

# European High Yield & Leveraged Loan Report

## European Leveraged Finance

Q1: 2017



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## Highlights and Market Environment

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### Highlights

#### Issuance Highlights

European leveraged finance issuance (leveraged loans and high yield bonds) increased in 1Q'17 to €86.5 billion, a 50.5% increase from €57.4 billion in 4Q'16 and almost double the €43.5 billion issued in 1Q'16. This was the highest quarterly issuance since 2Q'14. The quarterly increase stems from the surge in high yield bond issuance, which increased by 136.8% in the first quarter of 2017 while leveraged loan issuance increased by 19.9%. The high yield bond share of the leveraged finance market increased to 41.2%, up from 26.2% in 4Q'16 and from 24.3% in 1Q'16.

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*“European leveraged finance issuance (leveraged loans and high yield bonds) totaled €86.5 billion in 1Q'17 ”*

#### Market and Economic Environment

According to the April 2017 European Central Bank lending survey, in the first quarter of 2017, loan growth continued to be supported by eased lending conditions and increasing demand across all loan categories.

Credit standards eased for loans to enterprises, households and consumer credit mainly due to competitive pressure in the market. Banks' overall terms and conditions on new loans also eased across all loan categories in 1Q'17, driven largely by further narrowing of margins on average loans, while margins on riskier loans remained broadly unchanged.

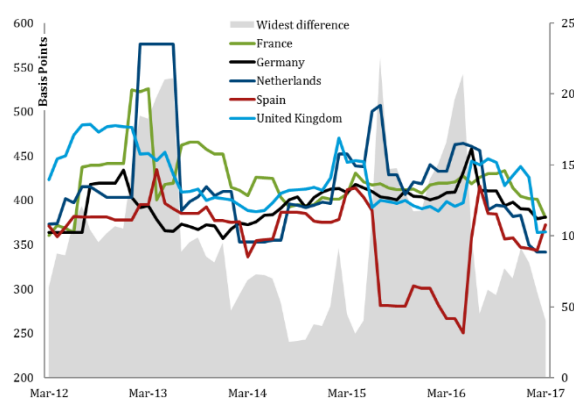
For loans to enterprises, credit standards eased slightly in net terms in the first quarter of 2017. Across firm sizes, credit standards eased for loans to both small and medium-sized enterprises (SMEs) and loans to large firms. Across the large euro area countries, credit standards on loans to enterprises eased in Germany and Italy, remained unchanged in France and the Netherlands, and tightened in Spain.

Looking ahead to the first quarter of 2017, euro banks expect a slight net tightening of credit standards on loans to enterprises, but expect unchanged credit standards for housing loans and consumer credit and for other household lending.

Net demand for loans to enterprises, housing loans, and consumer credit continued to increase in 1Q'17.

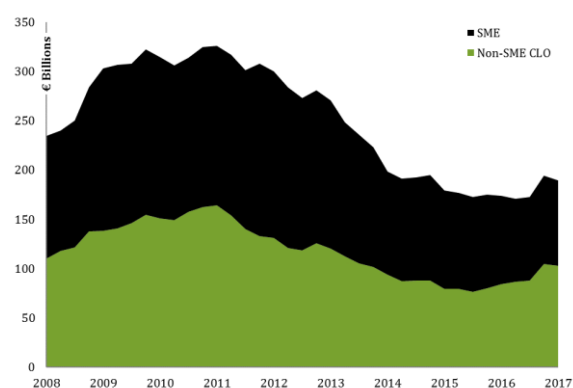
*“In 1Q’17, leveraged loan issuance increased to €50.8 billion on 70 deals”*

### Institutional Spreads



Source: Dealogic, AFME, SIFMA

### European CLO Outstanding



Source: AFME, SIFMA

## Issuance

### Issuance: Leveraged Loans

Leveraged loan issuance, including first lien, second lien, and mezzanine financing, increased to €50.8 billion in the first quarter of 2017, up 19.9% q-o-q (€42.4 billion in 4Q’16), up 54.2% y-o-y (€33.0 billion in 1Q’16). This was the highest quarterly total since the financial crisis.

In the first quarter of 2017, €16.3 billion of amend-and-extend (“A&E”) loans were financed, an increase from both €14.4 billion in 4Q’16 and from €0.6 billion in 1Q’16, and the highest quarterly A&E total since 1Q’12.

Most of the loans issued in 1Q’17 were 1<sup>st</sup> lien loans; there were no mezzanine loans and one 2<sup>nd</sup> lien loan financed. Pricing spreads for institutional loans tightened by 12 basis points (bps) q-o-q and by 13 bps y-o-y while spreads for pro rata loans widened by 27 bps q-o-q and by 12 bps y-o-y.

The top three sectors in leveraged loan issuance in 1Q’17 accounted for over 60% of the issuance volume; the leading sector was telecommunications (€16.4 billion), followed by healthcare (€8.6 billion), and chemicals (€7.3 billion), with the balance split between 13 other sectors.

The share of deals used to refinance and/or repay debt increased to 80.8% of all deals by euro amount in the first quarter of 2017, compared to 73.5% in 4Q’16 and 13.4% in 1Q’16. Refinancing and/or repayment of debt were the largest use of proceeds in 1Q’17 with €41.1 billion, followed by leveraged buyouts with €5.5 billion or 10.8% of total, and acquisitions with €3.6 billion or 7.1% of total.

European CLO outstandings, including SME deals, decreased by 2.6% to €189.5 billion in 1Q’17 from €194.5 billion. Non-SME CLOs decreased by 1.9% to €102.9 billion in 1Q’17 from €104.9 in 4Q’16, while SME CLOs decreased by 3.4% to €86.6 billion from €89.6 billion in 4Q’16.

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*“Primary high yield issuance totaled €81.3 billion on 159 deals in 2016”*

**Issuance: High Yield Bonds**

Primary high yield issuance in 1Q'17 totaled €35.7 billion on 76 deals, a 136.8% increase from 4Q'16 (€15.1 billion on 41 deals) and a 237.4% increase from 1Q'16 (€10.6 billion on 22 deals).

Primary high yield issuance in developed market Europe in the first quarter of 2017 was €27.5 billion on 61 deals, a 171.0% increase from €10.1 billion on 29 deals in 4Q'16 and a 198.5% increase from €9.2 billion on 20 deals in 1Q'16.

In emerging market Europe primary high yield issuance in 1Q'17 was €8.2 billion on 15 deals, an increase of 66.1% from €4.9 billion on 12 deals in 4Q'16 and an increase of 501.2% from €1.4 billion on 2 deals in 1Q'16.

In the first quarter of 2017, average deal size in developed market Europe increased by 28.8% to €450.7 million from €349.8 million in 4Q'16, but decreased by 2.1% from €460.5 million in 1Q'16. Average deal size in emerging market Europe increased by 32.9% to €543.7 million in 1Q'17 from €409.2 million in 4Q'16, but decreased by 19.8% y-o-y (€678.2 million in 1Q'16).

High yield issuance for refinancing and/or repayment of debt in developed market Europe decreased to €11.8 billion, representing 42.8% of all issuance in 1Q'17, up from €4.6 billion (45.4% of total) in 4Q'16 and from €1.3 billion (14.1% of total) in 1Q'16. In emerging market Europe, no high yield debt was issued for refinancing and/or repayment of debt in the first quarter of 2017, which was a decrease from €0.7 billion in 4Q'16 (13.3% of total) and unchanged from no deals issued for that purpose in 1Q'16.

Three sectors accounted for almost half of the total high yield issuance in developed market Europe in 1Q'17: the telecommunications industry led issuance with €6.0 billion (21.9% of total), followed by the finance industry with €3.7 billion (13.5% of total) and metal & steel industry with €3.4 billion (12.3% of total). In emerging market Europe the top three sectors accounted for almost three quarters of total high yield issuance: the oil & gas led the issuance with €2.6 billion (32.2% of total), followed by the finance industry with €2.3 billion (28.7% of total) and the metal & steel industry with €1.3 billion (15.5% of total).

The proportion of USD-denominated issuance increased to 41.3% of all issuance in 1Q'17, compared to 29.1% in 4Q'16 and 28.2% in 1Q'16. USD-denominated issuance in developed market Europe increased to €8.3 billion, or 30.3% of issuance, up from €1.3 billion or 12.6% in 4Q'16 and €2.1 billion (22.6%) in 1Q'16. Of high yield bonds issued in emerging market Europe, €6.4 billion or 78.1% was denominated in USD, up from €3.1 billion (63.0% of total) in 4Q'16 and €0.9 billion (66.4% of total) in 1Q'16.

### Returns & Credit Quality

All asset classes analysed recorded positive returns in the first quarter of 2017. MCSI Emerging Market Index led returns with 11.1%, followed by U.S. High Yield Distressed Index (9.1%) and S&P 500 (5.5%). The worst performing asset classes in 1Q'17 were EMU Covered Bonds (0.1%), EMU ABS/MBS (0.1%) and U.S. 30 Year Mortgages (0.4%).

As of March 2017, S&P reported the trailing 12-month speculative-grade default rate at 2.1%, up from 1.7% end-December 2016 and from 1.4% end-March 2016. Moody's reported the trailing 12-month speculative-grade default rate in March 2017 to be 2.5% (up from 2.1% end-December 2016 but down from 2.7% end-March 2016).

Seven bond-related defaults were reported in the first quarter of 2017, six in developed market Europe and one in emerging market Europe.

According to Standard and Poor's, in 1Q'17 upgrades exceeded downgrades in developed market Europe (37 upgrades to 16 downgrades), a much better ratio than 26 upgrades to 33 downgrades in 4Q'16 and 20 upgrades to 40 downgrades in 1Q'16. It was the lowest downgrade percentage of a total since 2Q'14. In emerging market Europe, there were only 4 rating actions by S&P in 1Q'17, all downgrades, compared to 6 upgrades to 7 downgrades in 4Q'16 and no upgrades and 10 downgrades in 1Q'16. Three sectors accounted for over half of the rating actions in 1Q'16: bank (total of 14 upgrades and 3 downgrades) followed by consumer products (1 upgrade and 7 downgrades) and chemicals, packaging and environmental services (4 upgrades and 1 downgrade).

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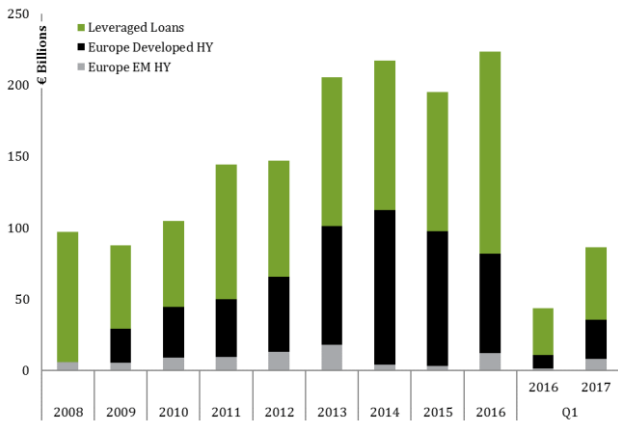
*“MCSI Emerging Market Index led returns in 1Q'17 with total return of 11.1%”*

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*“7 European high yield bond issuers defaulted in 1Q'17”*

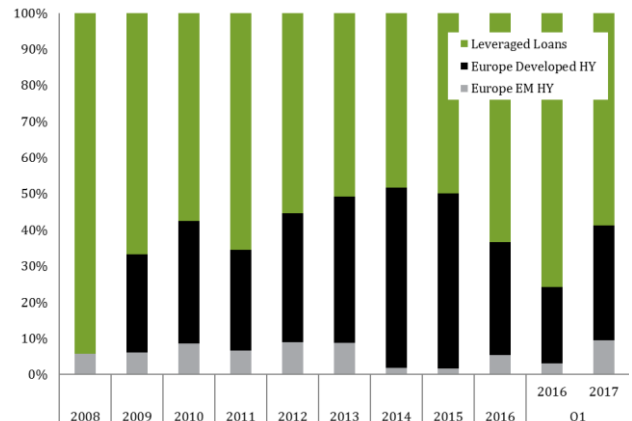
# 1 Leveraged Finance Overview

## 1.1 European Leveraged Issuance by Type



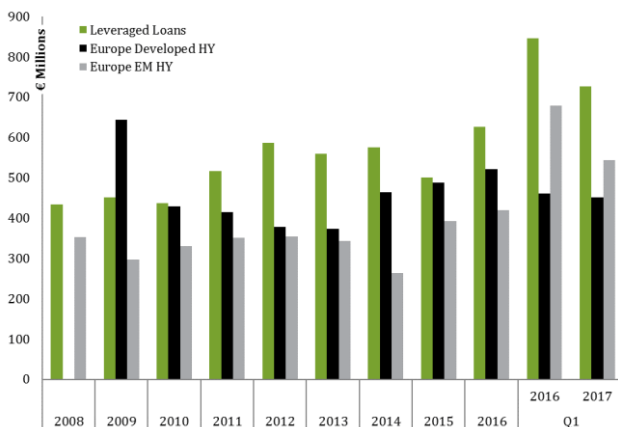
Source: Dealogic, Thomson Reuters LPC

## 1.2 European Leveraged Issuance Percentage



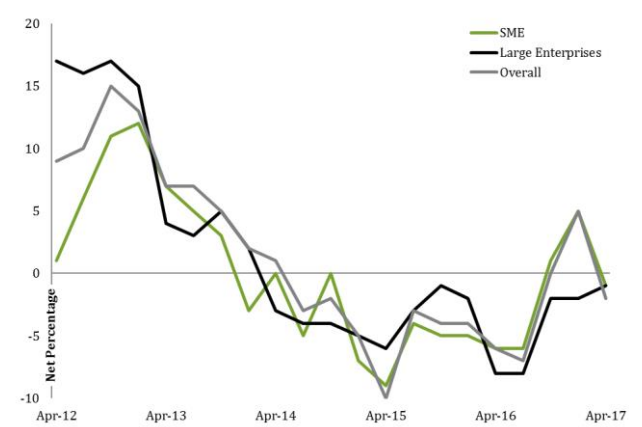
Source: Dealogic, Thomson Reuters LPC

## 1.3 European Leveraged Average Deal Size



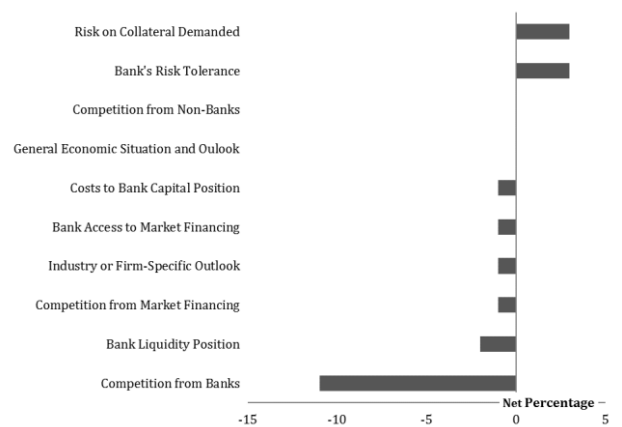
Source: Dealogic, Thomson Reuters LPC

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



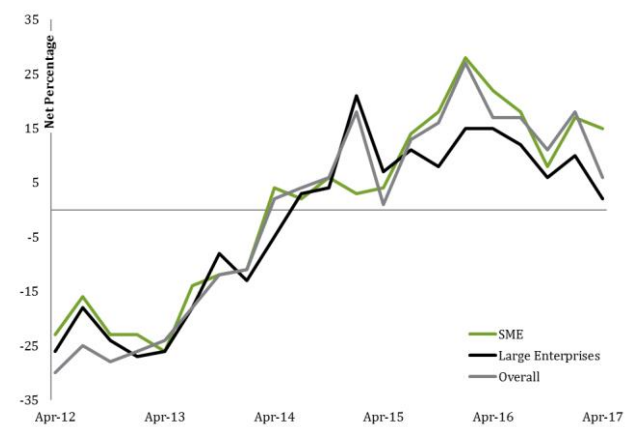
Source: European Central Bank

## 1.5 Factors Affecting Bank Credit Standards: January 2017<sup>2</sup>



Source: European Central Bank

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



Source: European Central Bank

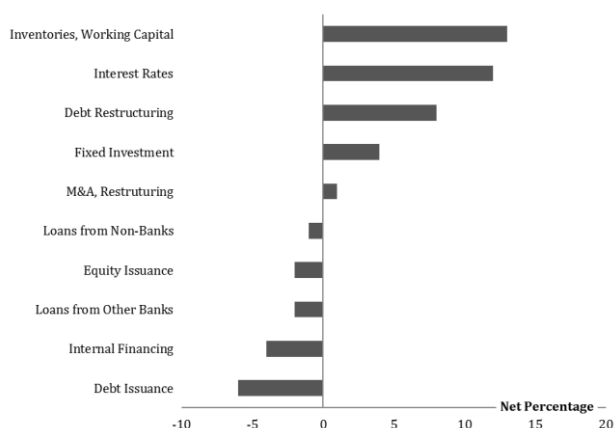
<sup>1</sup> A positive net percentage number signifies tightening bank credit; a negative net percentage number signifies easing credit.

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



1.7 Factors Affecting Loan Demand: January 2017<sup>4</sup>



Source: European Central Bank

1.8 Global Comparison – High Yield Issuance

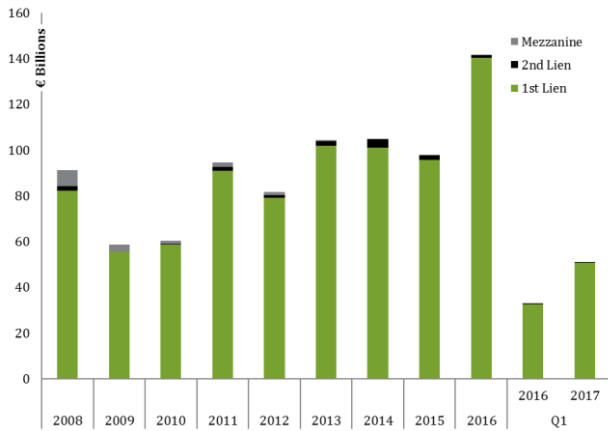
€ Billions	2017	2016					2015					Prior Years		
	Q1	Q1	Q2	Q3	Q4	Full Year	Q1	Q2	Q3	Q4	Full Year	2014	2013	2012
<b>United States</b>	61.4	33.71	54.22	49.38	37.44	174.8	60.86	70.59	29.70	31.17	192.3	185.2	196.8	214.8
<b>Asia Pacific</b>	27.0	25.94	17.25	21.91	16.47	81.6	9.91	10.51	13.50	6.98	40.9	36.0	42.7	32.2
<b>Europe</b>	39.8	12.95	39.20	28.42	18.77	99.3	41.83	35.94	18.27	20.82	116.9	125.3	122.5	80.5

Source: Dealogic

<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.

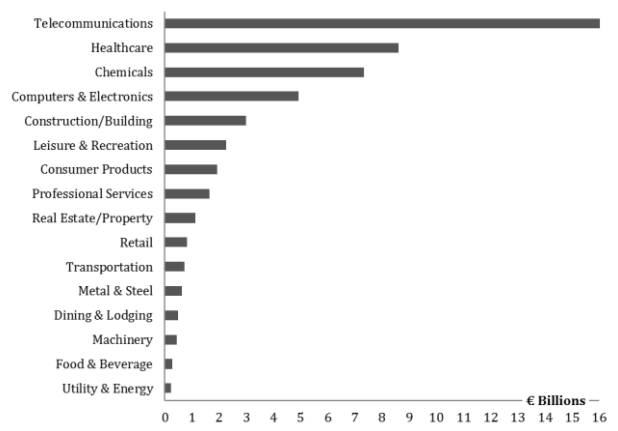
## 2 Issuance – Leveraged Loans

2.1 European Leveraged Loan Issuance By Type



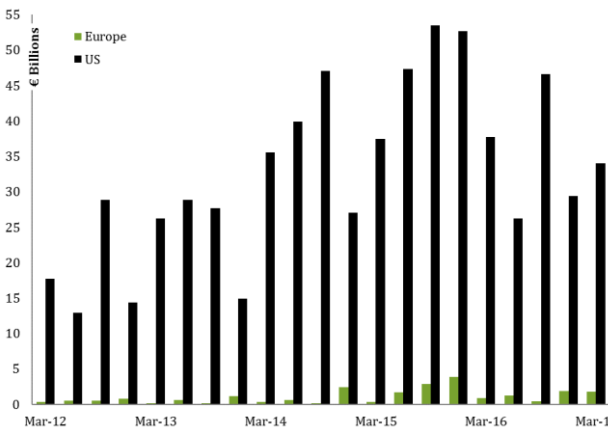
Source: Dealogic, Thomson Reuters LPC

2.2 European Leveraged Loan Issuance by Industry



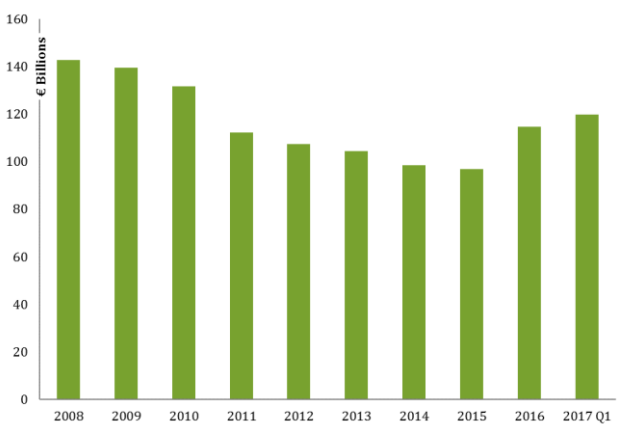
Source: Dealogic

2.3 Forward Pipeline of Leveraged Loan Market



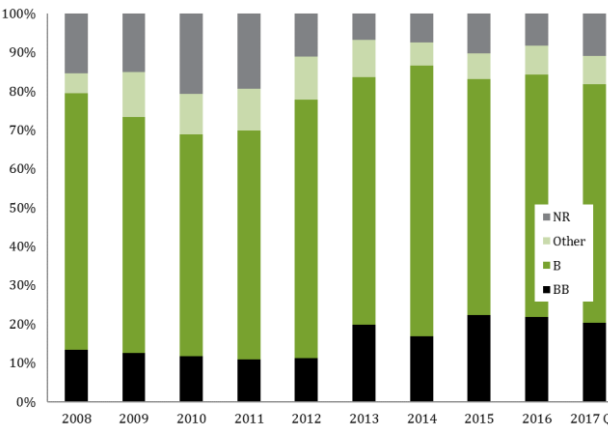
Source: Standard & Poor's LCD

2.4 ELLI Total Institutional Loans Outstanding



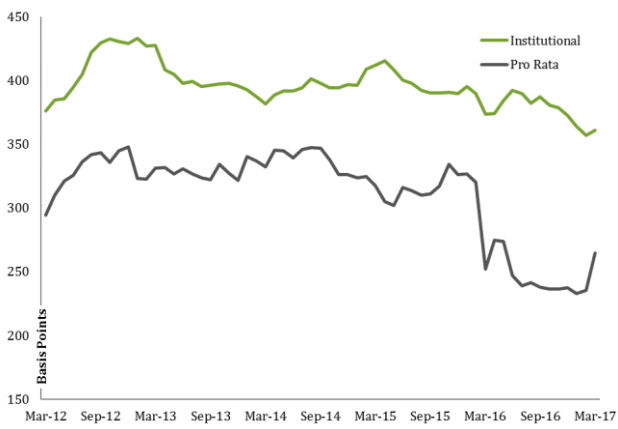
Source: Standard & Poor's LCD

2.5 ELLI Ratings Diversification



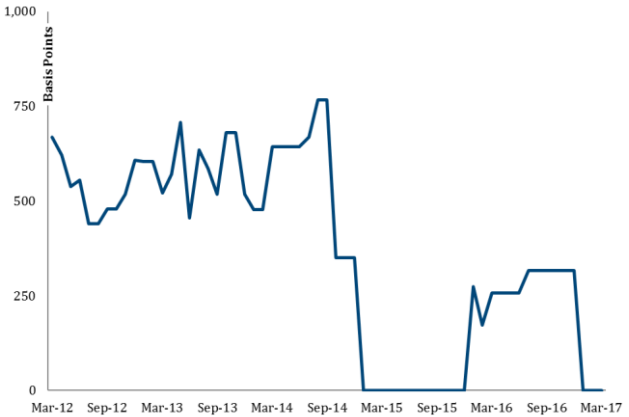
Source: Standard & Poor's LCD

2.6 Institutional and Pro Rata Spreads



Source: Thomson Reuters LPC/SMI

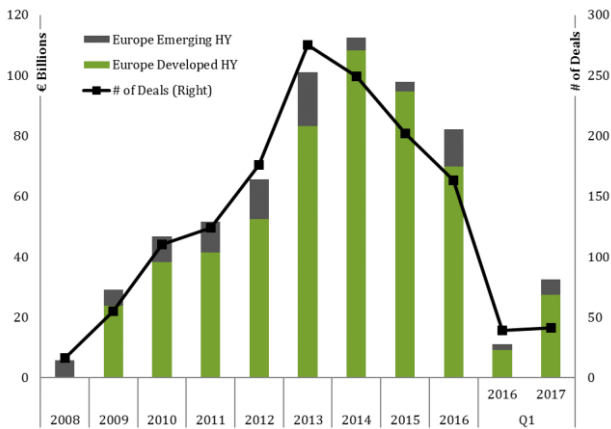
2.7 Mezzanine Spreads



Source: Dealogic, AFME, SIFMA

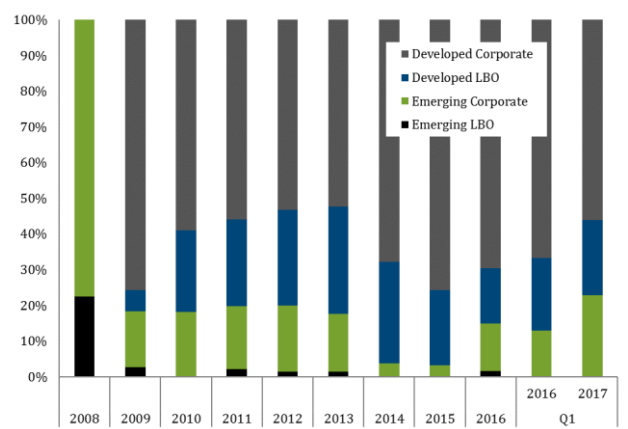
### 3 Issuance – High Yield Bonds Overview

#### 3.1 European High Yield Issuance



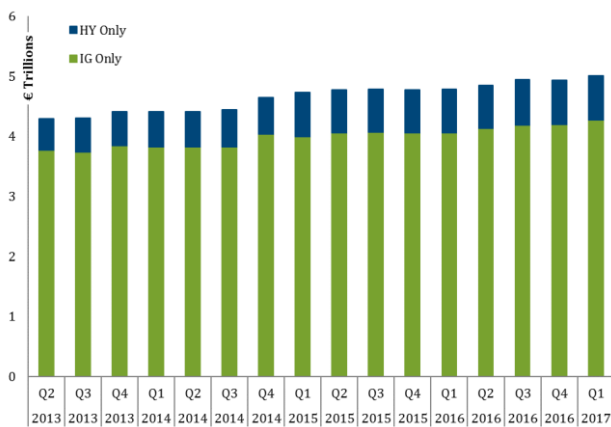
Source: Dealogic, Thomson Reuters LPC

#### 3.2 European High Yield Issuance by Sponsor



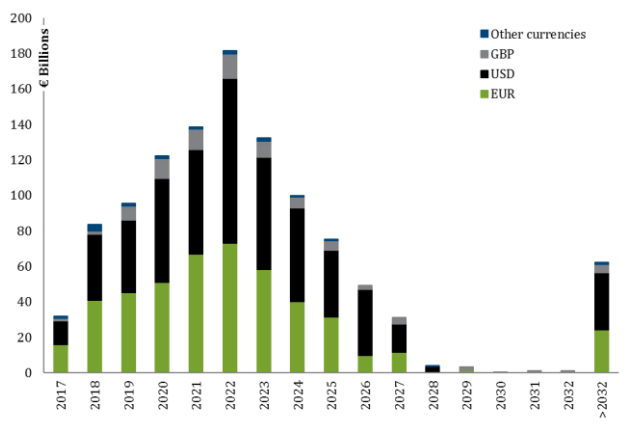
Source: Dealogic, Thomson Reuters LPC

#### 3.3 European Corporate Bonds Outstanding



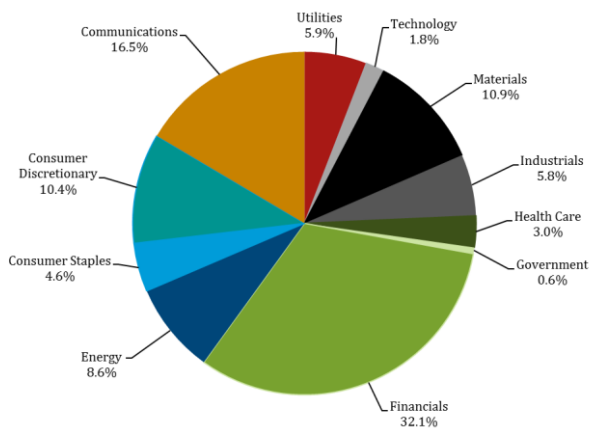
Source: Bloomberg, Dealogic, Thomson Reuters LPC

#### 3.4 European Corporate Bonds HY Maturity Wall: March 2017 (EU Only)



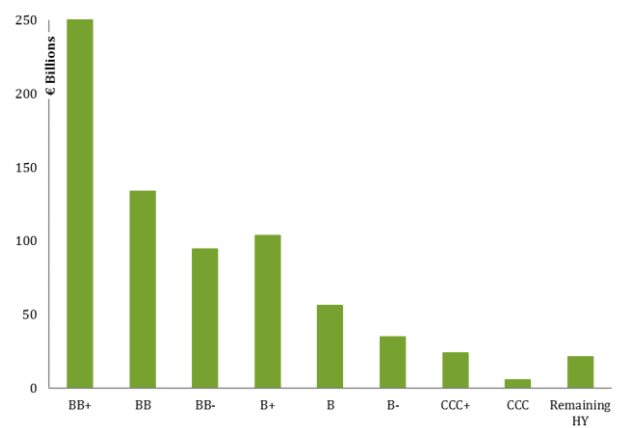
Source: Thomson Reuters LPC

#### 3.5 European Corporate HY Bonds Outstanding By Sector: 1Q 2017



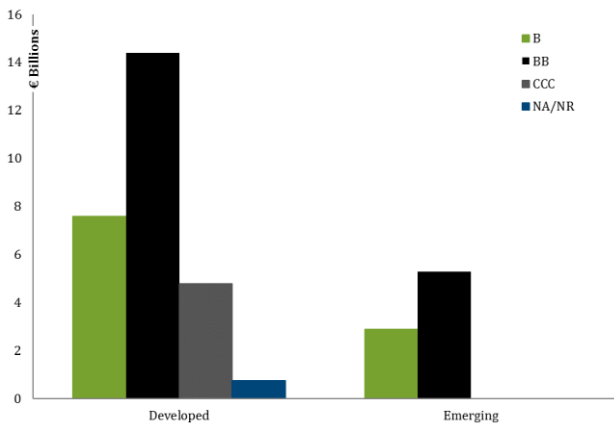
Source: Bloomberg, AFME, SIFMA

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



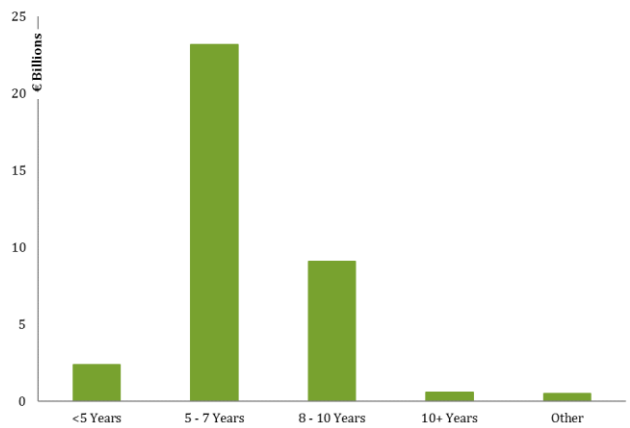
Source: Bloomberg, AFME, SIFMA

3.7 European Corporate Bond Issuance by Rating: 1Q 2017



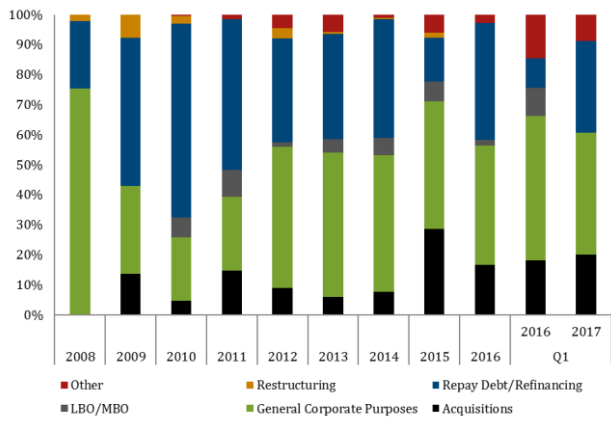
Source: Bloomberg, AFME, SIFMA

3.8 European Corporate Bond Issuance by Tenor: 1Q 2017



Source: Bloomberg, AFME, SIFMA

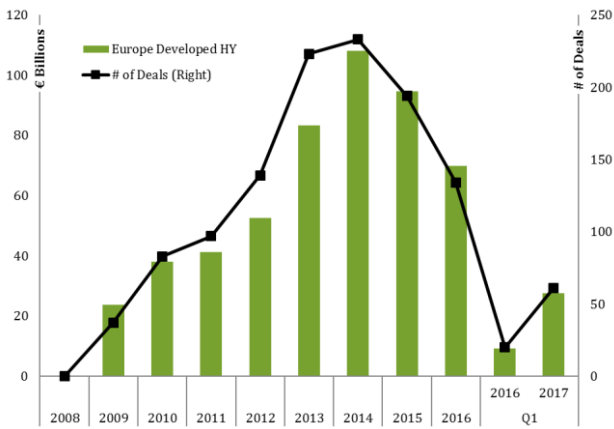
3.9 European HY Use of Proceeds



Source: Bloomberg, AFME, SIFMA

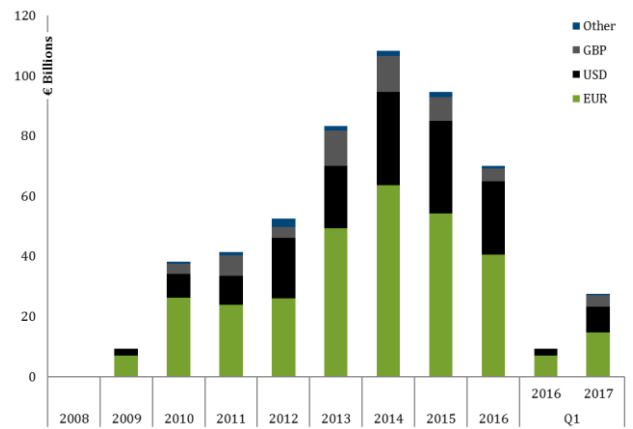
# 4 Issuance – European Developed Market High Yield Bonds

## 4.1 European Developed Market HY Bond Issuance



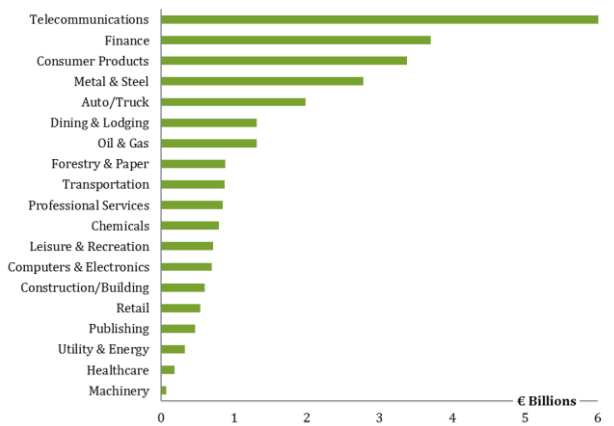
Source: Dealogic

## 4.2 European Developed Market HY Issuance by Currency



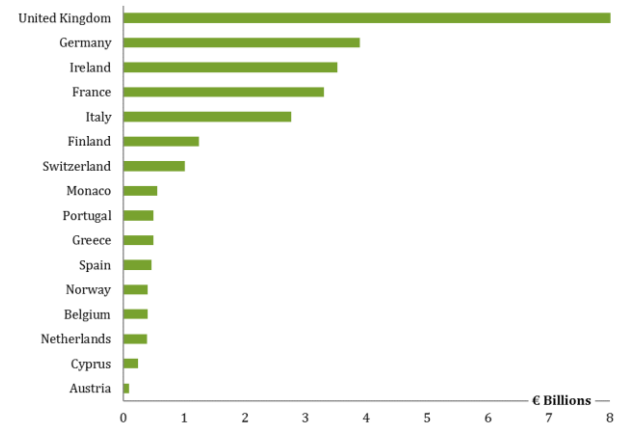
Source: Dealogic

## 4.3 European Developed Market HY Issuance by Industry: 1Q 2017



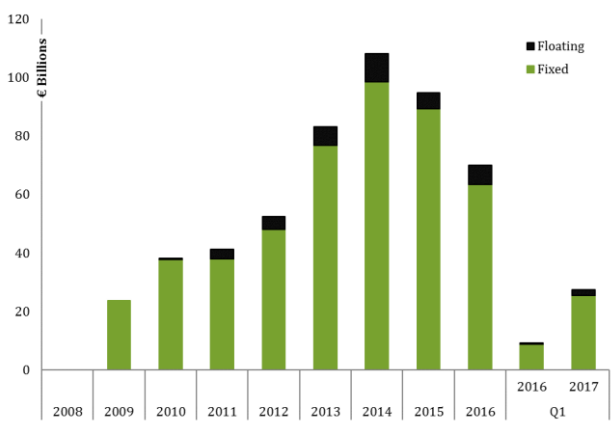
Source: Dealogic

## 4.4 European Developed Market HY Issuance by Country of Risk: 1Q 2017



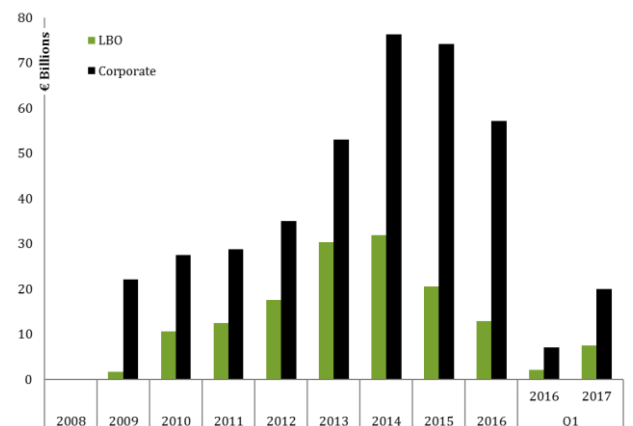
Source: Dealogic

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



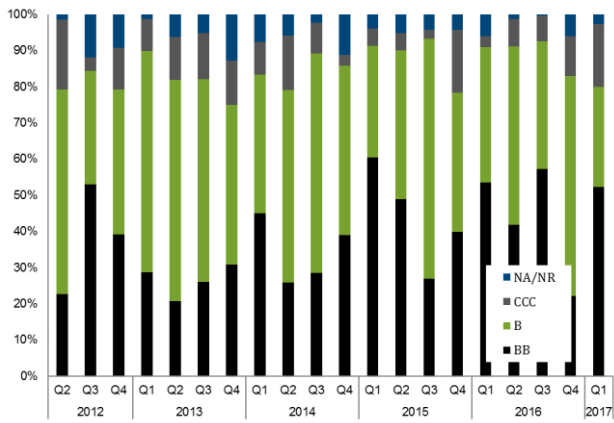
Source: Dealogic

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



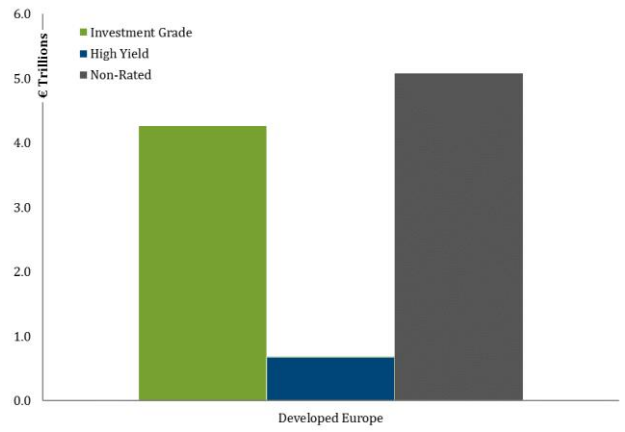
Source: Dealogic

4.7 European Developed Market HY Rating Distribution at Issuance



Source: Dealogic, AFME, SIFMA

4.8 European Developed Market Corporate Bonds Outstanding: March 2017



Source: Dealogic, AFME, SIFMA

4.9 European Developed Market HY Bond Issuance

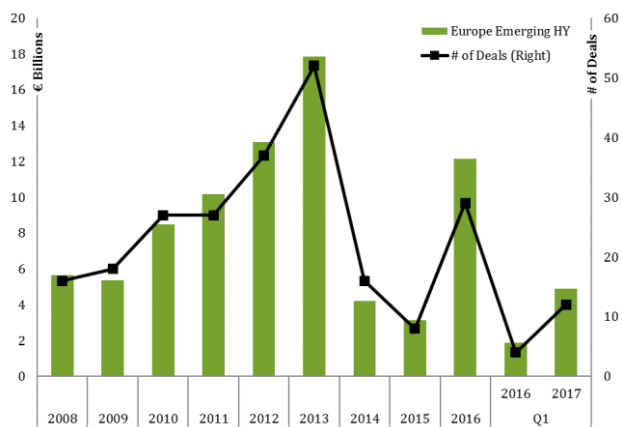
Issuer	Industry Group	Date	Currency	Amount (Millions)	Coupon	Moody's	S&P	Fitch
Telecom Italia SpA	Telecommunications	12/01/2017	EUR	1,000	2.50	Ba1	BB+	BBB-
TalkTalk Telecom Group plc	Telecommunications	12/01/2017	GBP	400	5.38	NA	BB-	BB-
Jaguar Land Rover Automotive plc	Auto/Truck	12/01/2017	EUR	650	2.20	Ba1	BB+	NA
Bank of Cyprus Public Co Ltd	Finance	12/01/2017	EUR	250	9.25	Caa3	NA	NA
Silversea Cruise Finance Ltd	Leisure & Recreation	13/01/2017	USD	550	7.25	B2	BB-	NA
Amigo Luxembourg SA	Finance	13/01/2017	GBP	275	7.63	B1	B+	NA
Smurfit Kappa Acquisitions	Forestry & Paper	17/01/2017	EUR	500	2.38	Ba1	BB+	BB+
Virgin Media Secured Finance plc	Telecommunications	18/01/2017	GBP	675	5.00	Ba3	BB-	BB+
Hapag-Lloyd AG	Transportation	18/01/2017	EUR	250	6.75	Caa1	B-	NA
Jaguar Land Rover Automotive plc	Auto/Truck	19/01/2017	GBP	300	2.75	Ba1	BB+	NA
Ardagh Packaging Finance plc	Consumer Products	19/01/2017	USD	1,000	6.00	B3	CCC+	NA
Nemean Bondco plc	Finance	20/01/2017	GBP	275	7.38	B1	NA	NA
			GBP	150	3M LIBOR +650	B1	NA	NA
Alpha 3 BV	Chemicals	25/01/2017	USD	425	6.25	Caa1	CCC+	NR
B&M European Value Retail SA	Retail	26/01/2017	GBP	250	4.13	Ba3	BB-	NA
DDM Debt AB	Finance	30/01/2017	EUR	50	9.50	NA	NA	NA
Mercer International Inc	Forestry & Paper	31/01/2017	USD	225	6.50	B1	BB-	NA
Navigator Holdings Ltd	Transportation	01/02/2017	USD	100	7.75	NA	NA	NA
Golar LNG Partners LP	Transportation	01/02/2017	USD	250	3M LIBOR +625	NA	NA	NA
Constellium NV	Metal & Steel	02/02/2017	USD	650	6.63	Caa1	CCC+	NA
Marcolin SpA	Retail	03/02/2017	EUR	250	3M EURIBOR +412.5	B2	B	NA
IHS Markit Ltd	Publishing	06/02/2017	USD	500	4.75	Ba1	BB+	BBB
Hapag-Lloyd AG	Transportation	07/02/2017	EUR	200	6.75	Caa1	B-	NA
ContourGlobal Power Holdings SA	Utility & Energy	08/02/2017	EUR	100	5.13	NA	BB	BB-
Verallia SA	Consumer Products	09/02/2017	EUR	350	8.25	NA	CCC+	NA
Mercury Bondco plc	Finance	09/02/2017	EUR	600	7.13	B3	B	NA
Ferroglobe plc	Metal & Steel	09/02/2017	USD	350	9.38	B3	NA	B+
Gategroup Finance (Luxembourg) SA	Dining & Lodging	13/02/2017	CHF	350	3.00	NA	NA	NA
Enesco plc	Oil & Gas	13/02/2017	USD	332	8.00	NA	BB	NA
Jerrold FinCo plc	Finance	15/02/2017	GBP	200	6.13	NA	B+	BB-
Ardagh Packaging Finance plc	Consumer Products	24/02/2017	EUR	750	2.75	Ba3	BB-	NA
			USD	715	4.25	Ba3	BB-	NA
			USD	700	6.00	B3	NA	NA
ThyssenKrupp AG	Metal & Steel	27/02/2017	EUR	1,250	1.38	Ba2	BB	BB+
Rexel SA	Computers & Electronics	27/02/2017	EUR	300	2.63	Ba3	BB-	BB
Naviera Armas SA	Transportation	27/02/2017	EUR	50	3M EURIBOR +650	B1	BB-	NA
HTA Group Ltd (Mauritius)	Finance	01/03/2017	USD	600	9.13	B2	B	NA
Stonegate Pub Co Financing plc	Dining & Lodging	02/03/2017	GBP	190	3M EURIBOR +437.5	B2	B	NA
			GBP	405	4.88	B2	B	NA
Nyrstar Netherlands (Holdings) BV	Metal & Steel	03/03/2017	EUR	400	6.88	B3	B-	NA
Nokia Oyj	Telecommunications	06/03/2017	EUR	750	2.00	Ba1	BB+	BB
			EUR	500	1.00	Ba1	BB+	BB
N&W Global Vending SpA	Machinery	06/03/2017	EUR	70	7.00	B2	B	NA
Liberbank SA	Finance	07/03/2017	EUR	300	6.88	NA	NA	BB-
Matterhorn Telecom Holding SA	Telecommunications	09/03/2017	EUR	117	4.88	Caa1	CCC+	NA
			EUR	525	3M EURIBOR +325	B2	B	NA
T-Mobile USA Inc	Telecommunications	13/03/2017	USD	500	5.38	Ba3	BB	NA
			USD	500	5.13	Ba3	BB	NA
			USD	500	4.00	Ba3	BB	NA
Progroup AG	Forestry & Paper	13/03/2017	EUR	150	3M EURIBOR +250	Ba2	NA	NA
Play Topco SA	Telecommunications	13/03/2017	EUR	500	5.38	Caa1	B-	B-
Merlin Entertainments plc	Leisure & Recreation	13/03/2017	EUR	200	2.75	Ba2	BB	NA
Moto Finance plc	Dining & Lodging	14/03/2017	GBP	150	4.50	NA	NA	B+
SPIE SA	Construction/Building	15/03/2017	EUR	600	3.13	Ba3	BB	NA
Paprec France SAS	Utility & Energy	16/03/2017	EUR	225	5.20	B1	NA	NA
Mercer International Inc	Forestry & Paper	16/03/2017	USD	25	6.50	B1	NA	NA
NewCo Sab Midco SAS	Healthcare	21/03/2017	EUR	180	5.38	Caa1	B-	NA
KCA Deutag UK Finance plc	Oil & Gas	21/03/2017	USD	535	9.88	Caa1	CCC+	CCC+
Arrow Global Finance plc	Finance	21/03/2017	EUR	400	3M EURIBOR +287.5	Ba3	BB	NA
Caixa Geral de Depositos SA - CGD	Finance	23/03/2017	EUR	500	10.75	Caa2	NA	B-
NH Hotel Group SA	Dining & Lodging	24/03/2017	EUR	115	3.75	Ba3	NA	NA
HP Pelzer Holding GmbH	Auto/Truck	24/03/2017	EUR	350	4.13	B1	B+	NA
Scorpio Tankers Inc	Transportation	28/03/2017	USD	50	8.25	NA	NA	NA
Saipem Finance International BV	Oil & Gas	29/03/2017	EUR	500	2.75	Ba1	BB+	NA
Nexans SA	Metal & Steel	29/03/2017	EUR	200	2.75	NA	BB	NA
Loxam SAS	Professional Services	29/03/2017	EUR	300	4.25	NA	BB-	NA
			EUR	300	3.50	NA	BB-	NA
			EUR	250	6.00	NA	B	NA
Nassa Topco AS	Computers & Electronics	30/03/2017	EUR	400	2.88	Ba2	BB+	NA
K+S AG	Chemicals	30/03/2017	EUR	400	2.63	NA	BB+	NA
Aston Martin Capital Holdings Ltd	Auto/Truck	31/03/2017	USD	400	6.50	B3	B-	NA
			GBP	230	5.75	B3	B-	NA

Source: Bloomberg, Dealogic



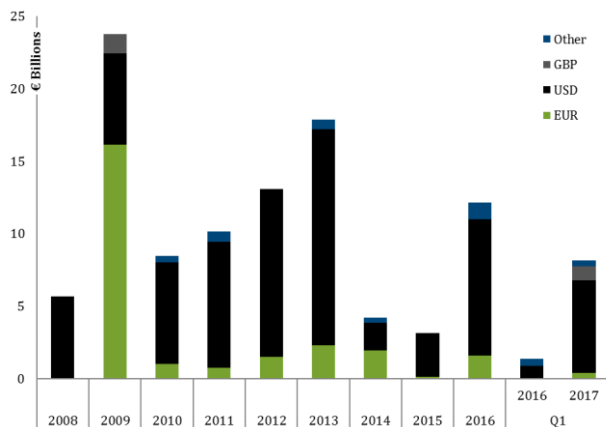
# 5 Issuance – European Emerging Market High Yield Bonds

5.1 European Emerging Market HY Bond Issuance



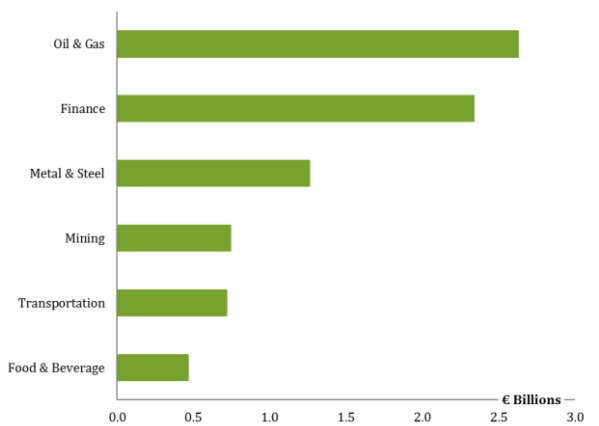
Source: Dealogic

5.2 European Emerging Market HY Bond Issuance by Currency



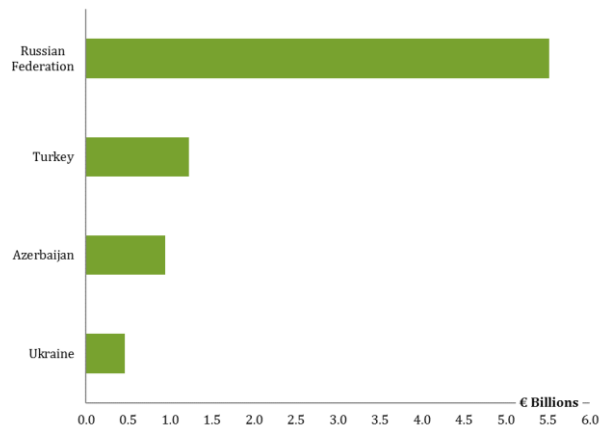
Source: Dealogic

5.3 European Emerging Market HY Issuance by Industry: 1Q 2017



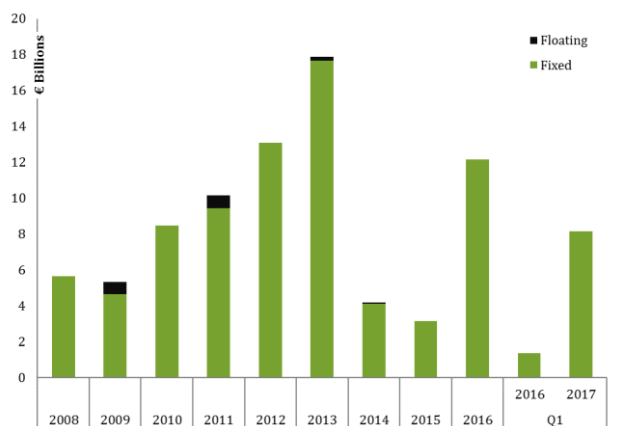
Source: Dealogic

5.4 European Emerging Market HY Issuance by Country of Risk: 1Q 2017



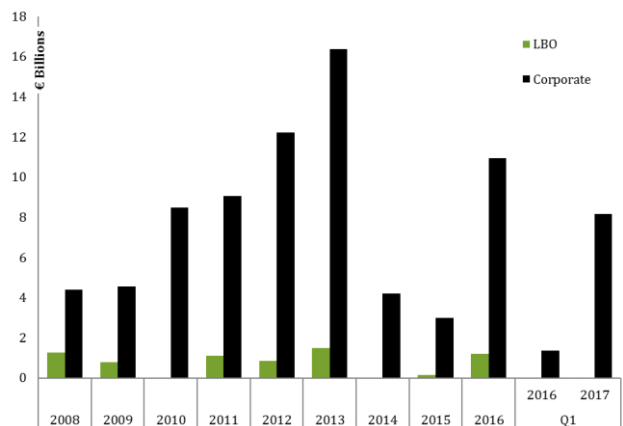
Source: Dealogic

5.5 European Emerging Market HY Issuance, Fixed vs. Floating



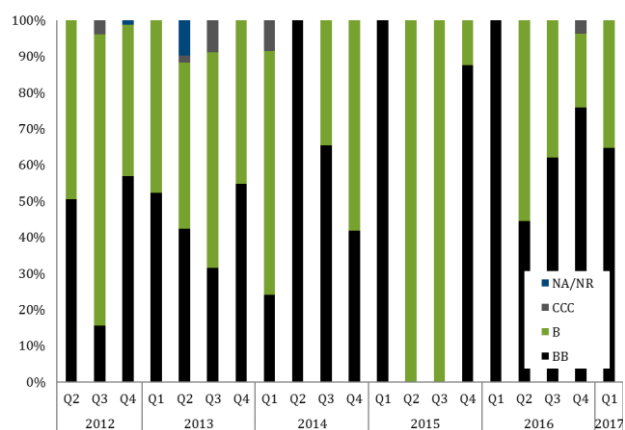
Source: Dealogic

5.6 European Emerging Market HY Issuance, Sponsored vs. Corporate



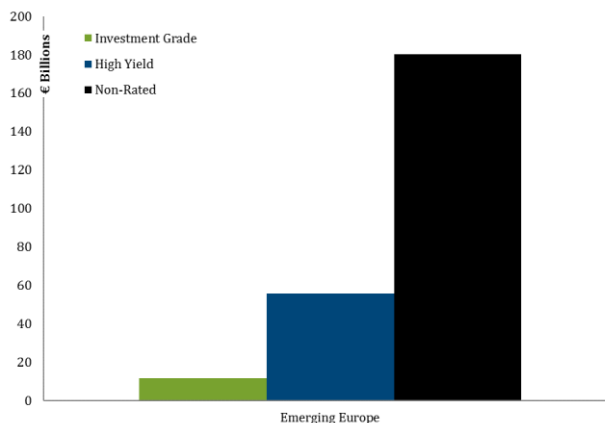
Source: Dealogic

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



Source: Dealogic, AFME, SIFMA

### 5.8 European Emerging Market Corporate Bonds Outstanding: December 2016



Source: Bloomberg, AFME, SIFMA

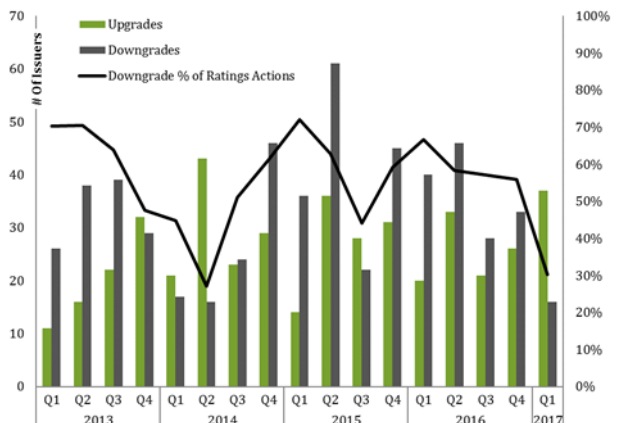
### 5.9 European Emerging Market HY Bond Issuance

Issuer	Industry Group	Date	Currency	Amount (Millions)	Coupon	Moody's	S&P	Fitch
Kernel Holding SA	Food & Beverage	25/01/2017	USD	500	8.750	NA	B	B+
Rusal Capital DAC	Metal & Steel	27/01/2017	USD	600	5.125	B1	NA	B+
Polyus Gold International Ltd	Mining	01/02/2017	USD	800	5.250	Ba1	BB-	BB-
Alfa Bank OAO	Finance	10/02/2017	RUB	10,000	9.250	Ba2	NA	BB+
Russian Railways OAO	Transportation	23/02/2017	USD	500	4.375	Ba1	NA	BBB-
			RUB	15,000	8.990	Ba1	NA	BBB-
Akbank TAS	Finance	08/03/2017	USD	500	7.200	B1	NA	BB
Turkiye Garanti Bankasi AS	Finance	09/03/2017	USD	500	5.875	Ba1	NA	BBB-
Southern Gas Corridor CJSC	Oil & Gas	09/03/2017	USD	1,000	6.875	Ba1	NA	BB+
Evrax Group SA	Metal & Steel	13/03/2017	USD	750	5.375	B1	B+	BB-
Gazprom OAO	Oil & Gas	17/03/2017	USD	750	4.950	Ba1	BB+	BBB-
Turkiye Sinai Kalkinma Bankasi AS - TSKB	Finance	21/03/2017	USD	300	7.625	B1	NA	BB-
ABH Financial Ltd	Finance	23/03/2017	EUR	400	2.626	NA	B+	BB
Gazprom OAO	Oil & Gas	29/03/2017	GBP	850	4.250	Ba1	NA	BBB-
Credit Bank of Moscow OAO - MKB	Finance	29/03/2017	USD	600	7.500	NA	NA	BB-

Source: Bloomberg, Dealogic

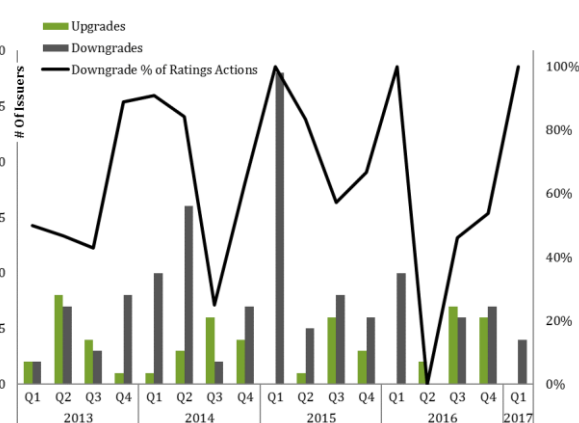
# 6 Credit Quality

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



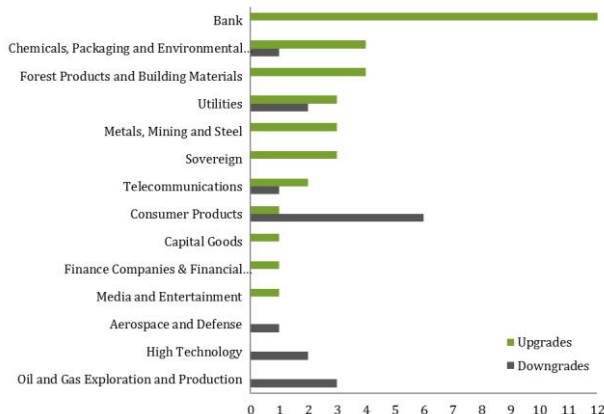
Source: Standard and Poor's

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



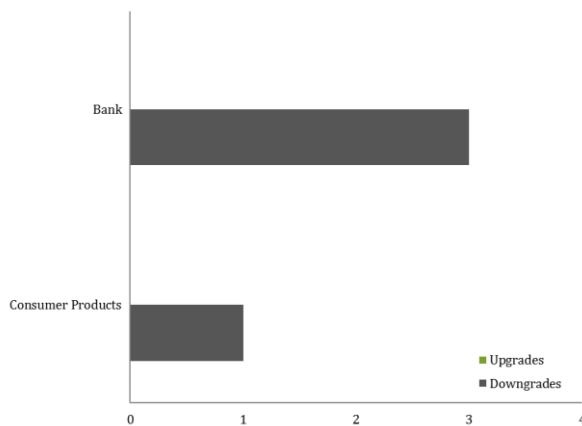
Source: Standard & Poor's

## 6.3 Developed European Industry Rating Actions by Number of Ratings: 1Q 2017



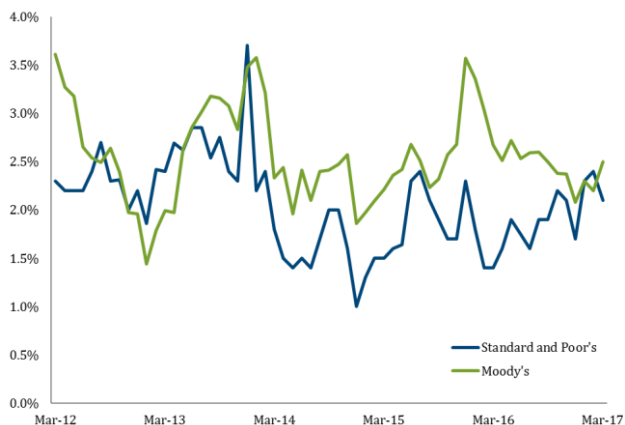
Source: Standard & Poor's

## 6.4 Emerging European Industry Rating Actions by Number of Ratings: 1Q 2017



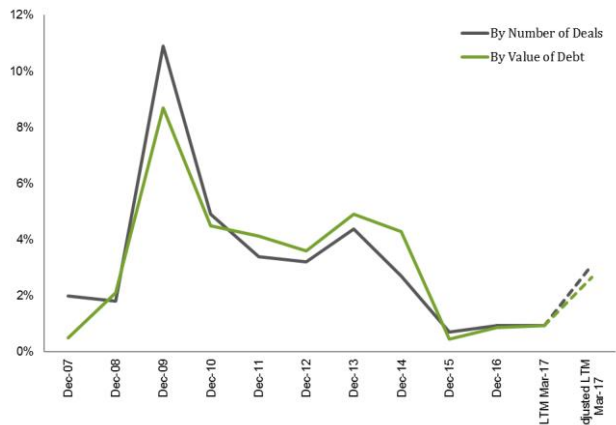
Source: Standard & Poor's

## 6.5 European High Yield Default Rates



Source: Standard & Poor's and Moody's

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



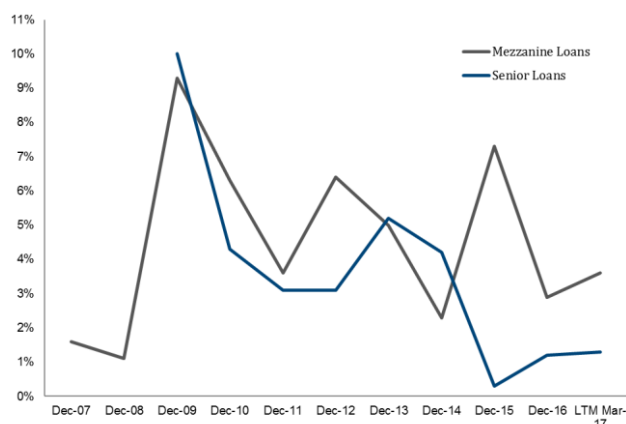
Source: Fitch Leveraged Credit Database

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

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

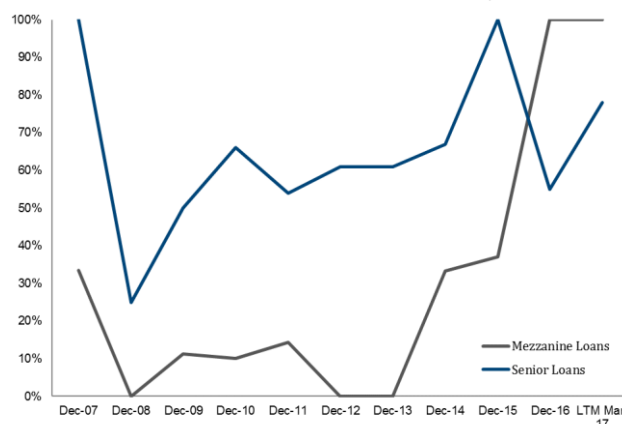
<sup>7</sup> Includes c\* and cc\* rated issuers as if those had already defaulted

### 6.7 Mezzanine and Senior Loan Default Rate



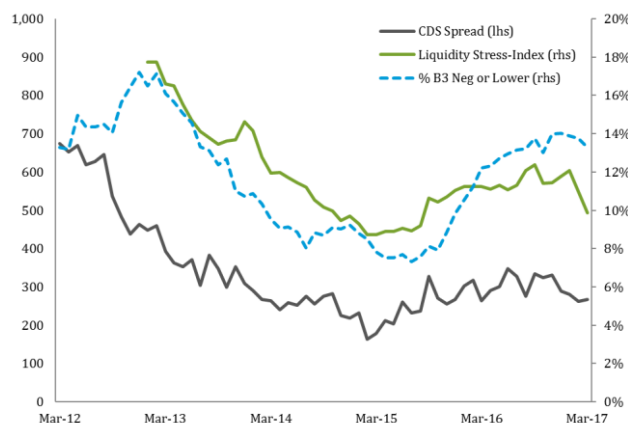
Source: Fitch Leveraged Credit Database

### 6.8 Mezzanine and Senior Loan Recovery Rates



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

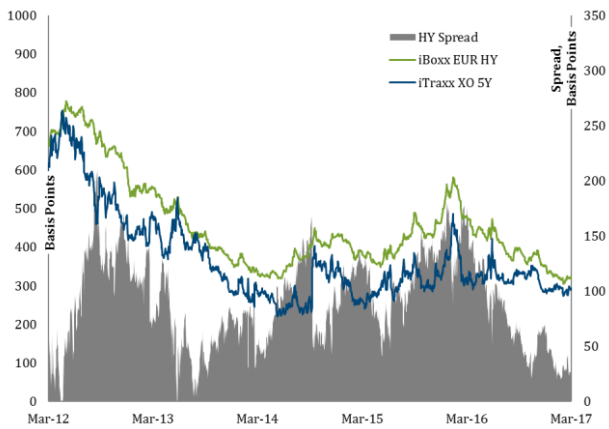
### 6.10 European Defaults

Issuer	Industry Group	Country	Date	Reported By	Reason
Avanti Communications Group PLC	Telecommunications	U.K.	January 2017	S&P	Distressed exchange
Toisa Ltd.	Oil and gas	U.K.	January 2017	S&P	Chapter 11
Delta Bank JSC	Bank	Kazakhstan	February 2017	S&P	Missed principal payment
Drill Rigs Holdings Inc.	Energy	Norway	March 2017	Moody's	Bankruptcy
Drillships Financing Holding Inc.	Energy	Norway	March 2017	Moody's	Bankruptcy
Drillships Ocean Ventures Inc.	Energy	Norway	March 2017	Moody's	Bankruptcy
Ocean Rig UDW Inc.	Energy	Norway	March 2017	Moody's	Bankruptcy

Source: Standard & Poor's, Moody's

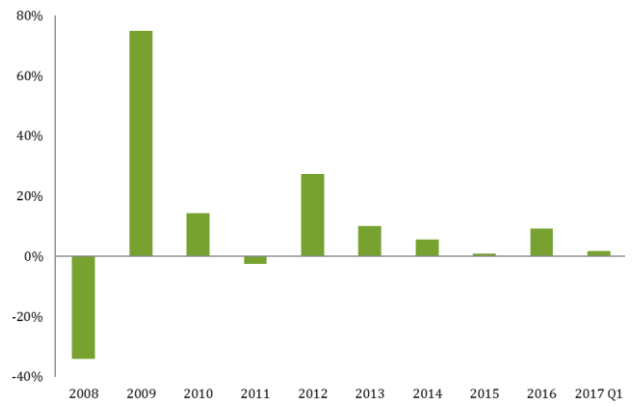
# 7 Relative Value and Total Return

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



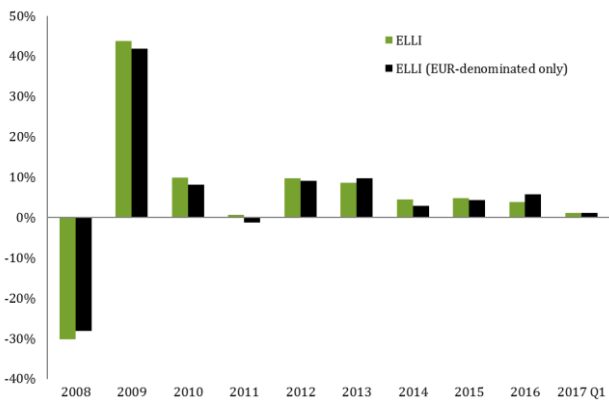
Source: Thomson Reuters Eikon, Markit

## 7.2 European HY Bond Total Return



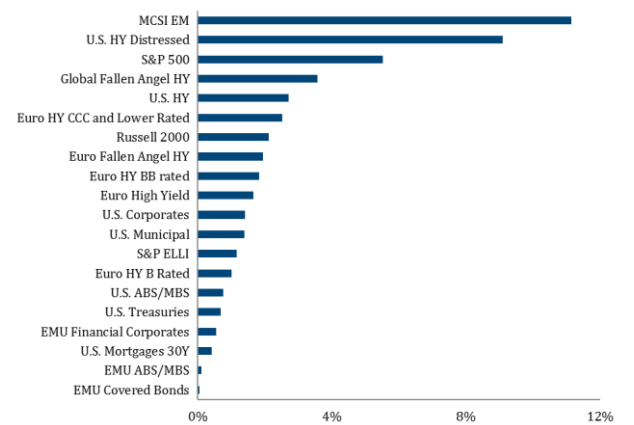
Source: BAML

## 7.3 European Leveraged Loan Total Return



Source: Standard & Poor's LCD

## 7.4 Asset Class Total Return, 1Q 2017



Source: BAML, Bloomberg

## Summary of the Methodologies Adopted for this Report

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### 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 (T1a).

### 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 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.

For chart 3,3., 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.

For chart 3.4., the data is sourced from Reuters Eikon and includes high-yield bonds issued by financial and non-financial corporates incorporated in EU countries.

### 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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