

7th May 2015

# Securitisation Markets

# Global Securitization Market

## Market Volumes as compared to other credit assets

### Global Securitisation Issuance

	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
US	114.6	91.1	104.9	84.1	394.6
Europe	18.3	18.4	24.6	34.8	96.1
Asia	10.7	17.4	16.1	21.2	65.3
Total	143.6	126.9	145.5	140.0	556.0

### Global Government Bond Issuance

	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
US	63.4	52.3	63.1	66.5	245.3
Europe	176.1	145.4	82.0	82.0	485.4
Asia	45.1	35.4	47.6	38.9	166.9
Total	284.5	233.1	192.6	187.4	897.6

### Global Corporate Bond Issuance

	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
US	144.5	137.6	113.9	150.5	546.5
Europe	192.8	166.3	112.0	114.3	585.4
Asia	124.9	204.3	200.9	162.1	692.2
Total	462.2	508.2	426.8	426.9	1824.0

Source: Dealogic

***The European securitisation market recovery is lagging.  
As opposed to other fixed income sectors, securitisation new  
issuance volumes are low in Europe as compared to the US***

1 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.

2 Global securitisation issuance includes ABS & MBS, both public and private placements, but excludes any retained volumes. Asia numbers include Japan. US numbers exclude Agency MBS.

3 Global corporate bond issuance is for investment grade bonds, public placements only. Asia numbers include Japan.

4 Global government bond issuance includes all agency and non agency issuances and does not include supranational. Asia numbers include Japan.

# European Securitization Market

## Market Volumes

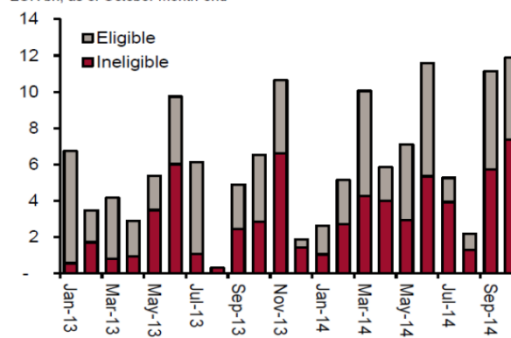
### European Historical Issuance

	Q1	Q2	Q3	Q4	TOTAL
2001	20.5	43.2	22.7	66.2	152.6
2002	24.3	42.6	35.7	55.1	157.7
2003	43.3	51.9	39.7	82.4	217.3
2004	55.8	59.0	53.2	75.5	243.5
2005	47.8	94.4	41.5	143.3	327.0
2006	69.0	114.3	112.8	184.9	481.0
2007	151.9	166.8	95.1	179.9	593.6
2008	47.3	194.7	157.5	419.7	819.2
2009	131.0	83.8	113.2	95.8	423.8
2010	75.5	32.5	111.9	159.2	379.1
2011	115.2	67.1	57.1	136.5	375.9
2012	61.1	67.7	60.1	63.9	252.7
2013	32.8	52.9	38.2	56.4	180.2
2014	19.6	99.5	37.3	59.6	216.0

Source: AFME

### Exhibit 3: European placed issuance ~€5bn/ month, of which ~€3.3bn is ECB-eligible on average

EUR bn; as of October month-end



Source: Credit Suisse, Informa, IFR, the BLOOMBERG PROFESSIONAL™ service

### European Issuance by Collateral

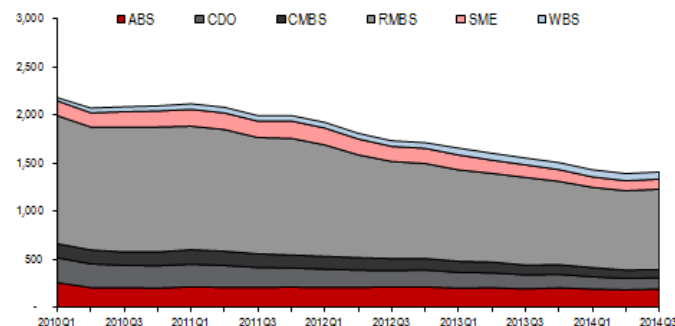
	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
ABS	5.5	12.1	13.2	16.8	47.6
CDO/CLO	2.7	3.1	4.3	4.3	14.3
CMBS	1.4	0.3	1.6	2.9	6.1
RMBS	6.5	65.4	15.5	23.4	110.8
SME	1.7	17.6	2.5	11.4	33.3
WBS/PFI	1.8	1.0	0.2	0.8	3.7
<b>Total</b>	<b>19.6</b>	<b>99.5</b>	<b>37.3</b>	<b>59.6</b>	<b>216.0</b>

Source: AFME & SIFMA

### European Outstandings by Collateral

	2014:Q1	2014:Q2	2014:Q3	2014:Q4
ABS	191.2	186.1	192.0	197.6
CDO/CLO	123.8	114.5	115.0	117.3
CMBS	95.7	87.3	85.5	85.8
RMBS	845.7	866.2	863.7	853.6
SME	104.1	104.0	104.1	106.8
WBS/PFI	73.2	74.0	73.7	73.9
<b>Total</b>	<b>1,433.7</b>	<b>1,432.0</b>	<b>1,433.9</b>	<b>1,435.1</b>

### European Securitisation Outstanding (€bn)



**The size of the European securitisation market is shrinking as low new issuance volumes (including the retained deals) do not compensate for the repayment of the stock. RMBS is the main European securitisation sector**

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

# US ABS Market

## Market Volumes

### US Issuance by Collateral

	2014:Q1	2014:Q2	2014:Q3	2014:Q4	TOTAL
ABS	40.2	51.3	42.7	35.7	169.8
CDO	15.7	25.9	22.7	18.0	82.3
Agency MBS	142.4	162.7	223.2	230.0	758.2
Non-Agency CMBS	14.4	7.4	11.1	6.9	39.8
Non-Agency RMBS	5.3	3.5	4.0	7.4	20.2
<b>Total</b>	<b>217.9</b>	<b>250.7</b>	<b>303.7</b>	<b>298.0</b>	<b>1,070.3</b>

Source: AFME & SIFMA

### US Historical Issuance

	US
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
2010	1,276.7
2011	1,013.7
2012	1,550.2
2013	1,484.9
2014	1,070.3

Source: AFME

### US Outstandings by Collateral

	2014:Q1	2014:Q2	2014:Q3	2014:Q4
ABS	918.4	921.6	1,038.8	1,104.0
Agency MBS	4,296.5	4,329.6	4,721.7	4,966.6
Non-Agency RMBS	756.3	717.1	775.3	791.3
Non-Agency CMBS	828.9	842.3	907.7	938.9
<b>Total</b>	<b>6,800.1</b>	<b>6,810.6</b>	<b>7,443.5</b>	<b>7,800.9</b>

Source: AFME & SIFMA

*The US new issuance volumes have also halved compared to pre-crisis levels, mostly due to the quasi lack of new issuances in the non agency RMBS space after its collapse in 2008.*

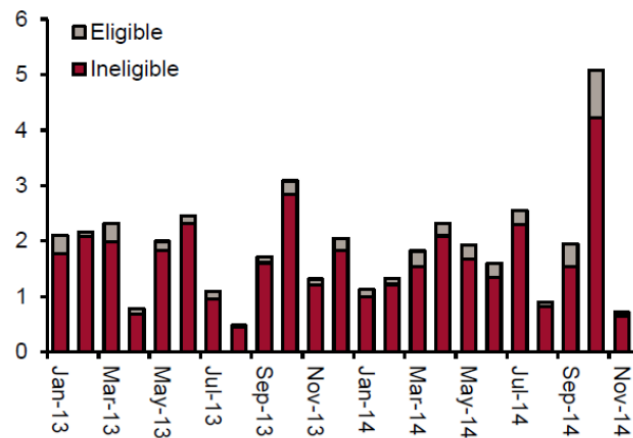
*Besides the Agency MBS sectors, the two sectors that have fully recovered are consumer ABS and CLO*

# European Securitization Market

## Liquidity

**Exhibit 4: BWIC volumes ~ €1.9bn/month, but only €210mn on average is ECB-eligible**

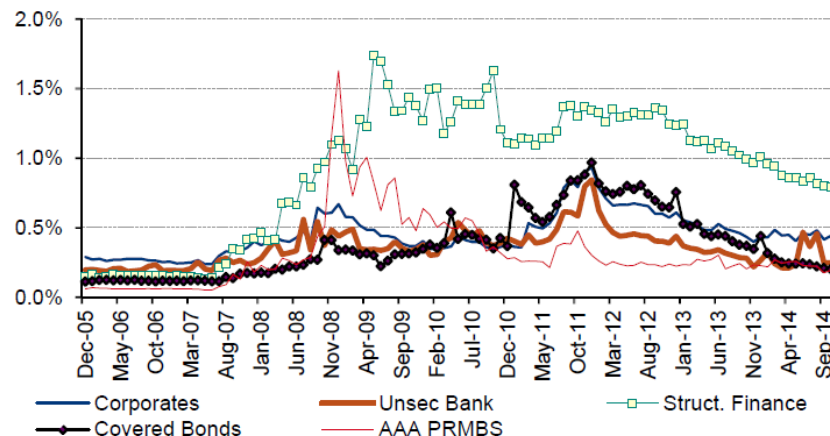
EUR bn; as of 9 Nov-14, EUR equivalent per month (includes UK transactions)



Source: Credit Suisse

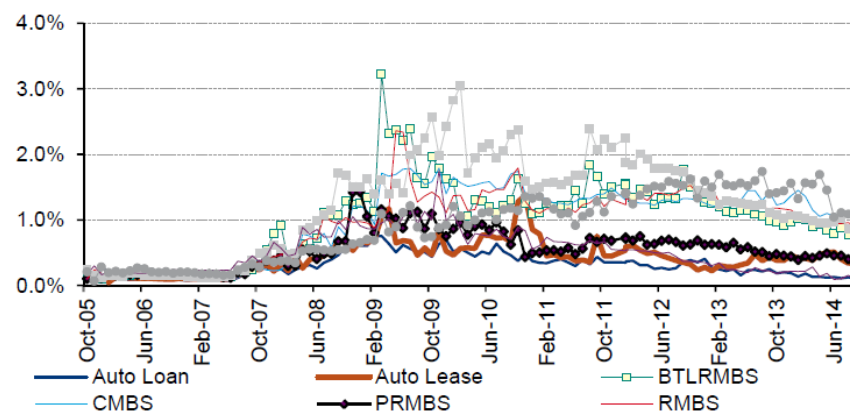
**Secondary activity is relatively limited but stable.**  
**Senior RMBS has been one of the most liquid credit sectors in Europe after the 08 financial crisis as evidenced by its bid ask spread**

**Chart 40: Average bid ask spread by sector**



Source: BofA Merrill Lynch Global Research, Markit, Bloomberg

**Chart 41: Average bid/ask spread by structured finance sector**



Source: BofA Merrill Lynch Global Research, Markit

# European Securitization Market

## Market Volatility

Annualised Spread volatility by sector, as computed by BofA Merrill Lynch

				2011					2012					2013YTD			
	CB	Bank	Sovs	AAA RMBS	A RMBS	CB	Bank	Sovs	AAA RMBS	A RMBS	CB	Bank	Sovs	AAA RMBS	A RMBS	CB	Bank
UK	0.9%	3.3%	1.1%	0.8%	2.3%	1.0%	2.2%	1.6%	1.0%	2.2%	0.6%	1.3%	0.7%	0.6%	1.0%		
France	1.5%	4.3%	3.1%	-	-	1.2%	2.7%	2.5%	-	-	0.5%	1.4%	0.8%	-	-		
Germany	0.4%	0.8%	1.3%	-	-	0.5%	0.8%	1.2%	-	-	0.2%	0.7%	0.9%	-	-		
Netherlands	0.7%	1.1%	1.9%	0.9%	1.9%	1.0%	1.0%	1.8%	0.8%	1.8%	0.6%	1.3%	0.8%	0.7%	1.2%		
Spain	2.3%	6.1%	8.8%	3.6%	6.2%	3.3%	7.0%	9.5%	4.6%	12.5%	2.9%	3.5%	4.6%	2.7%	6.3%		
Sweden	0.4%	2.6%	1.0%	-	-	0.5%	1.6%	1.4%	-	-	0.3%	1.0%	1.0%	-	-		
Italy	3.0%	6.2%	9.1%	4.3%	7.4%	2.7%	4.9%	7.5%	5.2%	9.8%	1.7%	3.2%	4.7%	2.5%	4.5%		

		2014YTD				
		CB	Bank	Sovs	AAA RMBS	A RMBS
United Kingdom3-5 years	UK	0.2%	0.6%	0.4%	0.4%	1.2%
France3-5 years	France	0.2%	0.8%	0.6%	-	-
Germany3-5 years	Germany	0.2%	0.4%	0.5%	-	-
Netherlands3-5 years	Netherlands	0.3%	0.5%	0.6%	0.5%	1.0%
Spain3-5 years	Spain	1.0%	1.4%	3.0%	2.1%	2.4%
Sweden3-5 years	Sweden	0.2%	0.4%	0.5%	-	-
Italy3-5 years	Italy	0.8%	1.4%	2.7%	1.4%	2.0%

***Senior RMBS experienced a lower spread volatility than sovereign bonds and bank unsecured debt throughout the European sovereign crisis. They are one of the most stable credit sectors.***

# European Securitization Market

## Return and Comparison with other credit assets

Components	Rating	Spread* / ASW
UK Senior PRMBS	AAA	35 bps
UK Gov 5 Y	AAA	-19 bps
Dutch Senior PRMBS	AAA	30 bps
NL Gov 5 Y	AAA	-32 bps
Italian Senior PRMBS	AA	60 to 90 bps
Italy Gov 5 Y	BBB+	19 bps
Spanish Senior PRMBS	AA	65 to 110 bps
Spain Gov 5 Y	BBB	22 bps
Euro Consumer ABS	AAA	25 bps
US Senior CLO	AAA	140 bps
Corp Bond 5-7 Y	A	56 bps
* over Euribor or Libor		

Source: JPM, Markit, Bloomberg

***In the current low spread environment, senior securitisation still presents an attractive risk/reward profile for non regulated investors: very high quality and spread pick up***