

# European High Yield & Leveraged Loan Report

# **European Leveraged Finance**

Q4: 2017







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# Highlights and Market Environment

# **Highlights**

# **Issuance Highlights**

European leveraged finance issuance (leveraged loans and high yield bonds) increased in 4Q'17 to €103.6 billion, more than double the €48.0 billion in 3Q'17 and a 80.4% increase from €57.4 billion issued in 4Q'16. Fourth quarter issuance was equally as robust in the leveraged loan sector (128.2% increase quarter over quarter) as it was in the HY sector (98.3% increase quarter over quarter) The high yield bond share of the leveraged finance market decreased to 37.1% in 4Q'17, down from 40.4% in 3Q'17 but up from the 26.2% share in 4Q'16.

For the full year 2017, European leveraged finance issuance reached €324.4 billion, an increase of 45.0% from €223.6 billion in 2016. Leveraged loan issuance increased by 37.9% y-o-y to €195.3 billion while high yield bond issuance set a new high of €129.1 billion in 2017, an increase of 57.3% from €82.1 billion in the previous year.

### **Market and Economic Environment**

According to the January 2018 European Central Bank lending survey, credit standards for loans to enterprises in the fourth quarter remained broadly unchanged. For loans to enterprises, credit standards eased considerably for loans to large firms, but eased only slightly for loans to small and medium-sized enterprises (SMEs).

Net demand for loans to enterprises, housing loans, and consumer credit continued to increase in 4Q'17, with interest largely concentrated on long term loans. Fixed investment, iinterset rates, and working capital were the main drivers to increase demand, while internal financing contributed to a reduction in demand.

### Issuance

### Issuance: Leveraged Loans

Leveraged loan issuance, including first lien, second lien, and mezzanine financing, increased to €65.2 billion in the fourth quarter of 2017, up 128.2% q-o-q (€28.6 billion in 3Q'17) and up 53.8% y-o-y (€42.4 billion in 4Q'16). For the full year 2017, €195.3 billion in leveraged loans were issued, up 37.9% from €141.6 billion in 2016 and the highest issuance volume since €239.7 billion in 2007.

In the fourth quarter of 2017, only €13.2 billion of amendand-extend ("A&E") loans were financed, a significant increase from no A&E deals in 3Q'17 and down from €14.4 billion in 4Q'16. A&E loans issuance rose by 62.9% to €34.1 billion in 2017 from €20.9 billion in 2016.

In addition to A&E loans, a significant number of loans that had been amended to reduce pricing were executed in the

"European leveraged finance issuance (leveraged loans and high yield bonds) reached €324.4 billion in 2017"

<sup>&</sup>quot;Leveraged loan issuance totaled €195.3 billion on 302 deals in 2017"

fourth quarter: €15.5 billion were issued in 4Q'17, of which €9.2 billion were also A&E deals.

Most of the leveraged loans issued in 4Q'17 were 1<sup>st</sup> lien loans (€64.5 billion); there were two 2<sup>nd</sup> lien loans financed (€0.7 billion) and no mezzanine loans. For the full year 2017, no mezzanine loans were issued, €2.6 billion in 2<sup>nd</sup> lien loans and the remainder (€192.7 billion) in 1<sup>st</sup> lien loans.

The top three sectors in leveraged loan issuance in 4Q'17 accounted for slightly more than half of issuance; the leading sector was telecommunications (€19.3 billion), followed by computers & electronics (€9.0 billion), and real estate (€7.6 billion), with the balance split between 18 other sectors. For the full year 2017, the top three leveraged issuance sectors in loan (€37.6 telecommunications billion). followed computers & electronics (€30.6 billion) and chemicals (€18.9 billion).

Pricing spreads for institutional loans tightened by 24 basis points (bps) q-o-q and by 62 bps y-o-y while spreads for pro rata loans tightened by 8 bps q-o-q and by 44 bps y-o-y.

The share of deals used to refinance and/or repay debt rose to 69.0% of all deals by euro amount in the fourth quarter of 2017, up from 55.1% in 3Q'17 but down from 73.5% in 4Q'16. Refinancing and/or repayment of debt were the largest use of proceeds in 4Q'17 with €45.0 billion, followed by leveraged buyouts with €19.1 billion or 29.3% of total, and acquisitions with €1.0 billion or 1.6% of total. The remainder was split between general corporate and other purposes. For the full year 2017, the top use of proceeds mirrored 4Q'17: refinancing and/or repaying of debt (€134.2 billion or 68.7% of 2017 total), leveraged buyouts (€45.3 billion or 23.2%), and acquisitions (€13.9 billion or 7.1%).

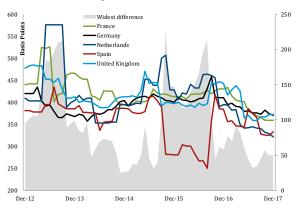
European CLO outstandings, including SME deals, increased by 1.9% to €180.5 billion in 4Q'17 from 3Q'17, but remain below the €194.7 billion outstanding in 4Q'16. Non-SME CLOs outstanding increased by 5.1% to €101.7 billion in 4Q'17 from €96.7 billion in 3Q'17 but declined 3.2% y-o-y, while SME CLOs declined by 2.1% to €78.6 billion in 4Q'17 and by 12.1% from 4Q'16.

### **Issuance: High Yield Bonds**

Primary high yield issuance in 4Q'17 totaled €38.5 billion on 89 deals, a 98.3% increase from 3Q'17 (€19.4 billion on 50 deals) and a 155.4% increase from 4Q'16 (€15.1 billion on 41 deals). For the full year 2017, primary high yield issuance totaled €129.1 billion, up 57.3% from €82.1 billion in 2016.

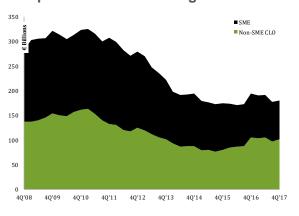
In the fourth quarter of 2017, average deal size in developed market Europe increased by 20.0% to €434.9 million from €362.3 million in 3Q'17 and by 24.3% from €349.8 million in 4Q'16. Average deal size in emerging

### **Institutional Spreads**



Source: Dealogic, AFME, SIFMA

### **European CLO Outstanding**



Source: AFME, SIFMA

"Primary high yield issuance totaled €129.1 billion on 306 deals in 2017"

### **Highlights and Market Environment**

market Europe declined by 20.0% to €403.2 million in 4Q'17 from €503.8 million in 3Q'17 and declined by 1.5% y-o-y (€409.2 million in 4Q'16). For the full year 2017, the average deal size was €410.2 million in developed market Europe and €475.3 million in emerging market Europe, down 21.4% and up 13.5%, respectively, from full year 2016.

High yield issuance for refinancing and/or repayment of debt in developed market Europe increased to €15.4 billion, representing 43.6% of all issuance in 4Q'17, up from €4.7 billion (31.6% of total) in 3Q'17 and from €4.6 billion (45.4% of total) in 4Q'16. In emerging market Europe, €1.1 billion (34.4% of total) in high yield debt was issued for refinancing and/or repayment of debt in the fourth quarter of 2017, a decrease from €1.4 billion (29.8% of total) in 3Q'17 and an increase from no issuance in 4Q'16. For the full year 2017, high yield issuance for refinancing and/or repayment of debt was €39.5 billion in developed market Europe and €2.8 billion in emerging market Europe, up 26.8% and 218.6%, respectively, from 2016.

Three sectors accounted approximately half of the total yield issuance volume in 40'17: telecommunications industry led issuance with €11.7 billion (30.3% of total), followed by retail with €4.0 billion (10.4% of total), and transportation with €2.9 billion (7.7% of total). For the full year 2017, the telecommunications industry led high yield issuance with €24.7 billion, followed by finance (€21.0 billion) and metal & steel (€8.7 billion). In developed market Europe, three industries in 40'17 telecommunications (€11.7 billion or 33.1% of total issuance volume), followed by retail (€3.7 billion or 10.5% of total) and transportation (€2.9 billion or 8.4% of total). In emerging market Europe the top three sectors were: oil & gas (€0.8 billion or 23.3% of total), followed by finance and real estate/property(€0.7 billion or 21.6% of total each).

The proportion of USD-denominated issuance increased slightly to 18.8% of all issuance in 4Q'17, compared to 18.2% in 3Q'17 and 29.1% in 4Q'16. USD-denominated issuance in developed market Europe rose to €5.9 billion, or 16.9% of issuance from €1.6 billion or 10.9% in 3Q'17 and €1.3 billion (12.6% of total) in 4Q'16. Of high yield bonds issued in emerging market Europe, €1.3 billion or 39.8% was denominated in USD, down from €1.9 billion (42.0% of total) in 3Q'17 and down from €3.1 billion (63.0% of total) in 4Q'16. For the full year 2017, USD-denominated deals totaled €40.2 billion and accounted for 31.1% of total issuance, down from €33.7 billion, or 41.1% of total, in 2016.

### **Returns & Credit Quality**

All asset classes analysed recorded positive returns in the fourth quarter of 2017 with the exception of US HY

"Emerging market and developed market equities led returns in 2017"

"26 European high yield bond issuers defaulted in 2017"

distressed bonds. Both developed and emerging market equities led returns, with the MCSI Emerging Market Index led total returns with 7.5% q-o-q, followed by the S&P 500 (6.6% q-o-q) and the Russell 2000 Euro (3.3% q-o-q). Investment grade corporates and municipals outperformed both U.S. and European high yield, however.

The worst performing asset classes in 4Q'17 were U.S. High Yield Distressed (-3.1% q-o-q), U.S. Treasuries (0.1% q-o-q), and U.S. 30-year mortgages (0.2% q-o-q). For the full year 2017, equities and investment grade credit also generally led total returns, although all asset classes analysed recorded positive returns. The MCSI Emerging Market index led turns with a 37.4%total for the full year, followed by the S&P 500 (21.6%) and the Russell 2000 (14.5%). European covered bonds were the worst performers in the market, with 0.7% total return in 2017, followed by U.S. Treasuries (2.4%), US 30-year mortgages (2.5%) and European ABS/MBS (2.5%).

As of December 2017, S&P reported the trailing 12-month speculative-grade default rate at 2.2%, unchanged from 2.1% end-September 2017 and up from 1.7% end-December 2016.

Moody's reported the trailing 12-month speculative-grade default rate in December 2017 to be 2.6%, up from 2.4% end-September 2017 and up from 2.3% end-September 2016.

Ten defaults were reported in the fourth quarter of 2017, with all but one from developed market Europe. For the full year 2017, 26 European high yield issuers defaulted, 22 in developed market Europe and the remaining four in emerging market Europe.

According to Standard and Poor's, in 4Q'17 upgrades exceeded downgrades in developed market Europe (47 upgrades to 26 downgrades), a better ratio than 24 upgrades to 23 downgrades in 3Q'17 and a better ratio than in 4Q'16 (26 upgrades to 33 downgrades). In emerging market Europe, there were 5 upgrades and 7 downgrades by S&P in 4Q'17 compared to 5 upgrades and 2 downgrades in 3Q'17 and 6 upgrades and 7 downgrades in 4Q'16. Three sectors accounted for two-fifths of the rating actions in 4Q'17: banks (3 upgrades and 14 downgrades), utilities (3 upgrades and 10 downgrades) and consumer products (2 upgrades and 4 downgrades). For the full year 2017, upgrades exceeded downgrades in developed market Europe with 137 upgrades to 91 downgrades. In emerging market Europe, downgrades exceeded upgrades, with 14 upgrades to 18 downgrades. Combined, the number of upgrades increased to 151 in 2017 from 115 in 2016 while number of downgrades dropped sharply to 109 in 2017 from 170 in 2016 resulting in a much smaller downgrade to upgrade ratio in 2017.

# **Highlights and Market Environment**

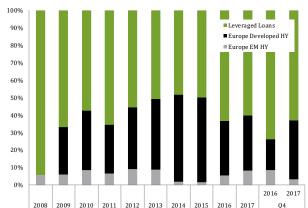
# 1 Leveraged Finance Overview

### 1.1 European Leveraged Issuance by Type



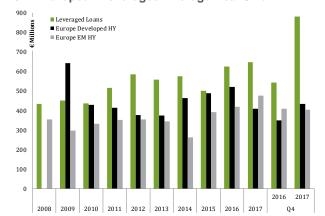
Source: Dealogic, Thomson Reuters LPC

### 1.2 European Leveraged Issuance Percentage



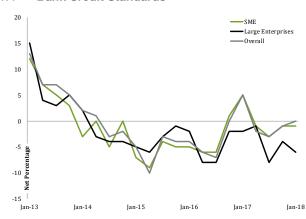
Source: Dealogic, Thomson Reuters LPC

### 1.3 European Leveraged Average Deal Size



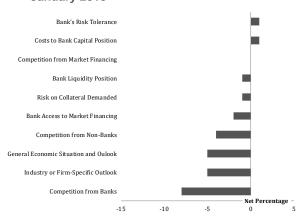
Source: Dealogic, Thomson Reuters LPC

### 1.4 Bank Credit Standards<sup>1</sup>



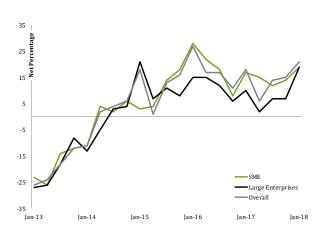
Source: European Central Bank

# 1.5 Factors Affecting Bank Credit Standards: January 2018<sup>2</sup>



Source: European Central Bank

# 1.6 European Leveraged Issuance Percentage<sup>3</sup>



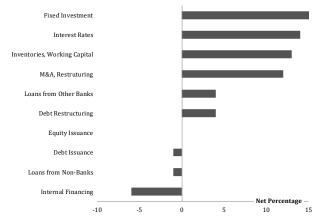
Source: European Central Bank

<sup>&</sup>lt;sup>1</sup> A positive net percentage number signifies tightening bank credit; a negative net percentage number signifies easing credit.

<sup>&</sup>lt;sup>2</sup> A positive net percentage signifies the factor contributed to tightening credit standards; a negative net percentage signifies the factor contributed to easing credit standards

<sup>&</sup>lt;sup>3</sup> A positive net percentage signifies increased demand; a negative net percentage signifies decreased demand.

# 1.7 Factors Affecting Loan Demand: January 2018<sup>4</sup>



Source: European Central Bank

# 1.8 Global Comparison – High Yield Issuance

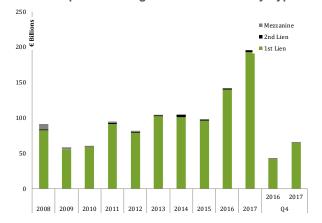
_	2017					2016					Prior Years				
€ Billions	Q1	Q2	Q3	Q4 F	ull Year	Q1	Q2	Q3	Q4 F	ull Year	2015	2014	2013	2012	
<b>United States</b>	64.2	48.2	49.0	48.8	210.2	33.71	54.22	49.38	38.27	175.6	191.5	185.2	196.8	214.8	
Asia Pacific	40.4	41.4	21.4	41.7	144.8	25.99	16.98	21.91	15.56	80.4	41.4	36.0	42.8	32.2	
Europe	36.7	34.6	19.4	38.5	129.1	10.57	32.50	23.94	15.06	82.1	97.8	112.4	101.1	65.6	

Source: Dealogic

<sup>&</sup>lt;sup>4</sup> A positive net percentage signifies a factor that contributed to higher demand; a negative net percentage signifies a factor that contributed to lower demand.

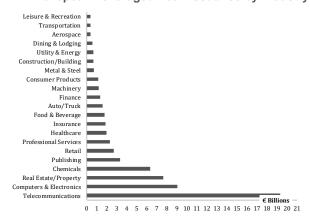
# 2 Issuance – Leveraged Loans

### 2.1 European Leveraged Loan Issuance By Type



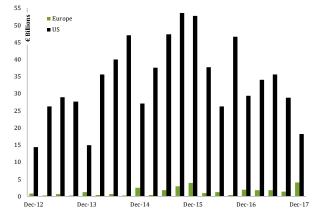
Source: Dealogic, Thomson Reuters LPC

### 2.2 European Leveraged Loan Issuance by Industry



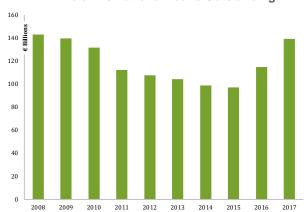
Source: Dealogic

### 2.3 Forward Pipeline of Leveraged Loan Market



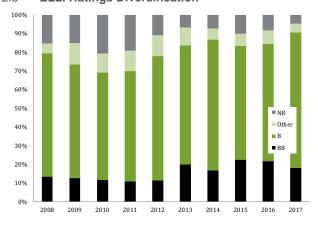
Source: Standard & Poor's LCD

### 2.4 ELLI Total Institutional Loans Outstanding



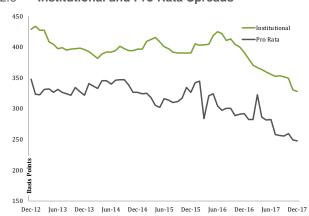
Source: Standard & Poor's LCD

# 2.5 ELLI Ratings Diversification



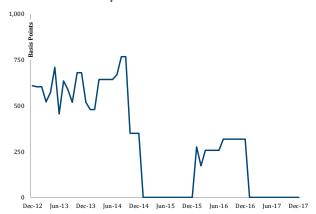
Source: Standard & Poor's LCD

### 2.6 Institutional and Pro Rata Spreads



Source: Dealogic, AFME, SIFMA

# 2.7 Mezzanine Spreads



Source: Dealogic, AFME, SIFMA

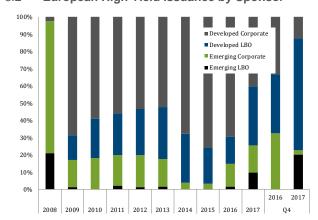
# 3 Issuance – High Yield Bonds Overview

### 3.1 European High Yield Issuance



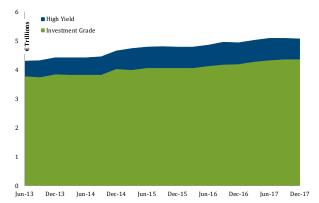
Source: Dealogic, Thomson Reuters LPC

### 3.2 European High Yield Issuance by Sponsor



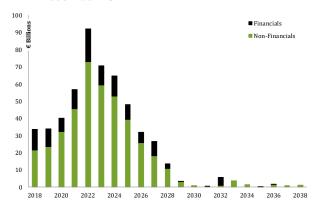
Source: Dealogic, Thomson Reuters LPC

# 3.3 European Corporate Bonds Outstanding (IG and HY only)



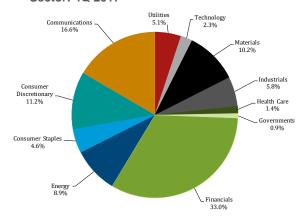
Source: Bloomberg, AFME, SIFMA

# 3.4 European Corporate Bonds HY Maturity Wall: December 2017



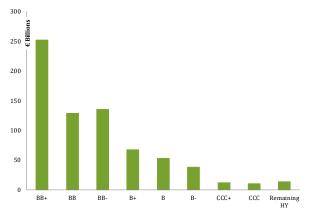
Source: Bloomberg, AFME, SIFMA

# 3.5 European Corporate HY Bonds Outstanding By Sector: 4Q 2017



Source: Bloomberg, AFME, SIFMA

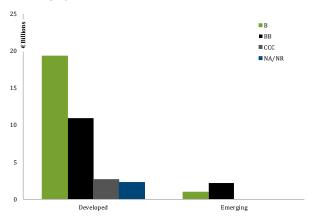
# 3.6 European Corporate HY Bonds Outstanding by Current Rating: December 2017



Source: Bloomberg, AFME, SIFMA

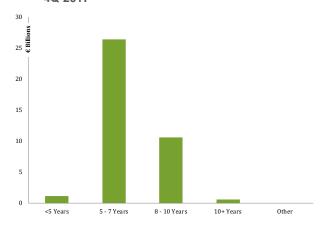
# Issuance - High Yield Bonds Overview

# 3.7 European Corporate Bond Issuance by Rating: 4Q 2017



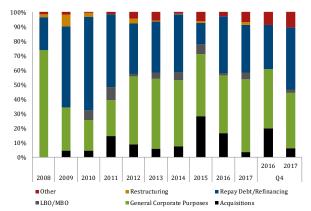
Source: Dealogic, AFME, SIFMA

# 3.8 European Corporate Bond Issuance by Tenor: 4Q 2017



Source: Dealogic, AFME, SIFMA

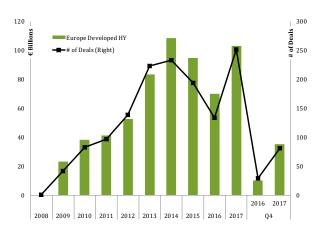
### 3.9 European HY Use of Proceeds



Source: Dealogic, AFME, SIFMA

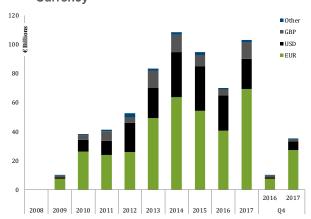
# 4 Issuance – European Developed Market High Yield Bonds

### 4.1 European Developed Market HY Bond Issuance



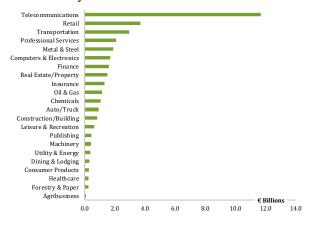
Source: Dealogic, Thomson Reuters LPC

# 4.2 European Developed Market HY Issuance by Currency



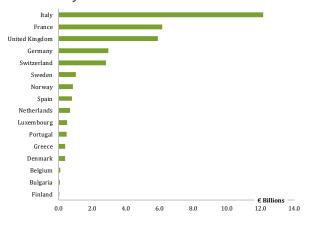
Source: Dealogic, Thomson Reuters LPC

# 4.3 European Developed Market HY Issuance by Industry: 4Q 2017



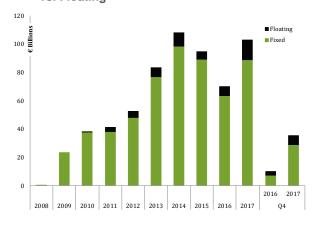
Source: Dealogic

# 4.4 European Developed Market HY Issuance by Country of Risk: 4Q 2017



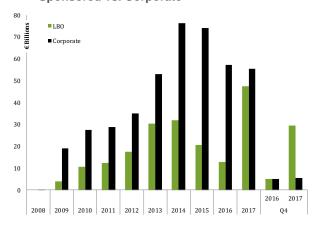
Source: Dealogic

# 4.5 European Developed Market HY Issuance, Fixed vs. Floating



Source: Dealogic, Thomson Reuters LPC

### 4.6 European Developed Market HY Issuance, Sponsored vs. Corporate



Source: Dealogic, Thomson Reuters LPC

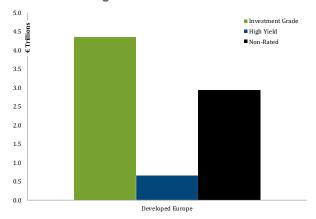
# Issuance – European Developed Market High Yield Bonds

#### 4.7 **European Developed Market HY Rating Distribution at Issuance**



Source: Dealogic, AFME, SIFMA

#### 4.8 **European Developed Market Corporate Bonds** Outstanding: 4Q 2017



Source: Bloomberg, AFME, SIFMA

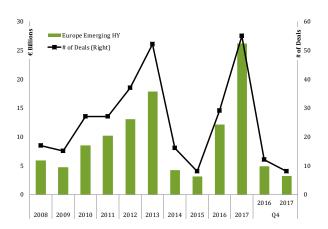
# 4.9 European Developed Market HY Bond Issuance

Issuer BAB Optique Developpement SAS	Industry Group Retail	Date 06/10/2017	Currency EUR	(Millions) 175	Coupon Moody: 3M EURIBOR +412.5 B3	s S&P B	Fitch B+
Ab Optique Developpement 3A3	Retail	00/10/2017	EUR	250	4.000 B3	В	B+
DLER Real Estate AG	Real Estate/Property	29/11/2017	EUR	300	2.125 NA	BB+	NA
			EUR	500	1.5 NA	BB+	NA
ltice Finco SA	Telecommunications	05/10/2017	EUR	675	4.750 B3	В-	NA
Anglian Water (Osprey) Financing plc ArcelorMittal SA	Utility & Energy Metal & Steel	01/12/2017 28/11/2017	GBP EUR	240 500	4 Ba3 0.950 Ba1	NA BB+	BB+ BB+
Arena Luxembourg Finance SARL	Transportation	11/10/2017	EUR	125	3M EURIBOR +275 Ba3	NA	NA
a cha Basempourg i manee or ne	Transportation	11/10/2017	EUR	350	2.875 Ba3	NA	NA
2Holding ASA	Finance	02/11/2017	EUR	200	3M EURIBOR +425 NA	NA	NA
Banca IFIS SpA	Finance	10/10/2017	EUR	400	4.500 NA	NA	BB
Forealis Finance LLC	Transportation	16/11/2017	USD	150	7.5 NA	NA	NA
Bormioli Pharma Bidco Srl	Consumer Products	02/11/2017	EUR	280	3M EURIBOR +350 B2	В	NA
Burger King France SAS Cattolica Assicurazioni	Dining & Lodging Insurance	07/12/2017 05/12/2017	EUR EUR	60 500	3M EURIBOR +525 B3 4.25 NA	NA BB+	NA NA
CBR Fashion Finance BV	Retail	25/10/2017	EUR	450	5.125 B2	В	NA
CMA CGM SA	Transportation	17/10/2017	EUR	500	5.250 B3	NA	NA
	•	06/11/2017	EUR	250	5.25 B3	B-	NA
loastal Holding AS (Startup 126 17 AS)	Transportation	30/10/2017	NOK	400	3M Other +400 NA	NA	NA
Codic International SA	Real Estate/Property	23/11/2017	EUR	35	4.25 NA	NA	NA
Constellium NV	Metal & Steel	02/11/2017	EUR	400	4.25 B3	B-	NA
Cooperativa Muratori & Cementisi CMC di Ravenna	Construction/Building	08/11/2017	USD EUR	500 325	5.875 B3 6 B2	B- B	NA NA
Crystal Almond SARL	Telecommunications	04/12/2017	EUR	95	10 NA	В	B B
CTC Bondco GmbH	Machinery	30/11/2017	EUR	406	5.25 Caa2	CCC+	CCC+e
DDM Debt AB	Finance	01/12/2017	EUR	50	8 NA	NA	NA
Oufry One BV	Retail	10/10/2017	EUR	800	2.500 Ba2	BB	NA
EC Finance plc	Transportation	18/10/2017	EUR	350	2.375 B1	BB	NA
Eurohold Bulgaria AD Sofia	Finance	30/11/2017	EUR	70	6.5 NA	NA	В
Europear Drive DAC	Transportation	18/10/2017	EUR	600	4.125 B3	B-	NA NA
ortuna Midco Ltd Shelamco Invest NV	Insurance Real Estate/Property	15/12/2017 15/11/2017	USD EUR	350 47	6M Libor +575 NA 4.3 NA	NA NA	NA NA
meianico invest nv	Real Estate/Property	15/11/2017	EUR	54	4.5 NA 4.8 NA	NA NA	NA NA
ilobal Ship Lease Inc	Finance	23/10/2017	USD	360	9.875 B3	В	B-
LX Holding AS	Computers & Electronics	01/12/2017	NOK	1,350	3M Other +525 NA	NA	NA
reenalia SA	Utility & Energy	31/10/2017	EUR	6	6.75 NA	NA	NA
Gruppo Pro-Gest SpA	Forestry & Paper	07/12/2017	EUR	250	3.25 B2	BB-	NA
Iaya Finance 2017 SA	Real Estate/Property	09/11/2017	EUR	225	3M EURIBOR +512.5 B3	B-	NA
			EUR	250	5.25 B3	B-	NA
II Bidco AS	Finance	30/10/2017	NOK	350	3M Other +800 NA	NA	NA
Hospitality Invest AS	Real Estate/Property	10/10/2017	NOK NOK	1,000 850	3M Other +550 NA 3M Other +600 NA	NA NA	NA NA
davang A/S	Agribusiness	18/10/2017 23/11/2017	EUR	85	3M EURIBOR +650 NA	NA	NA
HS Markit Ltd	Publishing	28/11/2017	USD	500	4 Ba1	BB+	BBB
NEOS Finance plc	Chemicals	25/10/2017	EUR	550	2.125 Ba1	BB+	BBB-
nter Media Communication Srl	Professional Services	14/12/2017	EUR	300	4.875 NA	BB-	NA
nternational Personal Finance plc	Finance	18/12/2017	EUR	12	5.75 NA	NA	BB+
aguar Land Rover Automotive plc	Auto/Truck	04/10/2017	USD	500	4.500 Ba1	BB+	NA
Cistefos AS	Finance	31/10/2017	NOK	600	3M Other +600 NA	NA	NA
endify Sweden 1 AB	Finance	05/10/2017	SEK	100 400	3M Other +500 NA 4 NR	NA B	NA NA
Matterhorn Telecom Holding SA Naviera Armas SA	Telecommunications Transportation	14/11/2017 10/11/2017	EUR EUR	300	3M EURIBOR +425 B1	BB-	NA NA
Vaviera Armas SA Vavios Maritime Holdings Inc	Transportation	14/11/2017	USD	305	11.25 NA	NA	NA
IewCo GB SAS	Dining & Lodging	07/12/2017	EUR	200	8 B3e	CCC	NA
kea AS	Oil & Gas	30/10/2017	USD	120	7.5 NA	NA	NA
PR-Vakuus Oy	Finance	10/11/2017	EUR	40	10.75 NA	NA	NA
Prexo AB	Healthcare	30/10/2017	SEK	325	3M Other +450 NA	NA	NA
rpea SA	Healthcare	05/12/2017	EUR	63	2.2 NA	NA	NA
erstorp Holding AB Ficard Bondco SA	Chemicals Retail	06/12/2017 06/12/2017	EUR EUR	250 310	3M EURIBOR +425 B3 5.5 Caa1	B- B-	NA CCC+
icard Groupe SAS	Retail	06/12/2017	EUR	1,190	3M EURIBOR +300 B2	B+	B+
inewood FinCo plc	Leisure & Recreation	29/11/2017	GBP	250	3.75 Ba2	BB	BB+
ioneer Holding LLC	Professional Services	16/10/2017	USD	280	9.000 NA	CCC+	NA
latin 1426 GmbH	Computers & Electronics	07/12/2017	EUR	425	5.375 B3	В	NA
rague CE SARL	Chemicals	06/12/2017	EUR	234	10 NA	CCC-	NA
taffinerie Heide GmbH	Oil & Gas	24/11/2017	EUR	250	6.375 B3	В	NA
texel SA	Computers & Electronics	06/11/2017	EUR	500	2.125 Ba3	BB-	BB
afari Holding Verwaltungs GmbH aipem Finance International BV	Leisure & Recreation Oil & Gas	01/12/2017 27/10/2017	EUR EUR	350 500	5.375 B2 2.625 Ba1	B BB+	NA NA
alini Impregilo SpA	Construction/Building	19/10/2017	EUR	500	1.75 NA	BB+	NA NA
catec Solar AS	Utility & Energy	31/10/2017	NOK	750	3M Other +475 NA	NA	NA
hop Direct Funding plc	Computers & Electronics	27/10/2017	GBP	550	7.75 B2	NA	B+
tar Bulk Carriers Corp	Transportation	02/11/2017	USD	50	8.3 NA	NA	NA
'akko Luxembourg 2 SCA	Retail	26/10/2017	EUR	225	3M EURIBOR +537.5 B2	В	NA
			EUR	285	5.375 B2	В	NA
elecom Italia SpA	Telecommunications	05/10/2017	EUR	1,250	2.375 Ba1	BB+	BBB-
'elenet Finance Luxembourg Notes SARL	Telecommunications	29/11/2017	EUR	600 1,000	3.5 Ba3	BB- BB-	BB BB
homas Cook Finance 2 plc	Professional Services	30/11/2017	USD EUR	1,000 400	5.5 Ba3 3.875 B1	B BB-	BB-
ikehau Capital SCA	Finance	20/11/2017	EUR	300	3.873 B1 3 NA	NA	NA
VL Finance plc	Dining & Lodging	18/12/2017	GBP	30	3M LIBOR +487.5 B3	B-	NA
Unilabs SubHolding AB	Healthcare	06/10/2017	EUR	155	5.750 Caa1	CCC+	NA
Jnipol Gruppo SpA	Insurance	21/11/2017	EUR	500	3.5 Ba2	ВВ+е	NA
IPC Holding BV	Telecommunications	13/10/2017	USD	550	5.500 B2	NA	В
'allourec SA	Metal & Steel	11/10/2017	EUR	400	6.625 Ba1	В	NA
	B 6 1 10	23/10/2017	EUR	150	6.625 NA	В	NA
erisure MidHolding AB	Professional Services	15/11/2017	EUR	980	5.75 Caa1	CCC+	NA
(alva Car AP	Auto /Truck	17/11/2017	SEK	1,650	3M Other +575 NA	CCC+	NA NA
Volvo Car AB	Auto/Truck	17/11/2017	EUR	500 340	2 Ba2	BB+	NA NA
Velltec A/S Vind Tre SpA	Oil & Gas Telecommunications	17/11/2017 24/10/2017	USD EUR	340 1,625	9.5 B2 2.625 B1	B- BB-	NA BB
vina ite opa	1 elecommunications	47/10/401/		1,625			BB
			FUR				
			EUR EUR	2,250	3.125 B1 3M EURIBOR +275 B1	BB- BB-	BB

Source: Dealogic

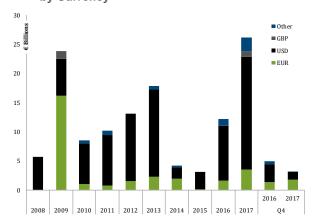
# 5 Issuance – European Emerging Market High Yield Bonds

### 5.1 European Emerging Market HY Bond Issuance



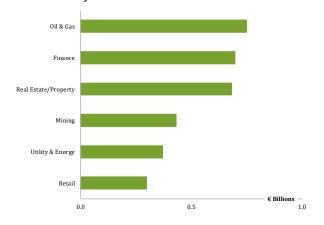
Source: Dealogic, Thomson Reuters LPC

# 5.2 European Emerging Market HY Bond Issuance by Currency



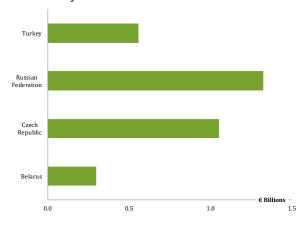
Source: Dealogic, Thomson Reuters LPC

# 5.3 European Emerging Market HY Issuance by Industry: 4Q 2017



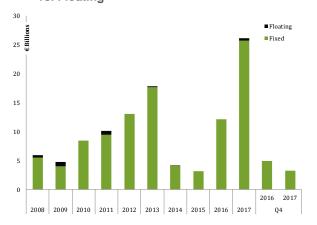
Source: Dealogic

# 5.4 European Emerging Market HY Issuance by Country of Risk: 4Q 2017



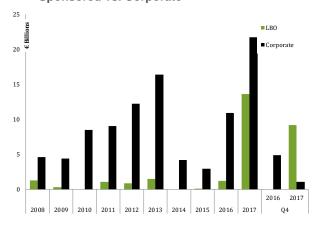
Source: Dealogic

# 5.5 European Emerging Market HY Issuance, Fixed vs. Floating



Source: Dealogic, Thomson Reuters LPC

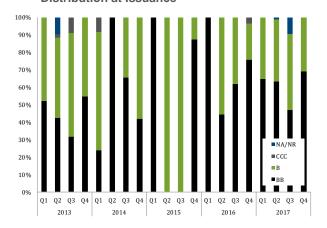
# 5.6 European Emerging Market HY Issuance, Sponsored vs. Corporate



Source: Dealogic, Thomson Reuters LPC

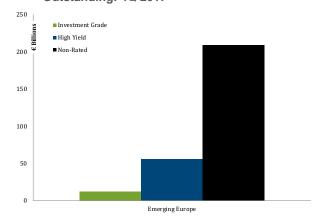
# **Issuance – European Emerging Market High Yield Bonds**

#### 5.7 **European Emerging Market HY Rating Distribution at Issuance**



Source: Dealogic, AFME, SIFMA

#### 5.8 **European Emerging Market Corporate Bonds** Outstanding: 4Q 2017



Source: Bloomberg, AFME, SIFMA

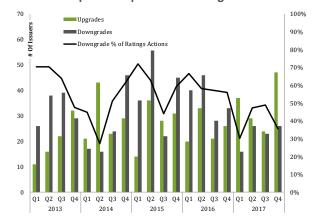
#### 5.9 **European Emerging Market HY Bond Issuance**

			Amount			
Industry Group	Date	Currency	(Millions)	Coupon Moodys	S&P	Fitch
Finance	13/07/2017	RUB	10,000	8.900 Ba2		BB+
Oil & Gas	13/07/2017	CHF	500	2.250 Ba1	BB+	BBB-
Γelecommunications	13/07/2017	EUR	575	4.375 B2	В	
		EUR	450	3M EURIBOR +437.5 B2	В	
		EUR	325	4.875 B2	В	
Oil & Gas	17/07/2017	USD	725	8.000 B2	В	
Finance	26/07/2017	USD	500	8.750 NA	NA	NA
Γransportation	14/09/2017	CHF	450	2.100 Ba1		BBB-
Utility & Energy	22/09/2017	RUB	20,000	8.125 Ba1	BB+	BB+
Finance	25/09/2017	USD	500	5.125 Ba1		BB+
Chemicals	29/09/2017	USD	500	4.125 Ba1		BB+
	Finance Dil & Gas Felecommunications Dil & Gas Finance Fransportation Utility & Energy Finance	Finance     13/07/2017       Oil & Gas     13/07/2017       Felecommunications     13/07/2017       Oil & Gas     17/07/2017       Finance     26/07/2017       Fransportation     14/09/2017       Jtility & Energy     22/09/2017       Finance     25/09/2017	Finance         13/07/2017         RUB           Oil & Gas         13/07/2017         CHF           Felecommunications         13/07/2017         EUR           EUR         EUR           Oil & Gas         17/07/2017         USD           Finance         26/07/2017         USD           Transportation         14/09/2017         CHF           Jtility & Energy         22/09/2017         RUB           Sinance         25/09/2017         USD	Industry Group         Date         Currency         (Millions)           Finance         13/07/2017         RUB         10,000           Dil & Gas         13/07/2017         CHF         500           Celecommunications         13/07/2017         EUR         575           EUR         450         EUR         325           Dil & Gas         17/07/2017         USD         725           Finance         26/07/2017         USD         500           Transportation         14/09/2017         CHF         450           Utility & Energy         22/09/2017         RUB         20,000           Finance         25/09/2017         USD         500	Industry Group         Date         Currency         (Millions)         Coupon Moodys           Finance         13/07/2017         RUB         10,000         8.900 Ba2           Dil & Gas         13/07/2017         CHF         500         2.250 Ba1           Celecommunications         13/07/2017         EUR         575         4.375 B2           EUR         450         3M EURIBOR +437.5 B2           EUR         325         4.875 B2           Dil & Gas         17/07/2017         USD         725         8.000 B2           Finance         26/07/2017         USD         500         8.750 NA           Transportation         14/09/2017         CHF         450         2.100 Ba1           Utility & Energy         22/09/2017         RUB         20,000         8.125 Ba1           Finance         25/09/2017         USD         500         5.125 Ba1	Industry Group         Date         Currency         (Millions)         Coupon Moody         S&P           Finance         13/07/2017         RUB         10,000         8.900 Ba2         BB+           Dil & Gas         13/07/2017         CHF         500         2.250 Ba1         BB+           Celecommunications         13/07/2017         EUR         575         4.375 B2         B           EUR         450         3M EURIBOR +437.5 B2         B         B           Dil & Gas         17/07/2017         USD         725         8.000 B2         B           Finance         26/07/2017         USD         500         8.750 NA         NA           Oransportation         14/09/2017         CHF         450         2.100 Ba1         H           Utility & Energy         22/09/2017         RUB         20,000         8.125 Ba1         BB+           Granace         25/09/2017         USD         500         5.125 Ba1         BB+

Source: Dealogic

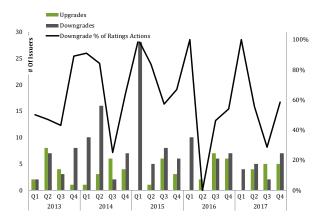
# 6 Credit Quality

# 6.1 Developed Europe Issuer Rating Actions<sup>5</sup>



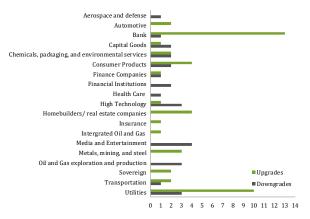
Source: Standard and Poor's

# 6.2 Emerging Europe Issuer Rating Actions<sup>6</sup>



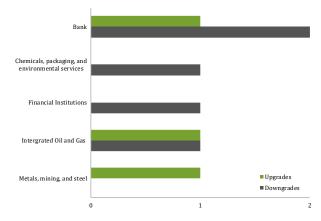
Source: Standard & Poor's

# 6.3 Developed European Industry Rating Actions by Number of Ratings: 4Q 2017



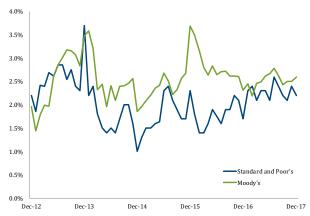
Source: Standard & Poor's

# 6.4 Emerging European Industry Rating Actions by Number of Ratings: 4Q 2017



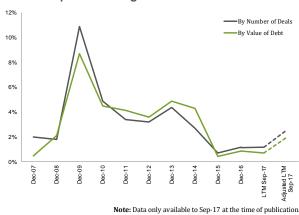
Source: Standard & Poor's

# 6.5 European High Yield Default Rates



Source: Standard & Poor's, Moody's

### 6.6 European Leveraged Loan Default Rates<sup>7</sup>



Source: Fitch Leveraged Credit Database

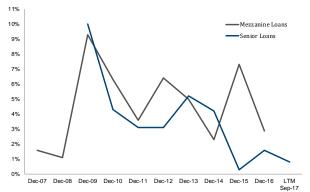


<sup>&</sup>lt;sup>5</sup> Numbers include both corporate and sovereigns.

<sup>&</sup>lt;sup>6</sup> Numbers include both corporate and sovereigns.

<sup>&</sup>lt;sup>7</sup> Includes c\* and cc\* rated issuers as if those had already defaulted

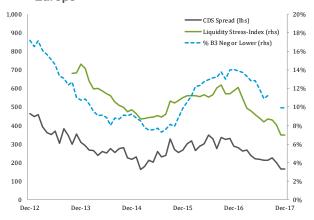
### 6.7 Mezzanine and Senior Loan Default Rate



**Note:** Data only available to Sep-17 at the time of publication; there were no mezzanine defaults or mezzanine loans outstanding in LTMSep-17.

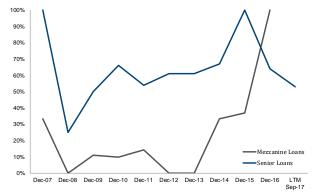
Source: Fitch Leveraged Credit Database

# 6.9 High-Yield bond CDS spreads vs. liquidity-stress index and HY bonds rated B3 neg and lower in Europe



Source: Moody's

### 6.8 Mezzanine and Senior Loan Recovery Rates



 $\begin{tabular}{ll} \textbf{Note:} Data only available to Sep-17 at the time of publication; there were no mezzanine defaults or mezzanine loans outstanding in LTM Sep-17. \end{tabular}$ 

Source: Fitch Leveraged Credit Database

### 6.10 European Defaults

Issuer	Industry Group	Country	Date	Reported By	Reason
Pinnacle Holdco S.a.r.l.	High Technology	Luxembourg	October 2017	S&P	Missed interest payment
Brunswick Rail Limited	Transportation	Russia	October 2017	Moody's	Distressed Exchange
Pacific Drilling S.A.	Oil and gas	Luxembourg	November 2017	S&P, Moody's	Chapter 11
Pacific Drilling V Ltd.	Oil and gas	Luxembourg	November 2017	Moody's	Bankruptcy
Bank RBK JSC	Bank	Kazakhstan	November 2017	S&P	Distressed exchange
Sterling Mid-Holdings Ltd.	Finance companies	Jersey	November 2017	S&P	Distressed exchange
Bibby Offshore Holdings Ltd.	Oil and gas	U.K.	December 2017	S&P, Moody's	Distressed exchange
Elli Investments Ltd.	Health care	U.K.	December 2017	S&P	Missed interest payment
Expro Holdings U.K. 3 Ltd.	Oil and gas	U.K.	December 2017	Moody's	Bankruptcy
Bibby Offshore Services Plc	Oil and gas	U.K.	December 2017	Moody's	Bankruptcy

Source: Standard & Poor's, Moody's

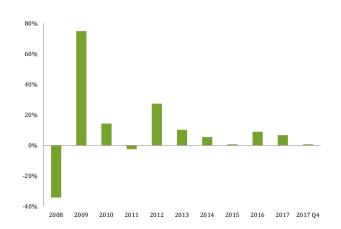
# 7 Relative Value and Total Return

# 7.1 Relative value: European HY Bonds, Cash vs. Synthetic



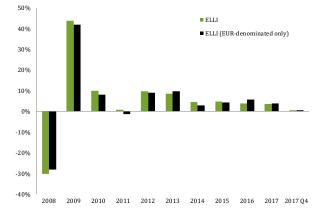
Source: Thomson Reuters Eikon, Markit

### 7.2 European HY Bond Total Return



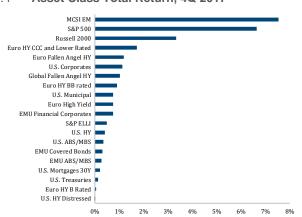
Source: BAMI

### 7.3 European Leveraged Loan Total Return



Source: Standard & Poor's LCD

# 7.4 Asset Class Total Return, 4Q 2017



Source: BAML , Bloomberg

# Summary of the Methodologies Adopted for this Report

# 1. Leveraged Issuance - Overview

# 1.1. – 1.3. Leveraged Loans and High Yield Bonds

Leveraged loan data are sourced from Thomson Reuters LPC and Dealogic.

Leveraged loan data from Thomson Reuters LPC are defined primarily as having sub-investment grade ratings and/or a margin spread minimum of 200 basis points (spread minimums will vary from year to year to make Thomson LPC's cutoff). Leveraged loan aggregates will include first lien, second lien, and mezzanine financing. Discrepancies in Thomson Reuters LPC data are due to rounding and/or currency rate of exchange.

Leveraged loan data from Dealogic are defined primarily as coming from a leveraged or highly leveraged European deal; loan tranches must have sub-investment grade ratings, or, if unrated, a margin spread minimum of 125 basis points over a benchmark (e.g., Euribor, LIBOR). Under these guidelines, sub-investment grade-rated loans with a margin spread of less than 125 basis points are included. Deals must be European and are inclusive of both developed and emerging market Europe as defined in high yield criteria in Section 3. Deals must also be marketed either in Europe or in the United States. Loans not EUR-denominated are converted to EUR as of credit date for purposes of aggregation. Aggregates include new money as well as non-new money deals.

Criteria for high yield bond transactions can be found in Section 3, 4, and 5.

# 1.4. - 1.7. Bank Lending Surveys

Data for loan demand and credit standards are sourced from the ECB's bank lending survey. Graph numbers are net percentages of reporting banks.

# 1.8. Global Comparison – High Yield Issuance

Data for global high yield issuance are sourced from Dealogic. Asian deals are inclusive of Japan and Australia.

## 2. Issuance - Leveraged Loans

### 2.1. - 2.2. Leveraged Loan Issuance

Leveraged loan issuance data are sourced primarily from Dealogic and Thomson Reuters LPC. For more details on qualifying criteria, please refer to section 1.

# 2.3. Forward Pipeline of Leveraged Loan Market

Forward leveraged loan pipeline data are sourced from S&P LCD.

# 2.4. S&P ELLI Total Institutional Loans Outstanding

Total institutional loan outstanding data are sourced from S&P LCD and are outstanding loans in the S&P ELLI index.

### 2.5. S&P ELLI Ratings Diversification

S&P ELLI ratings diversification are the percentages of currently outstanding loans in S&P's ELLI index that are rated accordingly. Data are provided by S&P LCD.

### 2.6. - 2.7. Loan Spreads

Loan spread data are sourced from Dealogic under our criteria for leveraged loans (see Section 1). For purposes of loan spread calculations, deals marketed in the US are excluded. Spreads are a weighted average of spread margin on new leveraged issuance on a rolling twelve months basis, and are typically benchmarked to LIBOR or EURIBOR. Institutional loan spread data are inclusive of 2<sup>nd</sup> lien; pro rata spreads include all revolvers and term loan A (Tla).

### 3. Issuance - High Yield Bonds Overview

High yield bond transactions are sourced primarily from Dealogic, with supplemental information sourced from Bloomberg. High yield transactions are defined as transactions with a Dealogic "effective" rating of equal or less than BB+, and may include unrated transactions based on issuer and desk notes. Split-junk rated transactions are generally excluded.

European issuance, inclusive of both emerging market Europe and developed market Europe, are defined as an issue having a Dealogic "deal nationality" as well as "nationality of risk" within Europe issued in the euro, foreign, and global markets; deals marketed locally are excluded. Sovereign, sub-sovereign, and supranational parent issuers are excluded from issuance, as well as ABS/MBS issuers.

Emerging market Europe and developed market European issuance are defined by nationality of risk, rather than nationality of deal, and although primarily sourced from Dealogic, are ultimately subject to AFME's discretion. Emerging and developed market issuances are mutually exclusive and will contain no overlap unless otherwise mentioned.

European emerging market bonds are further defined with having a minimum deal size of €75.0 million; deals on the same day from the same issuer are aggregated for the purpose of meeting this minimum. Deals are shown in EUR amount but include deals originated in other currencies and are converted to EUR at the exchange rate on the day of the deal. Russian ruble (RUB)-denominated issuance are excluded due to differences in terms and documentation; as of 4Q'10 this criteria no longer applies and may be included on a case by case basis.

### 3.2. European HY Issuance by Sponsor

Data for high yield issuance by sponsor are sourced from Dealogic. LBO deals are defined as all high yield transactions whose issuer parent is a public or private finance entity (i.e., a financial sponsor), regardless of use of proceeds.

# 3.3. – 3.6. European Corporate Bonds Outstanding

Data for European corporate outstanding are sourced from Bloomberg and AFME/SIFMA estimates. Criteria for European corporate bonds are: bonds must be placed in the domestic, euro, foreign and global markets with nationality of incorporation from a European developed or emerging market country as defined by AFME. Corporate bonds exclude non-Bloomberg verified securities, all structured notes, covered bonds, warrants, deposit notes, receipts, and certificates of deposit. All currencies are included and have been converted to EUR at time of pricing and/or issue.

High-yield ratings are sourced from Bloomberg's composite rating, which is an average of all available ratings from four rating agencies: Moody's, Standard and Poor's, Fitch Ratings, or DBRS. Split-rated securities may be included in high yield numbers due to this.

Corporate bonds outstanding include certain securities that may be considered corporate securitisations or structured finance securities; while all effort is made to exclude the latter, the former will be counted toward the corporate bonds outstanding total, and will subsequently overlap to some extent to AFME structured finance outstanding numbers. Excludes unrated securities.

# 3.7. European Corporate Bond Issuance by Rating

Data for HY issuance by rating are sourced from Dealogic, Bloomberg, and the three rating agencies. The composite rating is determined by the lowest

rating assigned by either Moody's, Standard and Poor's, or Fitch Ratings.

# 3.8. European Corporate Bond Issuance by Tenor

Data for HY issuance by tenor are sourced from Dealogic. "Other" includes perpetuals.

# 3.9. European HY Issuance By Use of Proceeds

Data for HY issuance by use of proceeds are sourced from Dealogic and aggregated for the purposes of this calculation. Please refer to Section 3 for criteria on high yield issue inclusion.

# 4. Issuance – European Developed Market High Yield Bonds

# 4.1. – 4.7., 4.9 European Developed Market HY Bond Issuance

High yield bond issuance data are sourced from Dealogic. For further criteria on how high yield issuance are defined, please refer to section 3.

Developed European issuance are deals predominantly from western Europe and includes deals from Andorra, Austria, Belgium, Bulgaria, Cyprus, Switzerland, Germany, Denmark, Spain, Estonia, Finland, France, Faroe Islands, United Kingdom, Guernsey, Gibraltar, Greenland, Greece, Isle of Man, Ireland, Iceland, Italy, Jersey, Liechtenstein, Luxembourg, Monaco, Malta, Montenegro, Netherlands, Norway, Portugal, San Marino, and Sweden.

# 4.8. European Developed Market Corporate Bonds Outstanding

Data for corporate bonds outstanding are sourced from Bloomberg. Please refer to Section 3 for criteria and methodology.

# 5. Issuance – European Emerging Market High Yield Bonds

# 5.1. – 5.7., 5.9. European Emerging Market HY Bond Issuance

High yield bond issuance data are sourced from Dealogic. Criteria for all high yield issuance are found in section 3.

Emerging market European issuance deals are predominantly from Eastern Europe but will also additionally include Turkey, the Russian Federation, Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan, Azerbaijan, and Kyrgyzstan. Certain sub-investment grade countries are not included in the emerging market total, including, among others, Iceland and Greece.

# **5.8. European Emerging Market Corporate Bonds Outstanding**

Data for corporate bonds outstanding are sourced from Bloomberg. Please refer to Section 3 for criteria and methodology.

### 6. Credit Quality

### 6.1. – 6.2. European Issuer Rating Actions

European issuer upgrades and downgrades are sourced from S&P. The breakdown by emerging market and developed Europe are from AFME's definition of developed and emerging markets and would be, under S&P's guidelines, a combination of both European and EMEA rating actions. Multiple downgrades of a single issuer are counted separately. Rating actions are inclusive of both corporate (both credit and merger-related) as well as sovereign ratings.

# 6.3. – 6.4. European Issuer Rating Actions by # of Ratings

Rating actions are sourced from S&P. Breakdown by emerging market and developed Europe are from AFME's definition of developed and emerging markets and would be, under S&P's guidelines, a combination of both European and EMEA rating actions.

### 6.5. European High Yield Default Rate

European HY bond default rates are sourced from Standard and Poor's and Moody's, calculated on a trailing 12 month basis.

"Europe" for the S&P default rate is defined to include Austria, Belgium, Bulgaria, Channel Islands, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. Countries are subject to revision.

# 6.6. – 6.7. European Leveraged Loan Default Rate

European LL default rates are sourced from Fitch Leveraged Credit Database, calculated on a trailing 12 month basis.

### 6.8. Leveraged Loan Recovery Rates

European LL recovery rate are sourced from Fitch Leveraged Credit Database, calculated on a trailing 12 month basis. Recovery rates are based on median cash realised (cash or cash-pay debt received) recoveries for senior loans and on average cash realised recoveries (excluding any equity/warrants given in a debt exchange) for mezzanine loans.

# 6.9. HY CDS spreads vs. liquidity-stress index and HY bonds rated B3 negative and lower in Europe

The liquidity stress index is calculated by Moody's Investor Services as the percentage of speculative grade companies with the weakest liquidity profile in EMEA. Speculative grade liquidity is categorised in one of four ways: SGL 1: Very good liquidity. Most likely to meet obligations over the coming 12 months through internal resources without relying on external sources of committed financing. SGL 2: Good liquidity. Likely to meet obligations during the coming 12 months through internal resources but may rely on external sources of committed financing. The issuer's ability to access committed financing is highly likely, based on Moody's evaluation of near term covenant compliance. SGL3: Adequate liquidity. Expected to rely on external sources of committed financing. Based on Moody's evaluation of near term covenant compliance there is only a modest cushion, and the issuer may require covenant relief in order to maintain orderly access to funding lines. SGL4: Weak liquidity. Relies on external sources of financing and the availability of that financing is, in Moody's opinion, highly uncertain.

The percentage of bonds rated B3 negative or lower is sourced from Moody's

### 6.10. European Defaults

Defaults reported by either Moody's or Standard and Poor's in the European bond markets and loan markets, when available.

### 7. Cash and Synthetic

### 7.1. Loans and Bonds, Cash and Synthetic

Data are sourced from Markit and Thomson Reuters LPC. High yield bond cash and synthetic spreads from Markit; European leveraged loan cash bid prices from Thomson Reuters LPC, and European leveraged loans synthetic prices from Markit.

# 7.2. European HY Bond Total Return

European HY bond total return data are sourced from the Bank of America-Merrill Lynch's Euro High Yield Index (HE00). The index tracks the performance of EUR-denominated below-investment-grade corporate debt publicly issued in the euro domestic or Eurobond markets. Qualifying securities must have a below-investment-grade rating and an investment-grade rated country of risk. Qualifying securities must have at least one year remaining term to maturity, fixed coupon schedule and minimum amount outstanding of €100 million. Original issue zero coupon bonds,

"global securities" (debt issued simultaneously in the Eurobond and euro domestic markets), 144a securities and pay-in-kind securities, including toggle notes, qualify for inclusion in the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Defaulted, warrant-bearing and euro legacy currency securities are excluded from the index.

# 7.3. European Leveraged Loan Total Return

Total return data are provided by S&P LCD and are total returns from S&P's ELLI index, both ELLI and EUR-denominated ELLI. Total returns for ELLI EUR-denominated data are unavailable for 2003 and 2004.

# 7.4. Asset Class Total Return (Cash Basis)

Total returns are sourced from respective index owners and Bank of America-Merrill Lynch's indices.

# **Annex**

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