2.1	39.5
204.9	239.8	181.0	153.3	779.0
261.0	308.3	205.4	158.9	933.6

Source: Bloomberg, JP Morgan, Merrill Lynch, RBS, Thomson Reuters, Unicredit, SIFMA

# 1.9. Securitisation Issuance by Deal Size<sup>1</sup>

2009:Q3

INCLUDING RETAINED DEALS <sup>2</sup>						
	EUR	OPE	US			
	# of Issues	€Billions	# of Issues	€Billions		
Less than 0.1 Billion	0%	0%	5%	0%		
0.1-1.0 Billion	48%	11%	19%	10%		
More than 1.0 Billion	52%	89%	15%	30%		
Agency MBS	N/A N/A 61% 61%					
Total <sup>3</sup>	100%	100%	100%	100%		

# 2009:Q4

EXCLUDING RETAINED DEALS <sup>2</sup>				IN	CLUDING RE	TAINED DEALS	<b>S</b> <sup>2</sup>	
	EUROPE US		EUROPE		US			
	# of Issues	€Billions	# of Issues	€Billions	# of Issues	€Billions	# of Issues	€Billions
Less than 0.1 Billion	17%	1%	3%	0%	8%	0%	3%	0%
0.1-1.0 Billion	61%	32%	26%	13%	47%	9%	27%	16%
More than 1.0 Billion	22%	67%	6%	11%	44%	91%	5%	12%
Agency MBS	N/A	N/A	66%	75%	N/A	N/A	65%	72%
Total <sup>3</sup>	100%	100%	100%	100%	100%	100%	100%	100%

Source: Dealogic

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end.
<sup>2</sup> Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.

<sup>&</sup>lt;sup>3</sup> European CDO issuance numbers only include euro-denominated issuance regardless of the country of collateral. A substantial percentage of CDOs are backed by multi-jurisdictional collateral. Historical CDO 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.

<sup>&</sup>lt;sup>1</sup> The European data includes all asset classes – ABS, CMBS, RMBS and euro-denominated CDOs. US data includes ABS, non-agency CMBS and RMBS, and US dollar-denominated CDOs. US agency MBS, which includes agency CMBS and RMBS, is shown separately. All data except for CDOs is included based on the country of collateral.

<sup>2</sup> Dealogic provides data for retained deals based on available market information, sourcing further details from a wide base of syndicate desks wherever possible. Further statistics on retained deals are

added based on intelligence from other market participants.

Percentages may not sum to 100% due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submit-

ted to our data source after the prior period cut-off dates.

#### € BILLIONS1

# 2.1. European Outstandings by Collateral

	2009:Q1	2009:Q2	2009:Q3	2009:Q4
ABS <sup>2</sup>	194.0	196.9	196.2	200.9
CDO <sup>3</sup>	315.1	319.9	328.9	347.6
CMBS	148.0	146.0	143.1	140.8
RMBS	1,088.6	1,108.7	1,154.6	1,158.8
WBS <sup>4</sup>	37.9	38.0	37.2	36.5
Total <sup>5</sup>	1,783.6	1,809.6	1,860.0	1,884.7

2008:Q1	2008:Q2	2008:Q3	2008:Q4
177.9	183.8	176.1	192.0
254.2	272.6	284.0	297.9
141.5	141.5	139.2	138.4
660.1	789.2	848.4	1,069.8
39.8	39.8	39.7	39.5
1,273.5	1,426.9	1,487.5	1,737.5

# 2.2. US Outstandings by Collateral

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	2009:Q1	2009:Q2	2009:Q3	2009:Q4	
ABS <sup>6</sup>	1,961.2	1,805.4	1,697.0	1,695.0	
Agency MBS	3,843.8	3,828.4	3,763.0	3,891.3	
Non-Agency RMBS	936.5	841.0	769.8	751.3	
Non-Agency CMBS	623.6	581.6	550.2	554.4	
Total <sup>1,5</sup>	7,365.0	7,056.5	6,780.0	6,892.0	

2008:Q1	2008:Q2	2008:Q3	2008:Q4
1,705.6	1,828.9	1,982.8	1,911.9
3,002.6	3,105.5	3,534.9	3,631.8
912.2	862.4	931.6	917.3
547.5	544.2	535.0	595.2
6,167.9	6,341.0	6,984.4	7,056.3

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

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end. <sup>2</sup> European ABS outstanding collateral types include auto loans, credit cards, loans (consumer and student), and other.

Includes euro-denominated CDOs issued after July 2007, regardless of country of collateral, and prior to this, only CDOs confirmed by market participants with known European collateral.
 Whole Business Securitisation: a securitisation in which the cashflows derive from the whole operating revenues generated by an entire business or segmented part of a larger business.
 Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data

source after the prior period cut-off dates.

<sup>6</sup> US ABS outstanding collateral types include auto loans, credit cards, loans (home equity, equipment and student loans), CDOs, and other. CDOs outstanding cannot be broken out within the ABS outstanding collateral type but represents dollar-denominated issues.

#### € BILLIONS¹

# 2.3. Outstandings by Country of Collateral<sup>2</sup>

2007 - 2008

	2008:Q1	2008:Q2	2008:Q3	2008:Q4
Austria	3.5	3.4	3.3	3.2
Belgium	6.9	22.0	21.8	41.4
Denmark	7.7	7.6	7.4	7.3
France	24.9	27.9	27.2	26.9
Germany	70.1	69.9	70.1	87.3
Greece	9.2	9.9	14.1	21.2
Ireland	18.4	33.2	32.3	48.8
Italy	109.2	119.3	125.5	161.3
Netherlands	143.2	158.3	152.2	202.5
Portugal	26.1	27.3	29.4	35.2
Russia	4.6	4.9	5.1	5.1
Spain	174.6	194.4	198.4	229.2
Sweden	0.9	0.9	0.9	0.7
Turkey	3.1	3.1	3.1	2.9
UK	456.5	513.3	565.1	615.5
Other <sup>3</sup>	0.3	0.4	0.5	8.1
Multinational	214.1	231.1	231.1	240.9
European Total <sup>2</sup>	1,273.5	1,426.9	1,487.5	1,737.5
US Total <sup>1</sup>	6,167.9	6,341.0	6,984.4	7,056.3

2007:Q1	2007:Q2	2007:Q3	2007:Q4
N/A	N/A	3.6	3.6
N/A	N/A	7.3	7.1
N/A	N/A	6.8	6.1
N/A	N/A	28.9	27.5
N/A	N/A	74.1	69.6
N/A	N/A	9.9	9.5
N/A	N/A	18.6	18.6
N/A	N/A	117.6	112.0
N/A	N/A	131.5	145.8
N/A	N/A	29.1	27.1
N/A	N/A	3.3	2.8
N/A	N/A	173.1	177.5
N/A	N/A	0.8	0.9
N/A	N/A	3.1	3.1
N/A	N/A	492.6	468.8
N/A	N/A	0.5	0.3
N/A	N/A	223.0	213.3
N/A	N/A	1,323.8	1,293.5
6,136.8	6,392.4	6,278.9	6,266.7

#### 2009

	2009:Q1	2009:Q2	2009:Q3	2009:Q4
Austria	3.1	3.0	2.9	2.8
Belgium	46.4	54.2	53.5	57.1
Denmark	7.0	6.5	6.3	6.1
Finland	6.8	6.4	6.0	5.7
France	26.1	29.7	28.6	29.6
Germany	85.0	83.4	88.2	90.2
Greece	30.6	36.3	42.5	42.7
Ireland	49.7	51.0	55.3	57.8
Italy	170.6	173.5	196.4	204.5
Netherlands	209.8	227.7	223.8	219.2
Portugal	40.6	41.1	42.0	43.6
Russia	4.6	4.8	4.5	4.1
Spain	242.6	250.6	247.9	249.6
Sweden	0.7	0.7	0.4	0.4
Turkey	2.7	2.6	2.5	2.4
UK	604.8	587.1	613.3	617.6
Other <sup>3</sup>	0.5	0.5	0.5	0.5
Multinational	251.8	250.5	245.3	250.7
European Total <sup>2</sup>	1,783.6	1,809.6	1,860.0	1,884.7
US Total <sup>1</sup>	7,365.0	7,056.5	6,780.0	6,892.0

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

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end.

<sup>2</sup> Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.

<sup>3</sup> Other includes countries with outstanding securities that are too small to be displayed, such as Georgia, Iceland, China, Ukraine, Switzerland, and Hungary.

# 2.4. European Outstandings by Moody's Investors Service Ratings<sup>1</sup> (as a percentage of total Moody's rated securitisations)

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	2009:Q1	2009:Q2	2009:Q3	2009:Q4				
Aaa/AAA	80.71%	79.57%	78.04%	75.64%				
Aa/AA	6.94%	8.11%	8.65%	9.81%				
A/A	4.66%	4.40%	5.03%	5.87%				
Baa/BBB	3.96%	3.52%	3.59%	3.81%				
Ba/BB	1.27%	1.36%	1.44%	1.46%				
B/B	0.75%	0.76%	0.82%	0.87%				
Caa/CCC	0.80%	0.92%	1.06%	1.15%				
Ca/CC	0.68%	0.92%	0.92%	0.89%				
C/C	0.23%	0.43%	0.45%	0.50%				
Total <sup>2</sup>	100.00%	100.00%	100.00%	100.00%				

2008:Q1	2008:Q2	2008:Q3	2008:Q4
85.45%	84.13%	84.29%	81.09%
5.22%	5.75%	5.41%	6.54%
4.37%	4.82%	4.87%	5.58%
3.85%	3.63%	3.63%	4.18%
0.84%	1.10%	1.04%	1.21%
0.10%	0.20%	0.22%	0.44%
0.05%	0.13%	0.26%	0.57%
0.03%	0.12%	0.11%	0.17%
0.07%	0.13%	0.17%	0.21%
100.00%	100.00%	100.00%	100.00%

# 2.5. US Outstandings by Moody's Investors Service Ratings<sup>1</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4
Aaa/AAA	46.19%	41.16%	37.92%	37.78%
Aa/AA	7.50%	8.11%	10.06%	10.41%
A/A	6.22%	6.87%	7.82%	7.62%
Baa/BBB	8.00%	7.57%	7.46%	7.32%
Ba/BB	5.30%	6.71%	6.00%	6.04%
B/B	7.21%	7.95%	8.60%	8.49%
Caa/CCC	10.28%	9.93% 11.04%		11.18%
Ca/CC	4.93%	5.89%	5.58%	5.61%
C/C	4.36%	5.81%	5.52%	5.55%
Total <sup>2</sup>	100.00%	100.00%	100.00%	100.00%

2008:Q1	2008:Q2	2008:Q3	2008:Q4
81.76%	73.69%	70.43%	62.98%
5.37%	7.26%	8.32%	8.67%
3.95%	5.69%	6.55%	6.75%
4.82%	4.69%	5.09%	7.57%
1.41%	2.13%	2.40%	3.06%
1.09%	2.71%	2.51%	2.71%
0.66%	1.56%	1.25%	3.00%
0.47%	1.26%	2.15%	2.61%
0.45%	1.00%	1.30%	2.66%
100.00%	100.00%	100.00%	100.00%

Source: Moody's Investors Service

<sup>&</sup>lt;sup>1</sup> The rating distribution is based on current rating and original issuance size. Unrated and defaulted securities are included.
<sup>2</sup> Percentages may not add to 100% due to independent rounding.

#### € BILLIONS1

# 2.6. Outstandings by Country and Collateral

	ABS <sup>2</sup>	CDO <sup>3</sup>	CMBS	RMBS	WBS <sup>4</sup>	TOTAL <sup>5</sup>
Austria	0.5		0.2	2.2		2.9
Belgium	0.2	0.0	0.1	53.2		53.5
Denmark	1.6	4.7				6.3
Finland				6.0		6.0
France	13.6	0.6	3.4	11.0		28.6
Germany	39.3	13.0	17.4	18.3	0.1	88.2
Greece	11.6	21.4		9.5		42.5
Ireland		2.6	1.3	51.4		55.3
Italy	50.2	10.1	3.7	130.3	2.2	196.4
Netherlands	3.9	10.0	7.5	202.4		223.8
Portugal	3.7	3.8		34.5		42.0
Russia	1.1			3.3		4.5
Spain	18.7	61.0	1.0	167.1		247.9
Sweden	0.1			0.3		0.4
Turkey	2.5					2.5
UK	39.9	9.5	71.5	458.0	34.5	613.3
Other <sup>8</sup>	0.1	0.2		0.2		0.5
Multinational <sup>6</sup>	9.1	191.9	37.1	6.9	0.4	245.3
European Total <sup>5</sup>	196.2	328.9	143.1	1154.6	37.2	1860.0

			NON-	NON-	
		AGENCY	AGENCY	AGENCY	
	ABS <sup>7</sup>	MBS	RMBS	CMBS	TOTAL <sup>1</sup>
US Total <sup>1</sup>	1,697.0	3,763.0	769.8	539.5	6,769.3

#### 2009:Q4

	ABS <sup>2</sup>	CDO <sup>3</sup>	CMBS	RMBS	WBS <sup>4</sup>	TOTAL <sup>5</sup>
Austria	0.4		0.2	2.2		2.8
Belgium	0.2	8.3	0.1	48.5		57.1
Denmark	1.6	4.5				6.1
Finland				5.7		5.7
France	14.5	0.6	3.3	11.2		29.6
Germany	42.6	13.0	17.2	17.3	0.1	90.2
Greece	12.1	21.4		9.3		42.7
Ireland	0.1	2.6	1.2	53.9		57.8
Italy	49.7	9.9	3.6	139.1	2.2	204.5
Netherlands	3.8	10.5	7.5	197.4		219.2
Portugal	4.0	3.8		35.8		43.6
Russia	0.9			3.3		4.1
Spain	19.1	61.9	0.9	167.6		249.6
Sweden	0.1			0.3		0.4
Turkey	2.4					2.4
UK	40.9	11.9	70.5	460.6	33.8	617.6
Other <sup>8</sup>	0.1	0.2		0.2		0.5
Multinational <sup>6</sup>	8.5	199.0	36.1	6.7	0.4	250.7
European Total <sup>5</sup>	200.9	347.6	140.8	1158.8	36.5	1884.7

			NON-	NON-	
		AGENCY	AGENCY	AGENCY	
	ABS <sup>7</sup>	MBS	RMBS	CMBS	TOTAL <sup>1</sup>
US Total <sup>1</sup>	1,695.0	3,891.3	751.3	554.4	6,892.0

Sources: Bloomberg (US & Europe), Fannie Mae (US), Federal Reserve (US), Freddie Mac (US), Ginnie Mae (US), JP Morgan (JPM) , Loan Performance (US), Thomson Reuters (US), SIFMA Estimates (US & Europe)

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end.

<sup>&</sup>lt;sup>2</sup> European ABS outstanding collateral types include auto loans, credit card, loans (consumer and student), and other.
<sup>3</sup> Includes euro-denominated CDOs issued after July 2007, regardless of country of collateral, and prior to this, only CDOs confirmed by market participants with known European collateral.

<sup>4</sup> Whole Business Securitisation: a securitisation in which the cashflows derive from the whole operating revenues generated by an entire business or segmented part of a larger business.

Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.

Multinational includes all deals in which assets originate from a variety of jurisdictions. This includes the majority of euro-denominated CDOs.
 US ABS outstanding collateral types include auto loans, credit cards, loans (home equity, equipment and student loans), CDOs, and other. CDOs outstanding can not be broken out within the ABS

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# **CREDIT QUALITY - RATING CHANGES**

# Upgrades/Downgrades by Country<sup>1</sup> 3.1. Fitch Ratings

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
France	0/0	0/5	0/18	0/17	0/40
Germany	4/65	5/28	6/65	2/246	17/404
Italy	1/17	11/2	1/7	1/21	14/47
Netherlands	1/1	0/0	0/6	1/21	2/28
Spain	0/97	2/58	3/17	1/97	6/269
UK	4/123	5/149	2/125	17/233	28/630
Multinational <sup>2</sup>	3/354	4/340	11/62	1/34	19/790
European Total	13/657	27/582	23/300	23/669	86/2208
US	48/4001	22/14566	20/21258	108/4358	198/44183

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
0/0	0/2	0/10	0/2	0/14
4/1	7/17	3/8	3/10	17/36
2/10	0/3	11/8	1/9	14/30
0/0	14/0	2/0	11/18	27/18
0/0	0/13	12/10	4/18	16/41
22/40	8/8	27/190	26/656	83/894
8/10	4/116	8/0	7/15	27/141
36/61	33/159	63/226	52/728	184/1174
335/4901	166/5769	123/6000	94/11005	718/27675

3.2. Moody's Investors Service

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
France	1/0	0/0	0/1	0/0	1/1
Germany	0/5	10/36	0/4	0/14	10/59
Italy	1/3	0/7	1/1	0/14	2/25
Netherlands	0/2	0/11	4/23	0/6	4/42
Spain	0/19	0/26	0/16	2/73	2/134
UK	5/80	0/65	1/121	1/76	7/342
Multinational <sup>3</sup>	4/1460	7/501	30/487	12/878	53/3326
European Total	11/1569	17/646	36/653	15/1061	79/3929
US	110/33536	96/12115	213/6075	171/1817	590/53543

2008:Q2	2008:Q3	2008:Q4	TOTAL
0/1	0/0	0/1	0/2
2/5	0/14	0/22	2/43
0/6	0/2	0/6	0/15
0/0	0/2	0/3	0/5
0/5	0/0	0/49	1/54
6/82	0/13	0/109	16/211
59/556	8/328	1/1009	79/2140
67/655	8/359	1/1199	98/2470
223/16563	413/9545	116/18706	863/49565
	0/1 2/5 0/6 0/0 0/5 6/82 59/556 67/655	0/1         0/0           2/5         0/14           0/6         0/2           0/0         0/2           0/5         0/0           6/82         0/13           59/556         8/328           67/655         8/359	0/1         0/0         0/1           2/5         0/14         0/22           0/6         0/2         0/6           0/0         0/2         0/3           0/5         0/0         0/49           6/82         0/13         0/109           59/556         8/328         1/1009           67/655         8/359         1/1199

#### 3.3. Standard & Poor's

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
France	2/10	0/10	0/1	0/7	2/28
Germany	1/13	1/15	0/48	0/130	2/206
Italy	5/5	5/9	8/8	2/4	20/26
Netherlands	10/18	8/1	9/1	0/12	27/32
Spain	11/33	4/63	0/61	0/35	15/192
UK	23/253	3/240	3/228	5/304	34/1025
Multinational <sup>3</sup>	19/884	24/969	10/840	10/854	63/3547
European Total	71/1216	45/1307	30/1187	17/1346	163/5056
US	83/6206	105/7807	126/14255	40/9671	354/37939

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
1/2	0/6	0/0	1/10	2/18
1/7	5/12	5/31	7/13	18/63
10/0	1/7	5/0	11/8	27/15
0/0	6/0	0/0	0/5	6/5
6/1	0/0	0/7	0/57	6/65
6/52	32/107	19/74	8/263	65/496
27/432	21/519	72/374	11/1557	131/2882
51/494	65/651	101/486	38/1913	255/3544
215/8904	106/4860	125/8842	136/7081	582/29687

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

<sup>&</sup>lt;sup>1</sup> Each box contains two numbers: Upgrades followed by Downgrades. Because the three credit rating agencies track different securities and apply slightly different rating criteria, these numbers are not directly comparable.

Fitch's "Multinational" classification includes cross-jurisdictional CMBS issues as well as the aggregated sum of rating actions in other EMEA countries, namely Austria, Belgium, Greece, Ireland, Portugal, and the Russian Federation. Fitch assigns CDO issues to the country in which the majority of the underlying assets are located.

"Multinational" for Standard & Poor's and Moody's ratings is defined as all issues with collateral located in multiple countries. All CDOs are also included in this category.

# **CREDIT QUALITY - RATING CHANGES**

# Upgrades/Downgrades by Collateral<sup>1</sup> 3.4. Fitch Ratings – Europe

0.4. Filen Rulings Europe						
	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL	
Auto	2/7	4/0	0/8	1/1	7/16	
Credit Card	0/0	0/9	0/0	0/16	0/25	
Other ABS <sup>2</sup>	1/24	5/9	7/11	3/17	16/61	
CDO	2/425	1/332	8/54	2/332	13/1143	
CMBS	3/111	3/142	3/90	0/232	9/575	
RMBS (prime)	2/70	12/72	0/3	7/20	21/165	
RMBS (non-conforming)	3/20	2/18	5/134	10/59	20/231	
Total	13/657	27/582	23/300	23/677	86/2216	

١	2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
	1/0	0/0	0/0	3/6	4/6
	0/0	0/0	0/0	0/9	0/9
	3/21	1/6	6/7	2/7	12/41
	0/10	3/117	7/179	2/391	12/697
	5/12	8/4	3/24	3/35	19/75
	12/0	16/27	22/10	23/30	73/67
	15/18	5/5	25/6	19/250	64/279
I	36/61	33/159	63/226	52/728	184/1174

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

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
Auto	0/0	1/7	0/25	0/10	1/42
CDO	4/1453	7/487	30/477	12/832	53/3249
CMBS	3/13	0/88	2/82	1/71	6/254
Credit Card	0/0	0/1	0/0	0/0	0/1
RMBS (prime)	1/41	9/46	4/64	2/89	16/240
RMBS (non-conforming)	3/73	0/27	0/85	0/78	3/263
Total	11/1580	17/656	36/733	15/1080	79/4049

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
1/0	1/0	0/0	0/4	2/4
11/247	57/556	8/325	1/1006	77/2134
2/0	9/34	0/7	0/36	11/77
3/0	0/0	0/0	0/22	3/22
0/3	0/10	0/7	0/54	0/74
5/7	0/55	0/27	0/82	5/171
22/257	67/655	8/366	1/1204	98/2482

# 3.6. Standard & Poor's - Europe

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
Auto	1/4	2/2	0/4	0/1	3/11
CDO	12/923	25/1038	4/941	12/882	53/3784
CMBS	2/38	0/38	0/60	1/281	3/417
Credit Card	0/0	0/19	0/0	0/2	0/21
RMBS (prime)	23/10	12/54	16/43	3/101	54/208
RMBS (non-conforming)	21/150	1/78	2/60	0/14	24/302
Total	59/1125	40/1229	22/1108	16/1281	137/4743

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
4/0	0/0	4/0	4/10	12/10
25/475	16/550	68/387	12/1647	121/3059
4/0	10/21	1/15	0/67	15/103
0/0	0/0	0/0	0/0	0/0
7/2	6/0	16/35	10/51	39/88
0/1	25/4	0/28	4/90	29/123
40/478	57/575	89/465	30/1865	216/3383

# 3.7. Fitch Ratings - US

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
Auto	8/4	0/16	12/0	13/13	33/33
Credit Card	7/0	4/7	0/4	13/1	24/12
Other ABS <sup>2</sup>	17/145	8/106	5/25	3/62	33/338
CDO	7/1291	8/1020	0/157	3/635	18/3103
CMBS	9/392	2/274	0/1069	0/497	11/2232
RMBS (prime)	0/381	0/6490	0/7896	3/1268	3/16035
RMBS (subprime)	0/1441	0/6056	3/2862	0/772	3/11131
Other RMBS <sup>3</sup>	0/347	0/597	0/9245	73/1111	73/11300
Total	48/4001	22/14566	20/21258	108/4359	198/44184

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
8/34	6/26	13/0	9/4	36/64
0/3	0/1	0/18	1/0	1/22
242/467	10/248	10/39	8/21	270/775
0/155	18/486	8/771	2/293	28/1705
69/39	132/69	67/78	29/287	297/473
11/100	0/26	2/1961	0/9	13/2096
0/3683	0/2939	0/30	0/4209	0/10861
5/420	0/1974	23/3103	45/6182	73/11679
335/4901	166/5769	123/6000	94/11005	717/27675

# 3.8. Moody's Investors Service - US

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
Auto	21/95	7/45	13/1	31/1	72/142
CDO	29/3913	3/1875	132/2112	62/578	226/8478
CMBS	22/2774	39/531	15/259	8/718	84/4282
Credit Card	1/91	28/58	7/20	10/0	46/169
RMBS	37/26663	19/9606	46/3683	60/520	162/40472
Total	110/33536	96/12115	213/6075	171/1817	590/53543

2	008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
	0/49	26/79	0/4	3/123	29/255
	3/1637	2/3227	69/1326	17/2552	91/8742
	93/76	142/47	188/128	26/188	449/439
	0/1	0/6	0/34	0/5	0/46
1	5/2988	53/13204	156/8053	70/15838	294/40083
11	11/4751	223/16563	413/9545	116/18706	863/49565

# 3.9. Standard & Poor's - US

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL
Auto	1/49	15/24	73/14	10/0	99/87
CDO	8/1463	13/2855	4/947	3/2849	28/8114
CMBS	16/381	2/620	12/1471	22/1494	52/3966
Credit Card	56/29	74/24	35/9	4/30	169/92
RMBS (prime)	0/1606	1/2792	2/4723	1/2482	4/11603
RMBS (subprime)	2/2678	0/1492	0/7091	0/2816	2/14077
Total	83/6206	105/7807	126/14255	40/9671	354/37939

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL
6/80	6/74	2/1	12/12	26/167
40/3231	31/1655	62/2501	120/3035	253/10442
84/54	35/216	55/571	15/103	189/944
0/0	0/1	0/19	0/0	0/20
80/85	31/637	7/677	39/88	157/1478
6/5433	3/2320	0/5083	29/123	38/12959
216/8883	106/4903	126/8852	215/3361	663/26010

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

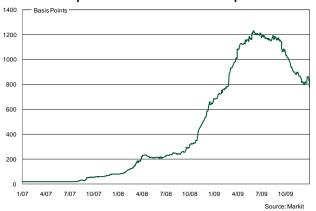
<sup>1</sup> Each box contains two numbers: Upgrades followed by Downgrades. Because the three credit rating agencies track different securities and apply slightly different rating criteria, these numbers are not directly comparable.

May include student loans, equipment leases, home equity, and other.

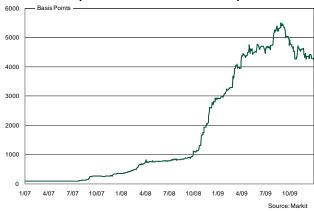
May include other types of RMBS transactions such as ALT-A, reverse mortgages, government RMBS, etc.

# **CMBS SPREADS**

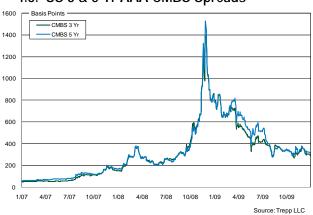
# 4.1. European 3-5 Yr AAA CMBS Spreads1



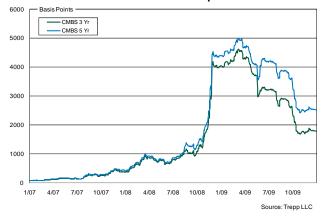
# 4.2. European 3-5 Yr BBB CMBS Spreads<sup>1</sup>



# 4.3. US 3 & 5 Yr AAA CMBS Spreads<sup>2</sup>



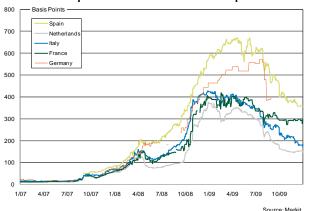
# 4.4. US 3 & 5 Yr BBB CMBS Spreads<sup>2</sup>



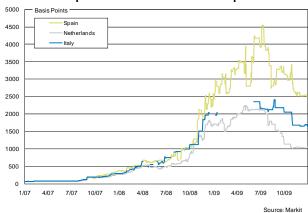
<sup>&</sup>lt;sup>1</sup> Markit provides independent composite spread levels which are calculated from dealer contributions and are subject to multiple cleaning algorithms. These levels are equivalent to the 'discount margin' which is defined as the effective spread to maturity of a floating rate security after discounting the yield value of a price other than par over the life of a security.
<sup>2</sup> US CMBS spreads are quoted for fixed rate bonds as the spread to the yield on US Treasury Bonds with the same average life as the CMBS bond.

# RMBS SPREADS

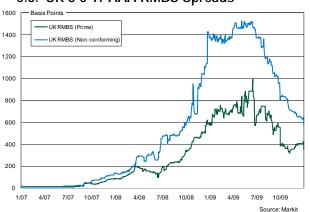
# 5.1. European 3-5 Yr AAA RMBS Spreads1



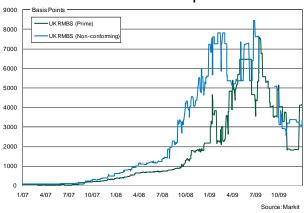
# 5.2. European 3-5 Yr BBB RMBS Spreads<sup>1,2,3</sup>



# 5.3. UK 3-5 Yr AAA RMBS Spreads<sup>1</sup>



# 5.4. UK 3-5 Yr BBB RMBS Spreads<sup>1</sup>



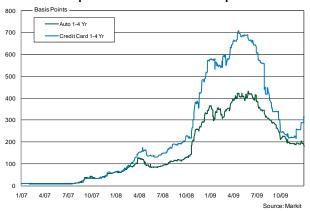
<sup>3</sup> German BBB spreads are unavailable due to insufficient information at time of publication.

<sup>&</sup>lt;sup>1</sup> Markit provides independent composite spread levels which are calculated from dealer contributions and are subject to multiple cleaning algorithms. These levels are equivalent to the 'discount margin' which 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 a security.

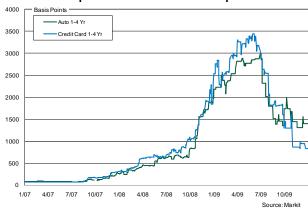
<sup>&</sup>lt;sup>2</sup> French 3-5 year BBB RMBS credit spreads are unavailable.

# **ABS SPREADS**

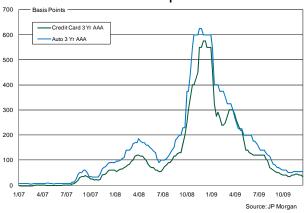
# 6.1. European 1-4 Yr AAA ABS Spreads1



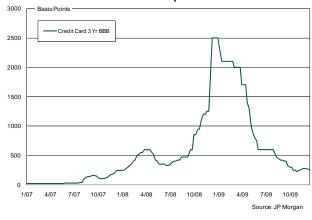
# 6.2. European 1-4 Yr BBB ABS Spreads1



# 6.3. US 3 Yr AAA ABS Spreads



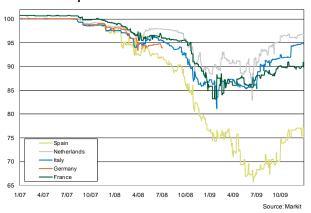
# 6.4. US 3 Yr BBB ABS Spreads<sup>2</sup>



<sup>&</sup>lt;sup>1</sup> Markit provides independent composite spread levels which are calculated from dealer contributions and are subject to multiple cleaning algorithms. These levels are equivalent to the 'discount margin' which 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 a security.
<sup>2</sup> US 3 Yr Auto ABS BBB spreads are not available.

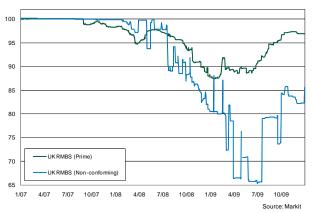
# RMBS PRICES

# 7.1. European 3-5 Yr AAA RMBS Prices<sup>1,2</sup>



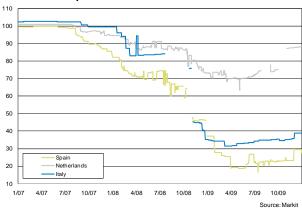
- Spanish AAA RMBS provided: IM Pastor 3, Fondo de Titulizacion Hipotecaria, Class A, Series 3. ISIN# ES0347862007. EUR-denominated.
- Dutch AAA RMBS provided: Saecure 5 B.V. Class A, Series 1. ISIN# XS0217032738. EUR-denominated.
- Italian AAA RMBS provided: Vela Home S.r.l. 3, Class A, Series 3. ISIN# IT0003933998. EUR-denominated.
- German AAA RMBS provided: Hallam Finance plc, Class A, Series 1. ISIN# XS0206470865. EUR-denominated.
- French AAA RMBS provided: FCC Loggias Compartment 2003, Class A, Series 1. ISIN# FR0010029231. EUR-denominated.

# 7.3. UK 3-5 Yr AAA RMBS Prices<sup>1,4</sup>



- UK AAA prime RMBS provided: Permanent Financing (No. 9) PLC, Class 4A, Series 9. ISIN# XS0248264060. EUR-denominated.
- UK AAA subprime RMBS provided: First Flexible No. 4 Plc, Class A, Series 1. ISIN# XS0132692384. GBP-denominated.

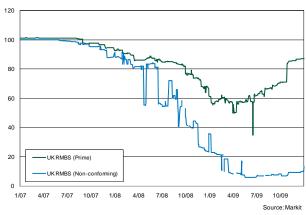
# 7.2. European 3-5 Yr BBB RMBS Prices<sup>1,3</sup>



- Spanish BBB RMBS provided: Hipocat 8, Fondo de Titulizacion Activos, Class D, Series 1: ISIN# ES0345784047. EUR-denominated.
- Dutch BBB RMBS provided: Dutch Mortgage Portfolio Loans IV B.V., Class C, Series 1. ISIN# XS0194097670. EUR-denominated.
- Italian BBB RMBS provided: Intra Mortgage Finance 1 S.r.I., Class 1, Series 1. ISIN# IT0003406003. EUR-denominated.

Note: French and German 3-5 Yr BBB RMBS data are not available.

### 7.4. UK 3-5 Yr BBB RMBS Prices<sup>1</sup>



- UK BBB prime RMBS provided: Permanent Financing (No. 5) PLC, Class C, Series 5. ISIN# XS0197070831. GBP-denominated.
- UK BBB subprime RMBS provided: Leek Finance Number Sixteen Plc, Class Cc. Series 1. ISIN# XS0232829332. FUR-denominated.

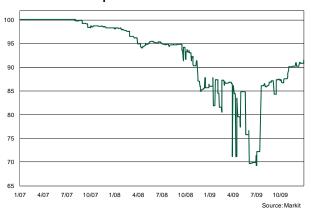
<sup>&</sup>lt;sup>1</sup> Markit prices: Independent composite prices levels are calculated from dealer contributions which have been subject to multiple cleaning algorithms for one sample bond per sector and ratings category where possible. According to the rules we have agreed on previously, the security we have chosen receives the greatest number of contributions for a bond matching the criteria and must receive at least 3 individual contributions. We have included data from the start of 2007 to present.
<sup>2</sup> A composite level of prices for Germany 3-5 year AAA RMBS could not be formed after 7 July 2008.

<sup>&</sup>lt;sup>2</sup> A composite level of prices for Germany 3-5 year AAA RMBS could not be formed after 7 July 2008.
<sup>3</sup> A composite level of prices for Italy 3-5 year BBB RMBS could not be formed for after 11 August 2008.

<sup>&</sup>lt;sup>4</sup> The jump on 06 January 2008 is due to a new addition to the underlying bond, which was then averaged.

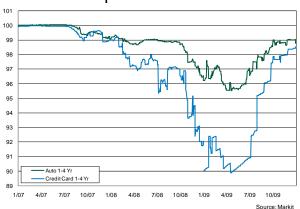
# CMBS AND ABS PRICES

# 8.1. Pan-European 3-5 Yr AAA CMBS Prices1



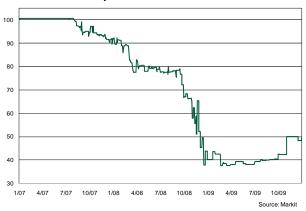
Pan-European AAA CMBS provided: Opera Finance (Lakeside) Plc, Class A, Series 1. ISIN# XS0198555202. GBP-denominated.

# 8.3. Pan-European 1-4 Yr AAA ABS Prices1



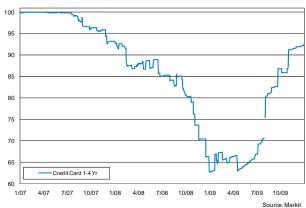
- Pan-European AAA Auto ABS provided: Driver Two GmbH, Class A, Series 1. ISIN# XS0228171673. EUR-denominated.
- Pan-European AAA Credit Card ABS provided: Arran Funding Limited 2005-B, Class A3, Series 2005-B. ISIN# XS0237919195. GBPdenominated.

# 8.2. Pan-European 3-5 Yr BBB CMBS Prices<sup>1</sup>



Pan-European BBB CMBS provided: German Residential Asset Note Distributor Plc, Class D, Series 1. ISIN# XS0260143101. EUR-denominated.

# 8.4. Pan-European 1-4 Yr BBB ABS Prices<sup>1</sup>



 Pan-European BBB Credit Card ABS provided: Arran Funding Limited 2005-B, Class C3, Series 2005-B. ISIN# XS0237922140. GBPdenominated

Note: Pan-European 1-4 Yr BBB Auto ABS price data is not available.

 $\label{thm:continuous} \textbf{Note: Gaps in data availability occur in some places and result in line breaks for those data series.}$ 

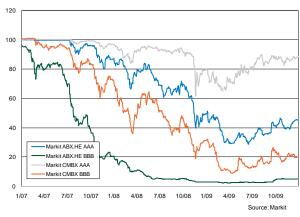
<sup>&</sup>lt;sup>1</sup> Markit prices: Independent composite price levels are calculated from dealer contributions which have been subjected to multiple cleaning algorithms for one sample bond per sector and ratings category where possible. According to the rules we have agreed on previously, the security we have chosen receives the greatest number of contributions for a bond matching the criteria and must receive at least 3 individual contributions. We have included data from start of 2007 to present.

# INDICES DATA

# 9.1. Securitised Index Option Adjusted Spreads



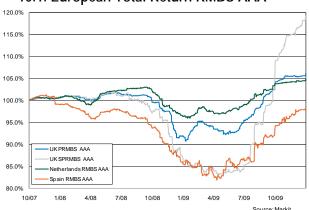
# 9.2. ABX.HE and CMBX Prices<sup>1</sup>



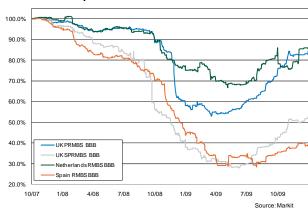
<sup>&</sup>lt;sup>1</sup> Due to pricing convention changes occurring on 20 April 2009, ABX.HE and CMBS spreads are no longer available.

# TOTAL RETURN DATA

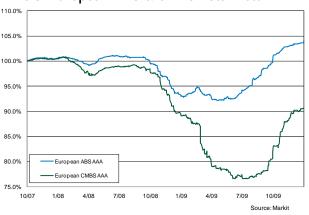
# 10.1. European Total Return RMBS AAA



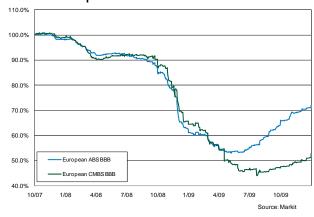
# 10.2. European Total Return RMBS BBB



# 10.3. European ABS & CMBS Total Return AAA



# 10.4. Europe ABS & CMBS Total Return BBB



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# 11.1. European ABCP Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL <sup>2</sup>
2004	28.2	29.7	35.8	37.8	131.5
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	46.3	39.9	39.0	32.0	157.3

# 11.2. European ABCP Issuance by Nationality of Issuer<sup>3</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>2</sup>
France	6.9	5.6	5.5	6.1	24.1
Germany					
Ireland	31.4	26.1	25.7	22.3	105.5
Italy	0.0	0.0	0.0	0.0	0.0
Luxembourg	0.1	0.1	0.1	0.1	0.3
Netherlands					
Spain	0.0	0.3	0.0	0.0	0.3
UK	7.9	7.8	7.6	3.5	26.9
Total <sup>2</sup>	46.3	39.9	39.0	32.0	157.3

# 11.3. European ABCP Issuance by Programme Type

The Larepean restance by Fregramme Type					
	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>2</sup>
SIVs	0.4	0.3	1.3	0.3	2.2
Single-Seller Conduits	0.1	0.1	0.1	0.1	0.3
Multi-Seller Conduits	30.9	30.5	28.6	22.9	112.8
Unspecified	15.0	9.1	9.1	8.8	41.9
Total <sup>2</sup>	46.3	39.9	39.0	32.0	157.3

# 11.4. ABCP Outstandings by Nationality of Issuer

	2009:Q1	2009:Q2	2009:Q3	2009:Q4
France	1.5	2.1	1.4	1.6
Germany				
Ireland	7.8	6.6	9.2	6.8
Italy	0.0	0.0	0.0	0.0
Luxembourg	0.0	0.0	0.0	0.0
Netherlands				
UK	2.3	2.3	2.6	1.2
European Total <sup>2,4</sup>	11.6	11.0	13.1	9.7
US Total <sup>1,2</sup>	314.8	290.1	256.1	229.7

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>2</sup>
5.1	8.4	13.4	30.0	56.9
7.8	9.0	7.1	9.9	33.8
34.8	32.5	28.7	24.3	120.3
0.3	0.3	0.2	0.2	1.0
6.3	1.4	0.6	0.8	9.1
20.7	15.4	23.8	20.9	80.8
75.0	66.8	73.8	86.2	301.8

2008	:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>2</sup>
6.	6	4.6	0.6	0.6	12.5
0.	5	0.3	0.2	0.2	1.2
41	.5	46.4	54.7	68.7	211.3
26	.4	15.5	18.3	16.6	76.9
75	.0	66.8	73.8	86.2	301.8

2008:Q1	2008:Q2	2008:Q3	2008:Q4
2.3	2.3	3.0	1.6
3.7	3.3	4.0	3.0
10.1	10.1	8.9	8.1
0.1	0.1	0.1	0.1
0.8	0.6	0.3	0.2
9.6	5.9	6.5	1.4
26.7	22.3	22.7	14.3
349.1	327.0	356.8	331.1

Source: Dealogic, Moody's Investors Service

<sup>&</sup>lt;sup>1</sup> All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$∫€ exchange rates as of quarter-end.

<sup>2</sup> Numbers may not add due to independent rounding. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>4</sup> Outstanding data is restricted to nationality of the issuer to determine the country of collateral. Dealogic provides the issuer's nationality as the country in which the SPV is domiciled.

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# 11.5. European ABCP Outstandings by Programme Type

g g				
	2009:Q1	2009:Q2	2009:Q3	2009:Q4
SIVs	0.1	0.1	0.1	0.0
Single-Seller	0.0	0.0	0.0	0.0
Multi-Seller	7.7	8.5	9.5	6.4
Unspecified	3.8	2.4	3.5	3.2
Total	11.6	11.0	13.1	9.7

2008:Q1	2008:Q2	2008:Q3	2008:Q4
1.9	1.0	0.6	0.5
0.2	0.1	0.1	0.1
15.2	15.1	16.3	9.9
9.4	6.1	5.8	3.8
26.7	22.3	22.7	14.3

11.6. US ABCP Outstandings by Programme Type<sup>2</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4
Loan-Backed	1.3	1.1	0.8	0.7
SIVs				
Single-Seller	40.8	34.5	28.3	25.4
Multi-Seller	248.5	235.6	215.4	194.0
Unspecified <sup>5</sup>	24.1	18.9	11.6	9.5
Total <sup>1,3</sup>	314.8	290.1	256.1	229.7

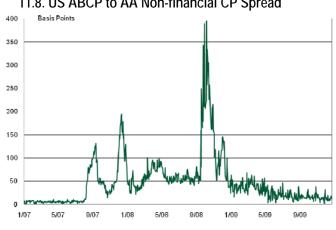
2008:Q1	2008:Q2	2008:Q3	2008:Q4
2.0	2.0	2.2	1.6
41.9	38.8	38.4	38.8
271.4	256.6	288.2	264.4
33.8	29.7	28.0	26.4
349.1	327.0	356.8	331.1

Source: Dealogic, Moody's Investors Service

# 11.7. ABCP Outstanding Assets Split by Country<sup>1</sup>

#### Country **United States** 25.7% Global<sup>2</sup> 16.1% **United Kingdom** 14.5% Netherlands 11.2% Germany 7.0% Europe<sup>3</sup> 5.7% France 4.0% Others 15.7% Total 100.0%

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



Source: Federal Reserve

All volumes are denominated in euro. The US volumes were converted from dollar to euro based on the \$/€ exchange rates as of quarter-end.
 Based on US ABCP programmes rated by Moody's NY office ABCP Program Index, regardless of market. Therefore, some euro-denominated ABCP may be included in this figure.
 Includes arbitrage and hybrid programme types.

Source: Moody's Investors Service

Percentages shown are as of July 2009; all EMEA ABCP programmes.
 Refers to ABCP with assets originating from multiple countries, at least one of which is outside Europe.
 Refers to ABCP with assets originating from multiple European countries.

# **GLOBAL COMPARATIVE DATA**

#### € BILLIONS<sup>1</sup>

# 12.1. Global Securitisation Issuance<sup>2</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>1</sup>
US	36.9	104.5	102.2	82.5	326.0
Europe	3.4	3.3	5.4	6.6	18.8
Asia	9.2	9.1	11.2	11.7	41.2
Total <sup>1</sup>	49.6	116.9	118.8	100.8	386.0

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>1</sup>
74.4	87.8	39.8	9.3	211.3
10.2	8.0	5.9	21.7	45.8
7.6	8.5	7.4	7.7	31.1
92.2	104.3	53.1	38.7	288.2

# 12.2. Global Corporate Bond Issuance<sup>3</sup>

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>1</sup>
US	199.3	131.8	79.3	55.4	465.7
Europe	323.5	266.3	145.8	113.6	849.2
Asia	91.4	103.8	98.8	87.4	381.3
Total <sup>1</sup>	614.2	501.9	323.9	256.4	1696.3

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>1</sup>
104.2	130.1	37.2	123.6	395.1
94.0	230.3	95.6	133.2	553.1
40.6	60.2	51.9	59.5	212.2
238.8	420.6	184.7	316.3	1160.5

# 12.3. Global Government Bond Issuance4

	2009:Q1	2009:Q2	2009:Q3	2009:Q4	TOTAL <sup>1</sup>
US	191.7	174.2	102.8	128.8	597.6
Europe	186.2	142.4	91.0	69.4	489.1
Asia	32.6	28.8	25.2	34.5	121.1
Total <sup>1</sup>	410.5	345.4	219.0	232.8	1207.7

2008:Q1	2008:Q2	2008:Q3	2008:Q4	TOTAL <sup>1</sup>
178.8	146.7	68.6	52.9	447.0
82.4	79.6	36.1	39.0	237.0
16.2	19.8	17.5	27.0	80.5
277.3	246.1	122.2	118.9	764.5

Source: Dealogic

US and Asian volumes were converted to euro based on the average exchange rate of the currency of issue to euro over each given quarter. Historical or prior period numbers are revised to reflect changes in classification, refined selection methodology, or information submitted to our data source after the prior period cut-off dates.
 Global securitisation issuance includes ABS & MBS, both public and private placements, but excludes any retained volumes. Asia numbers include Japan.
 Global corporate bond issuance is for investment grade bonds, public placements only. Asia numbers include Japan.
 Global government bond issuance includes all agency and non agency issuances and does not include supranationals. Asia numbers include Japan.

# Summary of the Methodologies Adopted for this Report

#### 1. Issuance

# 1.1. - 1.2. European and US Historical Issuance (p. 3)

The tables covering historical issuance in Europe and the US are denominated in euro. The historical issuance volume total is calculated by adding all transactions in different asset classes including, among others, asset-backed securities (ABS), collateralised debt obligations (CDOs), 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 source after the prior period cut-off dates.

# 1.3. - 1.4. Issuance by Collateral (p. 3)

The European issuance volumes are determined based on the review of four data sources: Bloomberg, JP Morgan, Thomson Reuters, and Unicredit starting from Q1 2009; in prior quarters our sources were Bloomberg, JP Morgan, Merrill Lynch 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. Those securities that fail to meet these criteria are excluded. With respect to CDOs, securities are designated as European if they are issued in euro, regardless of their country of collateral, due to the limited amount of CDOs denominated in European currencies other than the euro. The data is provided by Thomson Reuters.

The US non-agency RMBS, CMBS, ABS and CDO issuance data source is 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 is generally based on the sum of securities with US collateral; agency issuance numbers do not include securitisations of existing agency securities. US CDO data is defined as USD-denominated CDOs regardless of the country of collateral. The US issuance data is converted to euros based on the USD to EUR exchange rate at each quarterend indicated below.

Q1 2008	.6333
Q2 2008	.6347
Q3 2008	.7096
Q4 2008	.7156
Q1 2009	.7547
Q2 2009	.7126
Q3 2009	.6831
Q4 2009	.6978

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

# 1.5. Issuance by Country of Collateral (p. 4)

The tables covering issuance in the US and Europe are presented in euro. 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 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 five data sources: 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 data is defined as USD-denominated issues regardless of country of collateral.

# 1.6. Issuance by Collateral Type and Country of Collateral (p. 4)

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

# 1.7. – 1.8. Issuance by Rating (p. 5)

Issuance is presented by credit rating classification (AAA; AA; A; BBB and Below; and Not Rated) on a quarterly basis for 2007 and 2008. 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.

# 1.9. Issuance by Deal Size (p. 5)

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. US non-Agency data includes ABS, non-agency CMBS and RMBS, and USD-denominated CDOs. US agency MBS, which includes agency CMBS and RMBS, is shown separately.

All data, except for CDOs, is 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 is based on available information from both European and US dealers' syndicate desks. Further statistics on retained deals are added based on intelli-

gence from other market participants such as regulatory bodies and newswires across Europe.

# 2. Balances Outstanding

# 2.1. – 2.2. Outstandings by Collateral (p. 6)

The outstanding volumes are reported by asset class. Please note that subtotals may not add to totals 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 source 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 derived from the Bloomberg database. 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 some CDOs, have collateral originating from at least one European country to the extent that a determination can be made. However, for ABS and MBS securities with collateral originating from multiple countries, or where the origin of the underlying collateral is undefined, the following selection criteria will apply: securities will only be considered eligible as European 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 registered) falls 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 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.

For the CDO sector, only EUR-denominated issuance is included, regardless of the country of collateral, due to the limited amount of CDOs denominated in European currencies other than the euro. However, the majority of US-issued, EUR-denominated CDOs with known non-European collateral have been excluded from consideration based on consultation with market participants at the time of the Q3 2007 Data Report production. Subsequent to this time, all EUR-denominated CDOs are included irrespective of the country of collateral, in order to

maximise the consistency of the deal selection criteria for inclusion

CDO information does not include the notional amount of transactions referenced to be spoke portfolios of credit default swaps, which are called "single tranche" or "synthetic arbitrage CDOs" which can be found at www.creditflux.com.

The US outstanding calculations are based on information derived from Bloomberg for ABS; agency balance statements for agency MBS; Loan Performance for non-agency RMBS; and Federal Reserve and JP Morgan for non-agency CMBS. Specific assumptions are developed for prepayment and amortisation frequency based on consultations with the US dealer community. The following asset classes are segmented: agency MBS, non-agency RMBS, non-agency CMBS, and ABS. The agency MBS figures include both RMBS and CMBS. The ABS classification for the US includes CDOs, which contains USD-denominated CDOs regardless of the country of collateral. Non-agency CMBS does not include multifamily housing, which is included among outstanding MBS numbers.

#### 2.3. Outstandings by Country of Collateral (p. 7)

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. We have included Georgia, Iceland, Turkey, Kazakhstan and the Russian Federation in these criteria. 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 EUR only. CDOs issued with collateral from non-European jurisdictions but issued in euro are included under the country category 'Other' for the purpose of determining outstanding balances by country. CDOs issued in EUR 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. However, the majority of US-issued, EUR-denominated CDOs with known non-European collateral have been excluded from consideration based on consultation with market participants at the time of the Q4 2007 first Data Report production. Subsequent to this time, all EUR-denominated CDOs are included irrespective of the country of collateral, in order to maximise the consistency of the deal selection criteria for inclusion.

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

# 2.4. – 2.5. Outstandings by Moody's Rating (p. 8)

The percentage rating distribution for Europe and the US is based on Moody's Investors Service data for balances outstanding. The data provides current ratings as of the end of the quarter. The data presented is based on original issuance volumes for European and US securities, and therefore does not reflect amortised balances. Information on current ratings by outstanding volumes is not currently available. Moody's data has

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 this data.

### 2.6. Outstandings by Country and Collateral (p. 9)

Outstanding volumes are further specified by asset class and, for Europe only, by country of collateral. CDO selection criteria are the same as above.

# 3. Credit Quality - Rating Changes

# 3.1. – 3.3. Upgrades/Downgrades by Country (p. 10)

These tables present the aggregate number of upgrades and downgrades for securitisation (including CDOs) by country of collateral for European deals and in total for US deals. The information is based on data provided by 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.

The Multinational category includes CDOs 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.

# 3.4. – 3.9. Upgrades/Downgrades by Collateral (p. 11)

These tables present aggregate upgrades and downgrades for securitisation and CDO 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 (WBS). 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 (p. 12)

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 is 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. - 5.5. RMBS Spreads (p. 13)

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. The UK RMBS spreads are provided for both prime and non-conforming transactions. Markit spread calculations are based on data provided by dealer trading desks.

US subprime AAA home equity credit spreads are calculated over LIBOR and provided by Barclays Capital.

# 6.1. - 6.4. ABS Spreads (p. 14)

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.

### 7 - 8 Prices

# 7.1. – 7.4. RMBS Prices (p. 15)

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 (p. 16)

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

#### 9.1. - 9.2. Indices Data (p. 17)

The first graph presents daily spreads provided by Barclays Capital for Europe and US ABS indexes from a cross-section of securitised products.

The second graph presents daily prices provided by Markit for the benchmark AAA and BBB rated US ABX and CMBX derivative indices. The ABX (ABX.HE) is an index from reference obligations issued by twenty issuers of RMBS that meet the criteria specified in the ABX.HE Index Rules. The majority

of the mortgages backing the security underlying must be firstliens. The index calculation is based on the Markit proprietary methodology calculating the contributed prices from dealers. The CMBX follows a similar methodology as an index for credit derivatives of US CMBS issues. The ABX and CMBX are widely followed benchmarks in the securitised marketplace for subprime RMBS and CMBS market sectors, respectively.

# 10 Total Return Benchmark Data

# **10.1. – 10.4. Total Return Data** (p. 18)

These graphs represent historical return composites generated by tracking the aggregate asset value on an underlying portfolio of single name bonds. Total Return data is provided by Markit and more information is available at <a href="http://www.markit.com/en/products/data/structured-finance/euro-abs-tra.page">http://www.markit.com/en/products/data/structured-finance/euro-abs-tra.page</a>.

# 11. Asset-Backed Commercial Paper (ABCP)

# 11.1. – 11.2. ABCP Historical Issuance; ABCP Issuance by Nationality of Issuer (p. 19)

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 is 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** (p. 19)

ABCP data by programme type is provided by Dealogic and covers the period from 2008 through 2009 for Europe. The programme type classifications included are: SIVs, single-seller conduit, multi-seller conduit and 'unspecified'.

#### 11.4. ABCP Outstandings by Nationality of Issuer (p. 19)

Outstanding quarterly data is 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 is 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.

# 11.5. – 11.6. ABCP Outstandings by Programme Type (p. 20)

Outstanding quarterly data is provided from the first quarter of 2008 through 2009 for Europe and the US. The European data is provided by Dealogic and the US data is provided by 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'.

# 11.7. ABCP Outstanding Assets Split by Country (p. 20)

Global outstanding ABCP assets percentages are presented by country as of June 2008. The information is provided by Moody's Investors Service. The asset percentage represents the

actual amount of assets funded via ABCP and other sources, not including cash and short-term investments. Therefore the asset percentage is not necessarily equal to the ABCP outstanding amount.

### 11.8. ABCP Spreads (p. 20)

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 (p. 21)

# 12.1. - 12.3. Global Securitisation Issuance, Global Corporate Bond Issuance, Global Government Bond Issuance (p. 21)

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. The issuance volumes are provided quarterly for 2007 and 2008. 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.

# 13. Commentary Sources (p. 1)

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