

# High Yield Interest

European Edition, October 2018

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## MARKET SNAPSHOT

Exhibit 1  
**Strong loan issuance in September 2018**  
High-yield bond & leveraged loan volumes

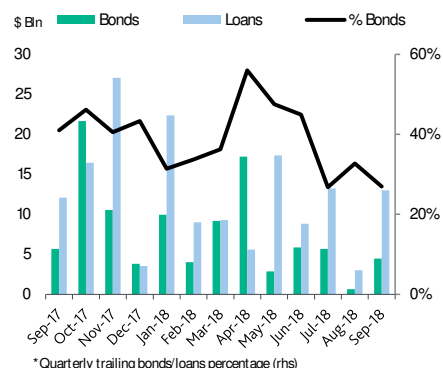
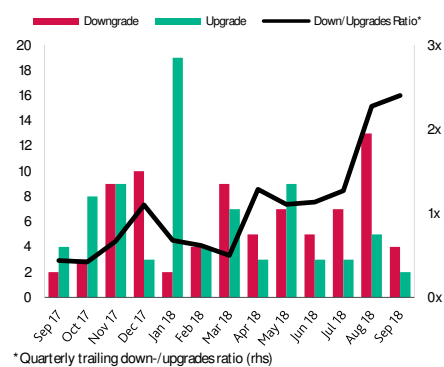


Exhibit 2  
**More downgrades than upgrades in September 2018**  
Spec-grade downgrade/upgrade trends



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# Loans continue to dominate high yield issuance in September

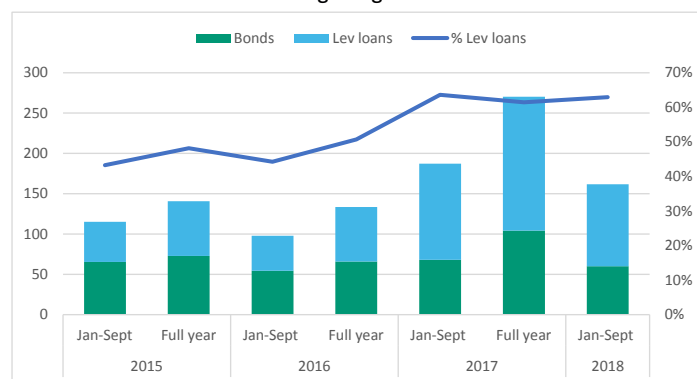
## Leveraged loans higher than bond issuance in nine of the last 12 months

Leveraged loans continue to dominate issuance in September, reaching \$13 billion, with bond volume significantly lower at \$4.5 billion. Total issuance of \$17.5 billion for September was essentially flat compared with September 2017, however loans this year represented an even higher proportion of the total, continuing a trend that has seen loan issuance outstrip bonds in nine of the last 12 months. Overall we continue to expect a healthy volume of high yield issuance for the full year 2018, but short of 2017 since October activity and the pipeline going into November does not look strong enough to make up for the shortfall to date.

Exhibit 1

### 2018 issuance volume unlikely to reach 2017

% Loans has stabilised since the beginning of 2017



Source: Moody's Investors Service

Issuance volume in September was distorted because more than 50% comprised debt financing the €10 billion buyout of [Akzo Nobel's](#) ((P)Baa1, stable) specialty chemicals business by Carlyle and GIC. The resulting new entity [Starfruit Finco BV](#) (B2, stable) issued a loan of \$6,272 million and a subordinated bond of \$1,142 million, perhaps highlighting the significant demand from CLOs that is currently driving loan volume. This can also be seen in FRN issuance, for example [Gamenet](#) (B1, stable) with \$263 million, and new issuers [Guala Closures S.p.A.](#) (B1, stable) and [Fire \(BC\) S.p.A.](#) (Italmatch, B3 stable) with \$526 million and \$474 million respectively. These three issuers opted for the bond market as is typical for Italian companies.

Apart from Starfruit, there were other first time ratings which in total amounted to around 75% of bond and loan issuance, while in loans there was only one repeat issuer, Swiss packager [SIG Combibloc Group AG](#) (Ba3, stable), which issued a chunky \$1,849 million loan for its IPO refinancing. The bulk of volume reflected continuance of a steady trend of M&A activity (85% of total issuance in September), with a reasonable mix of industries and geographies. The largest new issue transactions included several financings with senior and subordinated debt tranches: Starfruit, [Al Alpine AT BidCo GmbH](#), ((P) B3 stable), and [Marcel LUX IV S.a.r.l.](#) (SUSE, B3 stable).

Rating downgrades exceeded upgrades in September, as they have for the past four months, but the September activity was quiet in this regard with only six rating actions (not including outlook changes), four down and two up. The upgrades were both rising stars to investment grade, Swedish real estate company [AB SAGAX](#) (Baa3, stable) and Swiss natural products producer [Barry Callebaut AG](#) (Baa3, stable), both to Baa3 from Ba1. This takes the total of rising stars to 24 for 2018 YTD compared with 11 for the whole of 2017.

Recent reverse flexes such as the acquisition financing for [Marcel LUX IV S.a.r.l.](#) (SUSE, B3 stable) carve-out from [Micro Focus International plc](#) (B1, negative) which resulted in reduced margins and an up-sizing of Term loan B have turned back the trend for higher than expected pricing before the Summer break. Although overall market volatility remains mainly due to the trade tariff "war" and Brexit concerns, the technical bid for loans is strong and therefore even with increased volatility the loan bid should remain quite robust with the current supply/demand imbalance. It is most likely that flexes would reappear if supply materially increased and therefore loan investors could pick and choose and demand better terms for the weaker ones or for those deals which were considered to have trickier credit stories.

# Europe: An overview of sector credit trends

Originally [published](#) on 02 October 2018

This report provides an overview of the key credit trends affecting the largest European speculative-grade sectors. It also compares the rating positioning and most important forward-looking credit metrics of individual companies within each sector.

Unless stated otherwise, all comments throughout the report are specific to European speculative-grade companies, and therefore may not apply to other regions or higher rated companies.

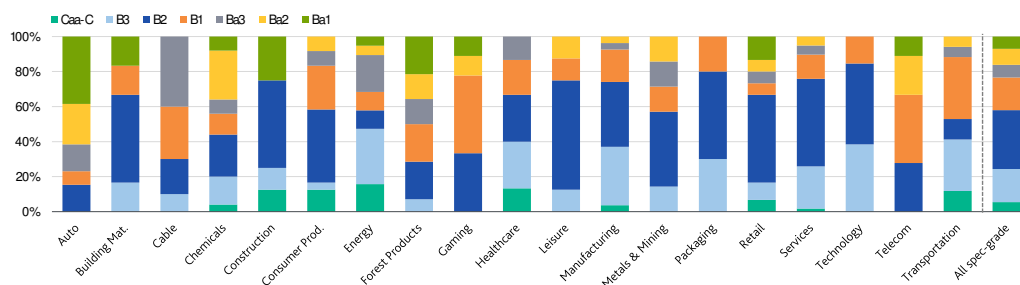
E-mail us: [hyresearch.emea@moodys.com](mailto:hyresearch.emea@moodys.com) (analyst contact details are also available at the end of each sector credit trends section)

## Macro credit trends summary

**Global macro outlook (August 2018):** The near-term global outlook for most advanced economies is broadly resilient, in contrast to the weakening of some developing economies in the face of tightening external liquidity conditions, elevated oil prices and emerging headwinds from rising US trade protectionism weighing on global growth in 2019.

Exhibit 1

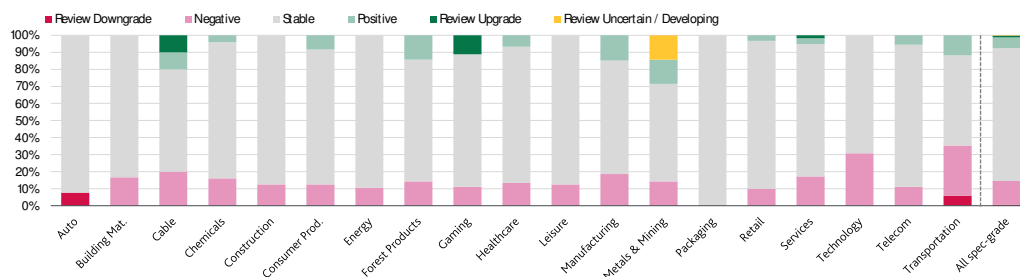
### Corporate family rating (CFR) distribution by industry – Western Europe As of 31 August 2018



Source: Moody's Investors Service

Exhibit 2

### Rating outlook distribution by industry – Western Europe



Source: Moody's Investors Service

**EMEA speculative-grade nonfinancial corporates refinancing study:** Overall debt is stable at \$1.1 trillion in 2018, though this masks some significant underlying trends, notably a reduction in debt due to companies being upgraded to investment-grade. The Ba category still retains the highest share of debt, accounting for nearly half of rated debt.

## Sector credit trends summary

**Business process outsourcing (BPO):** We expect deleveraging across the sector over the next 12 months as issuers focus on restoring their balance sheets following a period of high M&A activity. However, revenue growth will remain subdued across the sector over the next 12 months, driven by pricing pressure at contract renewal and rationalisation of portfolios of contracts, mitigated by favourable growth prospects for international operations. Margins should benefit from stricter focus on contract management, as well as from synergies from recent acquisitions.

**Cable TV:** Organic revenue growth for rated European cable is likely to remain modest at 2.0%-3.0% in 2018-19. We expect revenue growth in the UK to improve versus 2017, but the Netherlands and Switzerland will remain difficult markets. Overall, EBITDA growth will likely exceed revenue growth in 2018-19, helped mainly by cost synergies, despite continued decline in Switzerland and a largely stable EBITDA in the Netherlands. Mobile businesses in some markets are affected by operational/regulatory headwinds. Nonetheless, deeper convergence and presence in the mobile business via current MVNO arrangements or full ownership via M&A will continue to rise. Increased regulation of cable networks could pose challenges to growth in Belgium and potentially the Netherlands.

**Chemicals:** We have a stable North America and Europe sector outlook and we expect EBITDA growth of between 3% and 5% on average in 2018, into 2020, depending on the value chain. Commodity chemicals continue to face a good cyclical outlook, except for the ethylene chain where additional supply is coming on stream in the US and the Middle East, and fertilisers, which remains under pressure. Specialty chemicals are also facing a good market environment with global growth supporting demand. The subsegment will, however, need price increases to catch up with raw material inflation.

**Gaming:** Regulatory changes and tax increases, particularly in the UK, Germany and Italy, will constrain growth over the next 12-18 months, while the US federal ban on sports-betting has been lifted, opening up opportunities there. Online gambling will continue to grow in Europe and globally at different rates, with the main drivers being increased mobile penetration and further liberalisation and/or regulation. We also expect M&A activity to continue to be a feature of the sector as gaming operators are seeking scale, product and geographic diversification, and vertical integration to offset increasing compliance costs and taxes, while maintaining a competitive advantage.

**Manufacturing:** Our overall view of the manufacturing industry is positive, reflected in our expectation of 4.3% aggregate EBITA growth for 2018, accelerating to 5.7% in 2019. However, this may represent a peak in earnings growth for the current industrial cycle and that growth may vary among regions, as indicated by purchasing manager sentiment. An uncertain trade environment poses the biggest risk to manufacturers: retaliatory tariffs will hurt manufacturers, for example via increasing prices for important raw materials, and a Brexit without a trade agreement would adversely affect manufacturers' supply chains.

**Packaged goods:** Although the pace of economic growth is expected to slow down, the macro backdrop in continental Europe will remain resilient and unlikely to affect consumer products companies' profit at this stage. However, local manufacturers will struggle to generate organic revenue growth because of changing consumer habits, ongoing stiff competition and difficulties in passing raw material price increases on to customers. UK-based food manufacturers that rely mainly on the UK market could be affected by a no-deal Brexit scenario through additional import duties, potential logistic and supply chain disruption, and an eventual slowdown in consumption. We have also seen increasing volatility in some commodities, though prices remain favourable at this stage.

**Packaging:** We expect European non-paper packaging companies to grow moderately in the next 12 to 18 months, driven by a favourable macro environment, new products and ongoing cost reduction measures, as well as bolt-on acquisitions. However, rising raw material and energy prices are likely to weigh on EBITDA growth potential, as pass-through clauses only rarely cover all customers. While most rated issuers are experiencing very low revenue growth in mature Western markets, emerging markets still present medium-term top-line growth prospects, though growth rates could be volatile.

**Retail:** Economic conditions in continental Europe will support continued earnings growth for retailers. While we expect more muted growth for mature UK retailers, and in segments like clothing, department stores and DIY, the median Moody's-adjusted EBITDA growth for retailers we rate across Europe is 4.8%. A focus on convenience, value or both is increasingly the best strategy, with strong growth being achieved by online specialists and bricks and mortar-based discounters. Clear and consistent execution is crucial across retail segments.

**Software:** We expect organic revenue growth around the mid-single digits in percentage terms, with small and medium business-oriented and cloud-applications focused vendors performing best. The ongoing shift to subscriptions will add to large recurring revenues and most rated leveraged software issuers will weather the negative impact on revenue and EBITDA. Companies in the sector will continue to control costs, leading to some EBITDA margin improvements, but major cost savings programmes are largely behind us. Bolt-on M&A will complement organic growth and will likely be debt-funded, which will slow down deleveraging. We also expect a reduction in debt market activity for software vendors, barring new LBO transactions.

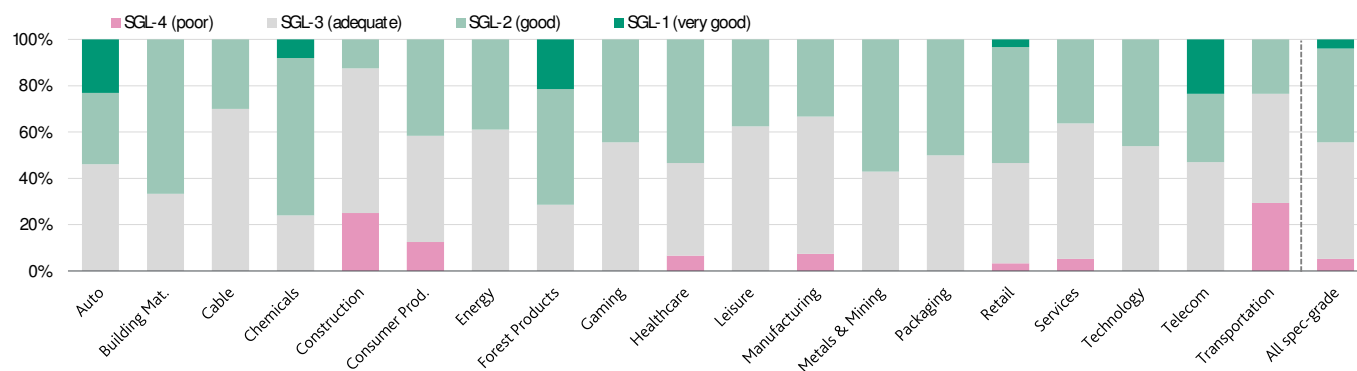
**Telecommunications:** We project annual revenue growth (cohort average organic reported revenue, excluding M&A) will increase slightly by up to 1%. We also expect a slight contraction (by a half percentage point) in the cohort's average annual reported EBITDA margin, to 37.5% from 37.0% in 2018, driven primarily by gradually declining base effects of slightly lower 2018 EBITDA adversely impacted by Roam-Like-at-Home costs. We anticipate European high yield telecoms will continue to have among the healthiest liquidity levels compared with other European non-financial high-yield corporates. We also expect the sector's elevated level of M&A activity seen throughout the year to September 2018 to continue into 2019. This sector's issuer-weighted average corporate family rating remains B1, with three times as many companies bearing a positive or stable outlook as those rated with a negative outlook.

**Travel-related services:** We expect the travel sector to benefit from continued mid-single-digit growth in passenger numbers, with tourist arrivals into Europe up 4%-5% in 2018. Price pressure from airlines will continue, although airline profitability is likely to remain relatively stable as demand matches capacity growth. The market is a complex ecosystem with risks of disintermediation and shifts in the bargaining power of different operators. We see increasing convergence of activities, with faster growth in metasearch, hotel and ancillary attachment and dynamic packages.

## Liquidity and leverage by industry

Exhibit 3

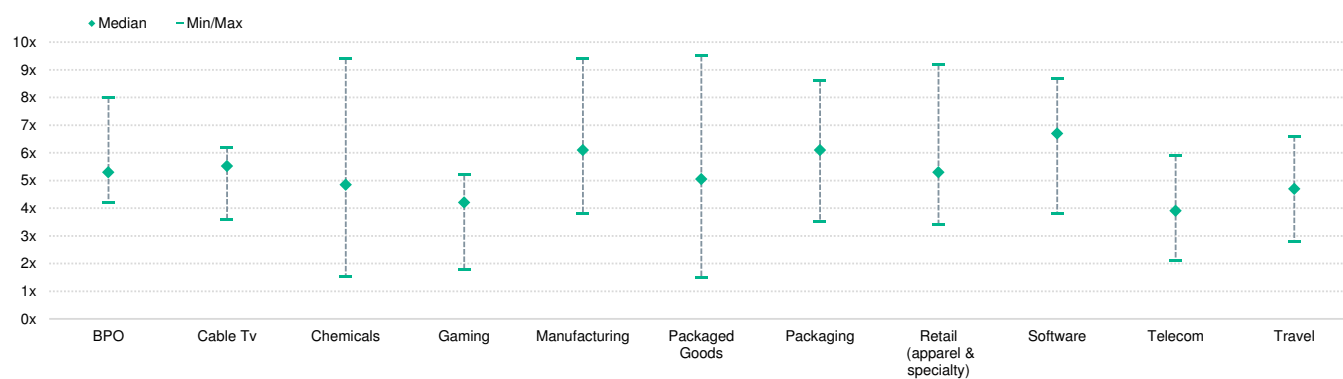
### Speculative-grade liquidity scores by industry – Western Europe As of 31 August 2018



Source: Moody's Investors Service

Exhibit 4

# Moody's adjusted leverage by selected industry



Source: Moody's Investors Service

# Cross-Sector – EMEA: Five vulnerabilities will deepen the impact in Europe of the next downturn

Originally [published](#) on 01 October 2018

## Summary

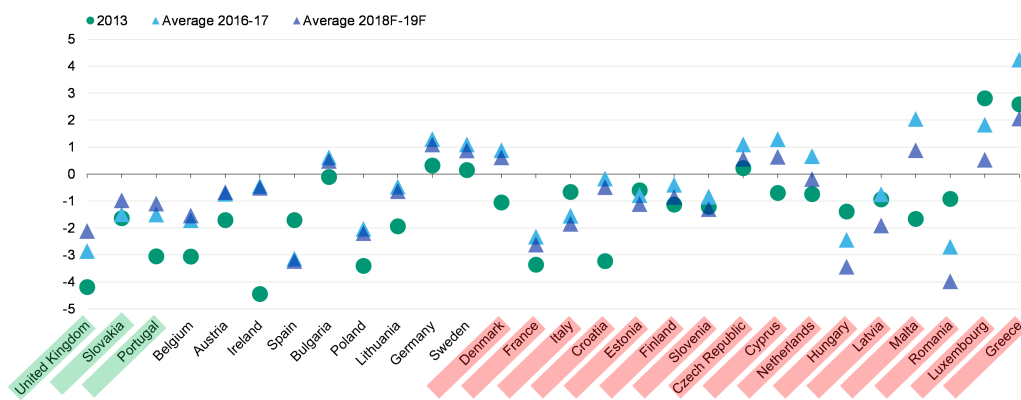
While some improvements have been made in the past 10 years, should another situation occur that puts stress on the financial system, some issuers and policymakers in Europe are less well equipped to counter the effects of that stress. We have identified five areas of risk and weakness:

**Higher debt loads: diminished capacity to absorb shocks and vulnerability to interest rates spiking.** In some countries and sectors debt levels have fallen, but in others they have actually increased. This leaves many issuers vulnerable if interest rates rise quickly and significantly and remain high.

Exhibit 1

### Only a handful of countries' structural deficits will improve in the next 12-18 months

Structural balance (SB) as % of potential GDP. Ameco forecasts for 2018 and 2019



The green colour indicates an improvement in the SB of more than 0.3 percentage points of GDP (difference between the average in 2016-17 and the average projected by Ameco in 2018-19). The red colour indicates a deterioration of the ratio of more than 0.3 percentage points of GDP

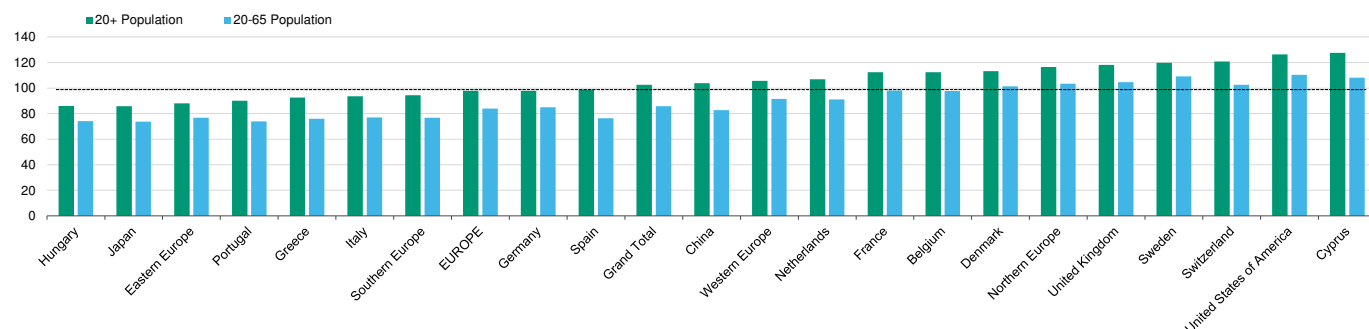
Source: Ameco, Moody's Investors Service

**Lack of tools:** actions taken to aid recovery from the last downturn mean there are fewer measures left to counter the next. Economic growth will remain sluggish, limiting recovery in the event of a downturn. Monetary stimulus is having diminishing returns and successive rounds of sub-sovereign cost-cutting make further cuts and budget consolidation increasingly difficult. Ageing societies will compound these problems.

Exhibit 2

### Adult working-age population will decline in Europe, China and the US

Evolution of adult and working-age population for selected countries 2015-50 (2015 population = 100)



Source: UN

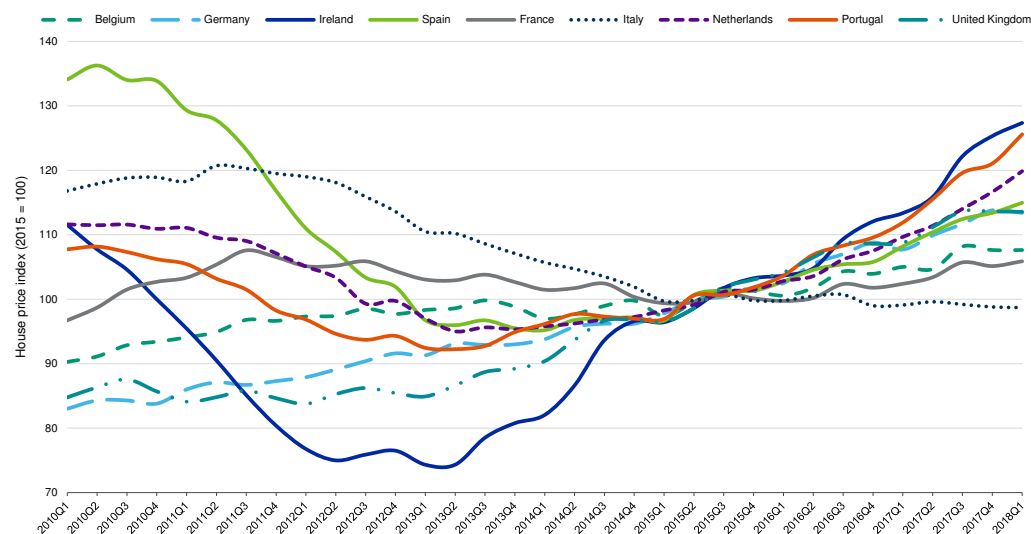
**Peaking asset prices:** some assets and markets at risk of a sudden correction. Yields are unlikely to compress much further. Asset values may go down if interest rates rise more quickly or by more than the market expects. For corporates, high multiples and asset valuations increase M&A execution risks because companies overpaying for deals might find it harder to reduce debt.

Residential property prices have been increasing in most European countries in the past three or so years. In and of themselves, higher house prices are not a sign they are overvalued. But a common sign of an overheated housing market is when house prices continue to rise despite the economic appeal of owning a home being lower, suggesting buyers have unrealistic expectations about how much further prices will go up.

Exhibit 3

### Residential properties prices are peaking across Europe

House price per country, select EU countries



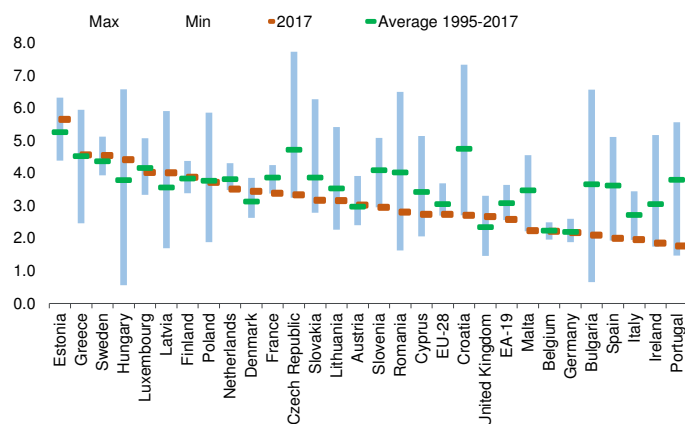
Source: Eurostat

**Regulatory/political risk:** low growth might exacerbate policy weaknesses. Economic insecurity is high and anti-consensus movements abound, and if another crisis erupts there may be a temptation to try a more idiosyncratic, anti-establishment political solution. In the event of a downturn, policymakers could intervene and make regulatory, budget or tax changes, withdraw previously assumed support or increase protectionism.



Exhibit 4

### Government investment in 2017 compared with 1995-2017 period Investment as percentage of GDP



Source: European Commission, AMECO, Moody's Investors Service

**Technological disruption increases vulnerability.** The rapid pace of technological change is disrupting a number of sectors and creating new sources of competition, with laggards weaker in the event of a downturn. Industries which house significant amounts of personal data are at greatest risk of large-scale data theft attacks and serious reputational and financial damage.

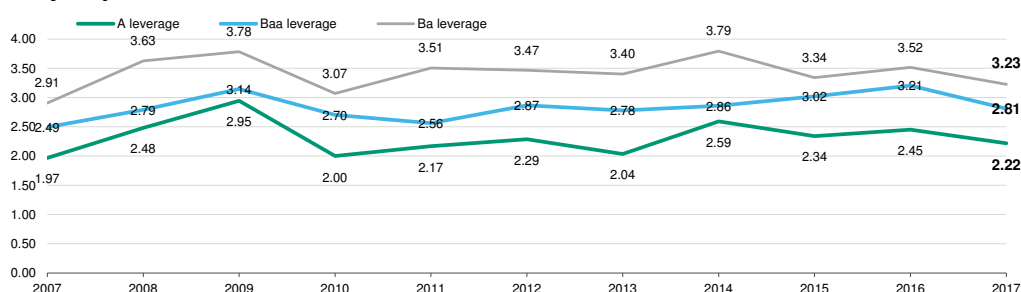
# Strong 2017 results, but weaker firms not saving for the rainy days ahead

Originally [published](#) on 25 September 2018

**The median leverage of rated EMEA non-financial companies fell in 2017, but weaker companies failed to retain the financial flexibility from stronger results.**<sup>1</sup> In 2017 median leverage, measured as Moody's-adjusted debt to EBITDA, fell consistently across the A, Baa and Ba rating categories. However, for companies rated in the B category and below, positive performance has in many cases been outweighed by the effects of dividend recapitalisations and debt-funded acquisitions, which will leave these companies more vulnerable when credit conditions eventually become more difficult. Median leverage has been rising steadily across the rated portfolio over the last decade, a trend which mainly mirrors the growing ranks of rated speculative-grade companies with higher leverage rather than an increase in like-for-like leverage

Exhibit 1

## Median EMEA corporate leverage moves in step across the A, Baa and Ba rating categories Moody's-adjusted debt/EBITDA



The Aaa/Aa categories are excluded due to the low sample size; single-B and below are addressed in Exhibit 3

Source: Moody's Investors Service

**Earnings have strengthened amid flat debt levels.** As we forecast in our 2018 outlook for EMEA non-financial companies,<sup>2</sup> the improvement in 2017 leverage was driven by stronger earnings, particularly in the energy and metals & mining sectors where earnings were up 23% and 30% year-on-year respectively, compared with the median cross-sector rise of 5.9%. While EBITDA has risen, debt levels have stayed flat, partly driven by lower pension deficit adjustments as interest rates have risen from historical lows, with the median pension deficit adjustment down 5.5%. **The transition to International Financial Reporting Standard 16 (IFRS 16) will be material for companies with large lease obligations.** We expect many companies to report a step-change in their as-reported metrics as these obligations are brought onto the balance sheet. However the net impact on Moody's-adjusted metrics should be more modest because the new reporting will mimic our long-standing adjustment to reflect such lease liabilities. **The higher proportion of vulnerable leveraged companies is sowing the seeds for a spike in the default rate when the next credit downturn strikes.** Most EMEA non-financial companies are now comfortably positioned, with earnings up, debt flat and strong liquidity.<sup>3</sup> However, at the lower end of the rating scale, many companies have used these good 2017 results to support dividend recapitalisations or debt-funded acquisitions, rather than saving for the rainy days ahead. Even in the broadly benign credit environment of the last two years we have seen the highest volume of defaulters since 2009, driven by the higher absolute volume of weaker companies that are now rated. As and when the next downturn strikes, many of the single-B companies which are spending their headroom now will find themselves more exposed, and at higher risk of default.

## Endnotes

<sup>1</sup> Metrics as of 11 September 2018, so excluding companies reporting after that date. The sample includes EMEA non-financial corporates and unregulated utilities and power companies, but excludes government-related issuers (GRIs) and real estate/property companies.

<sup>2</sup> "Non-financial corporates - EMEA: 2018 outlook positive as risks recede and credit conditions remain benign (Slides)," 5 December 2017.

<sup>3</sup> "Non-financial companies - EMEA: Sustained overall liquidity strength, despite geopolitical risks," 19 June 2018.

# Bricks-to-clicks credit negative for retail, positive for logistics

Originally [published](#) on 18 September 2018

## Summary

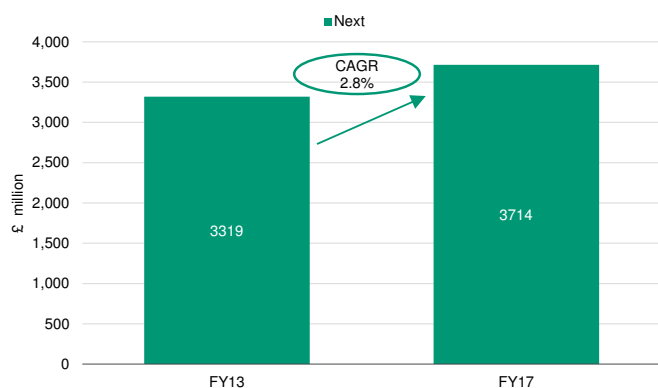
Consumers in need of convenience and price transparency are increasingly favouring shopping online over high street stores ("bricks to clicks"). The upward trend is credit negative for the retail economy (non-prime shopping centres, retailers, credit cards), positive for logistics.

**Growth in online shopping is credit negative for non-prime shopping-centre rents and valuations.** The convenience in online shopping is altering consumers' spending habits. For bricks and mortar stores it means both lower footfall and in-store sales. As a result, rents have been slightly declining across regional high streets and secondary shopping centres in most areas of the UK. Furthermore, there is growing evidence that valuations in regional high streets and secondary shopping centres are also weakening. However, none of the CMBS transactions that we rate are affected.

**E-commerce lowers the credit quality of high-street retail companies.** The shift to online directly leads to lower in-store profitability, both in absolute terms and profit margins. For many consumers, the physical department store has been superseded by online generalists, in terms of convenience and often price. Growth in online retailing has been steadily robust, reaching 20% of total sales during Christmas 2017.

Exhibit 1 1

**Next's CAGR has been relatively sluggish**

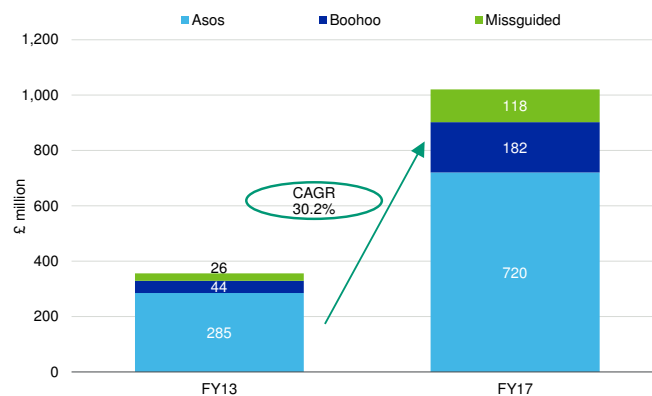


Source: Moody's Investors Service

Exhibit 2 2

Exhibit 3

**CAGR among pure online retailers is far more substantial**



Source: Moody's Investors Service

**Virtual shopping expansion will reduce some local authorities' revenue.** The shift from "bricks to clicks" is likely to have a moderately negative effect on the finances of local authorities. A minority of them are now more significantly exposed through direct investments in town centres and out-of-town retail developments.

**Internet buying leads to more product returns, weakening the performance of credit card ABS collateral pools.** Returning products cancels the receivables generated on credit cards that are sold to special purpose vehicles (SPVs), entailing a potential loss. European CLOs have limited exposure to UK retail, so the effects of the shift towards online shopping will be very minimal.

**Commercial logistics will benefit from e-commerce growth.** The logistics sector is a clear winner from the structural consumer shift to online from high street shopping. Logistic properties benefit, especially those within the "last mile" network (that is warehouses close to large population centres), amid strong investor demand

# Research Highlights:

## Selected speculative-grade relevant research

### New issuers

In September, we published initial reports on the following newly rated companies: Netherlands-based specialty chemicals manufacturer [Startfruit](#) (B2, stable), Germany-headquartered open source software products provider [SUSE](#) (B3, stable), Netherlands-based Unsaturated Polyester Resin (UPR) supplier [CR](#) (B2, stable), Netherlands-headquartered light-weight belting products producer [Alpha](#) (B3, stable), Italy-based chemical additives manufacturer [Italmatch](#) (B3, stable), Headquartered in Oman plastic packaging manufacturer [OCTAL](#) (B1, stable), Spain-based departmental store [ECI](#) (Ba1, stable), Italy-based producer of closures for wine and spirit industry [Guala](#) (B1, stable), Austria-headquartered solutions provider for power generation and gas compression [Al Alpine](#) ((P)B3, stable).

### Issuer comments

Selected issuer comments included the following credit positive reports:

- » [Bayerische Motoren Werke Aktiengesellschaft: BMW's plan to raise its stake in BMW Brilliance Automotive is credit positive](#)
- » [Obrascon Huarte Lain S.A.: OHL's sale of its stake in "Ciudad Mayakoba" is credit positive](#)
- » [Novorossiysk Commercial Sea Port, PJSC and Transneft, PJSC: Transneft's acquisition of controlling stake in NCSP is credit positive for both companies](#)
- » [JACOBS DOUWE EGBERTS Holdings B.V.: Proposed refinancing of bank facility is credit positive; no impact on the rating at this stage](#)
- » [L1E Finance GmbH & Co KG: Letter One and BASF to merge its oil and gas activities a credit positive for DEA](#)
- » [TUI AG: TUI's summer trading update underpins resilience of its business model, credit positive](#)

Selected issuer comments included the following credit negative reports:

- » [WPP Plc: Loss of Ford's Creative Business To Omnicom Is Credit Negative For WPP](#)
- » [Astaldi S.p.A.: Astaldi's adjustment of its capital and financial strengthening plan is credit negative](#)
- » [Obrascon Huarte Lain S.A.: Poor first half results and signs of prolonged restructuring are credit negative](#)
- » [Marcel LUX IV S.a.r.l. \(SUSE\): SUSE's \\$35 million Term Loan B upsizing is credit negative, ratings unaffected](#)
- » [Thomas Cook Group plc: Profit warning is credit negative for Thomas Cook](#)

### Issuer and sector reports

**NH and Radisson: Radisson relies on asset light model and global brand while NH benefits from stronger free cash flow and asset portfolio**  
[Radisson Hospitality Group AB](#) (B1, stable) has access to a larger global brand with a more diverse offering than [NH Hotel Group S.A.](#) (B1, stable), although Radisson does not own the brand. Radisson's range of hotel brands gives consumers more choice, and provides a cushion since economy and luxury hotels tend to be more resilient through the economic cycle than those in the mid ranges. However we expect NH Hotel's scale and geographic presence to broaden with investment by a new majority stakeholder, Minor International Pcl, or MINT

### **Casino Guichard-Perrachon SA: Parent's leverage and negative underlying cash flow generation at Casino France constrain credit quality**

Pricing of Casino's market instruments has fluctuated widely since January 2018. Pressure from short sellers and concerns about existing financial complexity pushed the share price to €26 at the beginning of September 2018, back to its 1996 level. At the same time, the five-year credit default swap (CDS) traded above 500 basis points (bp).

**CD&R Firefly 4 Limited & EG Group Limited - peer comparison: Peer Comparison: EG's overseas expansion gives more scope for credit quality improvement; higher execution risks abating**

After [EG Group Limited](#) (EG, B2 stable) and [CD&R Firefly 4 Limited](#) (MFG, B2 stable) companies made large acquisitions and refinanced earlier this year their Moody's-adjusted gross leverage was very similar at around 7.0x. The potential for a relatively high level of synergies from EG's multiple international acquisitions give it greater scope for deleveraging. However, slightly lower relative capital spending will mean that MFG's free cash flow generation will be relatively stronger.

**Telecommunications - Italy: Expensive 5G spectrum auction in Italy is credit negative for telecoms operators**

The outcome of the auction is credit negative for all telecoms operators in Italy because they face either higher leverage owing to the large amounts paid for this spectrum or, for those that have not secured the desired frequencies, a weaker spectrum position, which could result in poorer 5G network quality. Despite the very expensive auction, the amounts paid by each operator can be accommodated within the expectations for their respective ratings.

**Corporates - Europe: Trade tensions will modestly disrupt Europe's trade flow with the US and China**

The escalating trade tensions between the US and China will disrupt trade flows between Europe and its two major trade partners, and this has implications for European corporates. However, three main factors lessen the negative effect on European companies: their small direct trade exposures with the US and China, the global footprint of many large European companies, and lower than expected Chinese tariffs on some European products

**Aerospace and Defense - Europe: Amid supply chain strains, trade disruption would be greatest risk of 'no-deal' Brexit**

A "no-deal" Brexit would be credit negative for European aerospace and defense companies, we expect the two sides will likely preserve many of their current trade arrangements, which would minimize the impact on European aerospace and defense companies. However, while we believe it is in the shared interests of the UK and the EU to avert a cliff-edge risk, a "no-deal" Brexit scenario will remain a threat until a withdrawal agreement with transition arrangements is signed.

# Issuance & Rating Actions:

## Issuance update

Note: First-time rated bond and loan issuers are highlighted in blue.

Exhibit 1

### September 2018: Bonds

Issuer	Rating Date	Industry	Country	CFR	Instrument Rating	Amount (USD mil)
Starfruit	07-Sep	Chemicals	Netherlands	B2	Caa1	1142
Gamenet	10-Sep	Gaming	Italy	B1	B1	263
JLR	11-Sep	Automotive	United Kingdom	Ba2	Ba2	579
Odigeo	11-Sep	Services	France	B1	B2	496
Italmatch	18-Sep	Chemicals	Italy	B3	B3	474
OCTAL	20-Sep	Packaging	Oman	B1	B1	300
ECI	21-Sep	Retail	Spain	Ba1	Ba1	700
Guala	24-Sep	Packaging	Italy	B1	B1	526
<b>Total September</b>						<b>4,480</b>

Exhibit 2

### September 2018 issuance: Loans

Issuer	Rating Date	Industry	Country	CFR	Instrument Rating	Amount (USD mil)
Starfruit	05-Sep	Chemicals	Netherlands	B2	B1	6272
SIG	06-Sep	Packaging	Switzerland	B2	Ba3	1849
SUSE	07-Sep	Technology	Luxembourg	B3	B2	360
						431
CR	12-Sep	Chemicals	Netherlands	B2	B2	510
Alpha	14-Sep	Manufacturing	Netherlands	B3	B2	972
Al Alpine	24-Sep	Manufacturing	Austria	(P)B3	(P)B2	1485
					(P)Caa2	338
<b>September Public Loans</b>						<b>12,216</b>
<b>PMLRs*</b>						
- New Issuers						0
- Existing Issuers						793
<b>Total September PMLRs</b>						<b>793</b>
<b>Total September Loans</b>						<b>13,009</b>

\*PMLR: Private Monitored Loan Rating

Source: Moody's Investors Service

## Rating action update

Note: Rising stars and fallen angels are highlighted in blue.

Exhibit 3

### Rating actions – September 2018

Rating Action	Date	Issuer	Industry	Country	CFR / Outlook	Previous
<b>New Ratings</b>						
*	05-Sep	<a href="#">Starfruit</a>	Chemicals	Netherlands	B2 / STA	New
*	07-Sep	<a href="#">SUSE</a>	Technology	Luxembourg	B3 / STA	New
*	12-Sep	<a href="#">CR</a>	Chemicals	Netherlands	B2 / STA	New
*	14-Sep	<a href="#">Alpha</a>	Manufacturing	Netherlands	B3 / STA	New
*	18-Sep	<a href="#">Italmatch</a>	Chemicals	Italy	B3 / STA	New
*	20-Sep	<a href="#">OCTAL</a>	Packaging	Oman	B1 / STA	New
*	21-Sep	<a href="#">ECI</a>	Retail	Spain	Ba1 / STA	New
*	24-Sep	<a href="#">Guala</a>	Packaging	Italy	B1 / STA	New
*	24-Sep	<a href="#">Al Alpine</a>	Manufacturing	Austria	(P)B3 / STA	New
<b>Rating/ Outlook Changes</b>						
NEG	04-Sep	<a href="#">Tele Columbus</a>	Cable Tv	Germany	B2 / NEG	B2 / POS
NEG	06-Sep	<a href="#">MTN</a>	Telecommunications	South Africa	Ba1 / UR Down	Ba1 / STA
POS	06-Sep	<a href="#">SIG</a>	Forest Products	Switzerland	B2 / UR Up	B2 / STA
DOWN	10-Sep	<a href="#">Astaldi</a>	Constr & Engineering Serv	Italy	Caa2 / NEG	Caa1 / NEG
NO CHANGE	10-Sep	<a href="#">Gamenet</a>	Gaming	Italy	B1 / STA	B1 / STA
POS	10-Sep	<a href="#">Navico</a>	Consumer Products	Norway	B2 / POS	B2 / STA
POS	11-Sep	<a href="#">Nico Middle East</a>	Energy	United Arab Emirates	B2 / STA	B2 / NEG
POS	11-Sep	<a href="#">MegaFon</a>	Telecommunications	Russia	Ba1 / STA	Ba1 / UR Down
DOWN	12-Sep	<a href="#">Intralot</a>	Technology Services	Greece	B2 / NEG	B1 / NEG
UP	17-Sep	<a href="#">Sagax</a>	Real Estate Finance	Sweden	Baa3 / STA	Ba1 / UR Up
UP	18-Sep	<a href="#">Barry Callebaut</a>	Natural Products Processor	Switzerland	Baa3 / STA	Ba1 / STA
DOWN	18-Sep	<a href="#">CMC</a>	Constr & Engineering Serv	Italy	B3 / NEG	B2 / STA
NO CHANGE	19-Sep	<a href="#">UPC</a>	Cable Tv	Netherlands	Ba3 / NEG	Ba3 / NEG
DOWN	20-Sep	<a href="#">Nyrstar</a>	Metals & Mining	Belgium	Caa1 / STA	B3 / STA
NEG	20-Sep	<a href="#">Ziggo</a>	Cable Tv	Netherlands	B1 / NEG	B1 / STA
NO CHANGE	21-Sep	<a href="#">Fives</a>	Manufacturing	France	B2 / STA	B2 / STA
POS	24-Sep	<a href="#">Fiat Chrysler Automobiles</a>	Automotive	Italy	Ba2 / POS	Ba2 / STA
POS	26-Sep	<a href="#">GKN</a>	Automotive	United Kingdom	Ba1 / STA	Ba1 / UR Down
NEG	28-Sep	<a href="#">Casino</a>	Retail	France	Ba1 / NEG	Ba1 / STA
<b>Withdrawn</b>						
WR	05-Sep	<a href="#">Ezdan</a>	Constr & Engineering Serv	Qatar	WR	B1 / STA
WR	14-Sep	<a href="#">Ammeraal Beltech</a>	Manufacturing	Netherlands	WR	B3 / STA
WR	18-Sep	<a href="#">Linxens</a>	Manufacturing	France	WR	B2 / NEG

Source: Moody's Investors Service

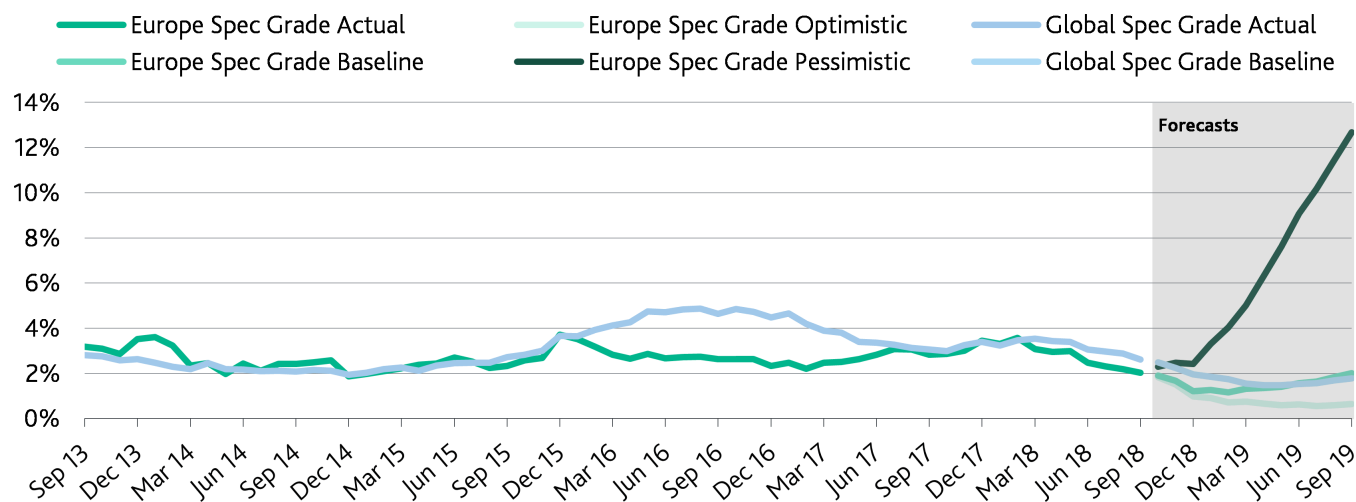
# Stress Indicators & Surveillance:

## Defaults

Global speculative-grade default rate at 2.6% in September

Exhibit 1

### High-yield default trends and forecasts



Also includes financial corporates  
Source: Moody's Investors Service

The global speculative-grade default rate fell to 2.6% in September, down from 3.1% a year earlier. We expect the default rate to hit 2% at the end of 2018. By region, we expect the US speculative-grade default rate to fall to 2.6% at year-end 2018 from its current level of 3.1%, and the rate in Europe to decline to 1.2% from 2%.



Exhibit 2

# Non-financial corporate defaults in EMEA (last 12 months)

Updated through 30 September 2018

Company	Date	Initial Default Type	Defaulted Amounts (USD mil) Bond	Loan	Total	Country	Industry	PDR 1 year before default
<a href="#">Brunswick Rail Limited</a>	18-Oct-17	Distressed exchange	600		600	Russia	Equipment and Transportation Rental	C
<a href="#">Pacific Drilling S.A.</a>	12-Nov-17	Bankruptcy	750	1193	1943	Luxembourg	Energy	Caa3
<a href="#">Pacific Drilling V Ltd.</a>	12-Nov-17	Bankruptcy	439	0	439	Luxembourg	Energy	C
<a href="#">Expro Holdings UK 3 Limited</a>	18-Dec-17	Bankruptcy		1420	1420	United kingdom	Energy	Caa2
<a href="#">Bibby Offshore Holdings Ltd</a>	21-Dec-17	Bankruptcy	0	20	20	United kingdom	Energy	Caa2
<a href="#">Bibby Offshore Services Plc</a>	21-Dec-17	Bankruptcy	234	0	234	United kingdom	Energy	Ca
<a href="#">Elli Investments Limited</a>	14-Jan-18	Missed interest payment	240	0	240	United kingdom	Healthcare: long-term care facilities	Ca
<a href="#">BrightHouse Group PLC</a>	02-Feb-18	Distressed exchange	308		308	United kingdom	Retail	Caa2
<a href="#">Eletson Holdings Inc.</a>	15-Feb-18	Missed interest payment	300		300	Liberia	Transportation	B3
<a href="#">Avanti Communications Group plc</a>	21-Feb-18	Distressed exchange	836		836	United kingdom	Telecommunications	Ca
<a href="#">Ideal Standard International S.A.</a>	04-Apr-18	Distressed exchange	814		814	Luxembourg	Consumer Durables	Ca
<a href="#">CEVA Group plc</a>	08-May-18	Distressed exchange	0	953	953	United kingdom	Transportation services: trucking	C
<a href="#">Proserv Operations Limited</a>	14-May-18	Distressed exchange	0	135	135	United kingdom	Energy: oil services	Ca
<a href="#">House of Fraser (UK &amp; Ireland) Limited</a>	27-Jul-18	Distressed exchange	217	263	479	United kingdom	Retail: specialty	Caa1
<b>Total</b>			<b>4,737</b>	<b>3,984</b>	<b>8,721</b>			

[Download latest monthly default report](#); [Download our approach to evaluating distressed exchanges](#)

## B3 negative and lower

Exhibit 3

List of issuers rated B3 negative and lower as of 30 September 2018

As of 30 September 2018, the percentage of issuers rated B3 negative and below (PDR) increased to 8.1% compared to 7.7% in August 2018, and remains above the low of 7.3% in July 2015.

Company	PDR / Outlook	Total Outstanding	Industry	Country
IDH	B3 / NEG	764	Healthcare	United Kingdom
<a href="#">Navios Acquisition</a>	B3 / NEG	1,065	Transportation Services	Greece
<a href="#">Ithaca</a>	B3 / NEG	643	Energy	United Kingdom
<a href="#">Travelex</a>	B3 / NEG	526	Services	United Kingdom
<a href="#">Doncasters</a>	B3 / NEG	1,093	Manufacturing	United Kingdom
<a href="#">First Quantum Minerals</a>	B3 / NEG	5,024	Metals & Mining	Canada
<a href="#">CAAB</a>	B3 / NEG	675	Chemicals	Germany
<a href="#">Swissport</a>	B3 / NEG	1,681	Services	Luxembourg
<a href="#">Dynagas Partners</a>	B3 / NEG	714	Transportation Services	Monaco
<a href="#">CMC</a>	B3 / NEG	1,027	Constr & Engineering Serv	Italy
<a href="#">O1</a>	B3 / UR Down	3,063	Real Estate Finance	Russia
<a href="#">Ferrexpo</a>	Caa1 / POS	1,043	Metals & Mining	Ukraine
<a href="#">Metinvest</a>	Caa1 / POS	2,981	Metals & Mining	Ukraine
<a href="#">MHP</a>	Caa1 / POS	1,286	Natural Products Processor	Ukraine
<a href="#">Cognor</a>	Caa1 / POS	154	Metals & Mining	Poland
<a href="#">Moby</a>	Caa1 / STA	858	Transportation Services	Italy
<a href="#">Boparan</a>	Caa1 / STA	1,211	Consumer Products	United Kingdom
<a href="#">Britax Group</a>	Caa1 / STA	390	Consumer Products	United Kingdom
<a href="#">Care UK</a>	Caa1 / STA	887	Healthcare	United Kingdom
<a href="#">Endemol</a>	Caa1 / STA	1,558	Media	Netherlands
<a href="#">Floatel</a>	Caa1 / STA	875	Energy	Sweden
<a href="#">Nyrstar</a>	Caa1 / STA	2,122	Metals & Mining	Belgium
<a href="#">Ocean Rig</a>	Caa1 / STA	3,888	Energy	Norway
<a href="#">Perstorp</a>	Caa1 / STA	1,503	Chemicals	Sweden
<a href="#">Techniplas</a>	Caa1 / STA	257	Automotive	United States
<a href="#">Astaldi</a>	Caa1 / NEG	2373	Constr & Engineering Serv	Italy
<a href="#">Deoleo</a>	Caa1 / NEG	611	Consumer Products	Spain
<a href="#">Galapagos</a>	Caa1 / NEG	1,118	Manufacturing	Germany
<a href="#">TSL Education</a>	Caa1 / NEG	370	Media Publishing	United Kingdom
<a href="#">Photonis</a>	Caa1 / NEG	310	Aircraft & Aerospace	France
<a href="#">Yaşar Holding</a>	Caa1 / NEG	250	Consumer Products	Turkey
<a href="#">Aenova</a>	Caa2 / STA	851	Services	Germany
<a href="#">Seadrill Partners</a>	Caa2 / STA	3,878	Energy	Norway
<a href="#">New Look</a>	Caa2 / NEG	1,653	Retail	United Kingdom
<a href="#">Exterion</a>	Caa2 / NEG	187	Media	United Kingdom
<a href="#">Vivarte</a>	Caa3 / STA	1,524	Retail	France
<a href="#">Johnston Press</a>	Caa3 / NEG	326	Media Publishing	United Kingdom
<a href="#">Four Seasons Health Care</a>	Caa3 / NEG	864	Healthcare	United Kingdom
<a href="#">Eletson</a>	Ca / NEG	809	Transportation Services	Liberia
<b>Total</b>		<b>45,683</b>		

Note: new additions to the list during the month are highlighted in blue.

Source: Moody's Investors Service

## Speculative-grade liquidity

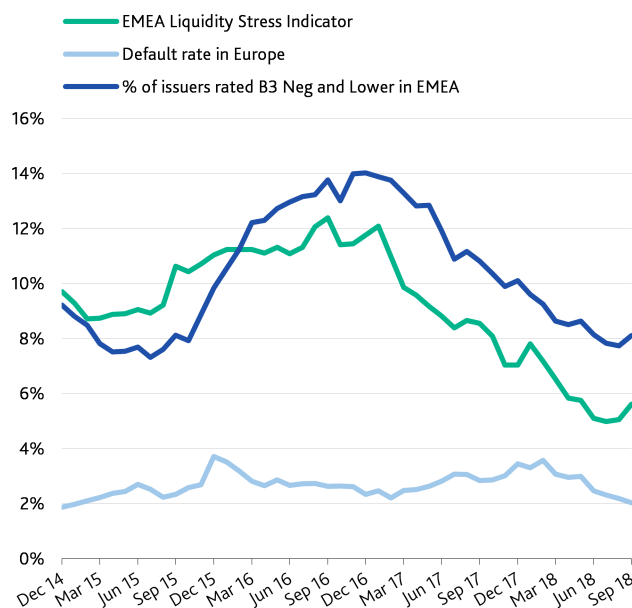
### EMEA LSI at record low

The EMEA LSI – the percentage of speculative-grade companies with the weakest liquidity profile (SGL 4) – increased to 5.6% in September 2018 from 5.1% in August 2018. The EMEA LSI was 5% in July and 5.1% in June 2018. Solid aggregate liquidity profiles for EMEA speculative-grade companies continue to be supported by issuer-friendly debt capital markets.

The LSI in the US bumped up to 3.3% in September 2018 compared to 3.2% in August 2018. The LSI for Asia weakened to 33.5% in September 2018 from 31.1% in August 2018 and remained above its long-term average of 23.2%. We believe that LSI trends are a more meaningful indicator than absolute levels for predicting default rates.

Exhibit 4

#### Corporate liquidity continues to improve in Europe over last months



Source: Moody's Investors Service

#### Classification of SGL scores

Speculative grade liquidity is categorised in one of four ways, as described below:

- » **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.
- » **SGL 3:** 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.
- » **SGL 4:** Weak liquidity. Relies on external sources of financing and the availability of that financing is, in Moody's opinion, highly uncertain.

[Access latest EMEA SGL Monitor, US SGL Monitor and Asian Liquidity Stress Indicator](#)

## Speculative-grade liquidity

As of 30 September 2018

Exhibit 5

### Stable liquidity profiles

Distribution of SGL overall scores

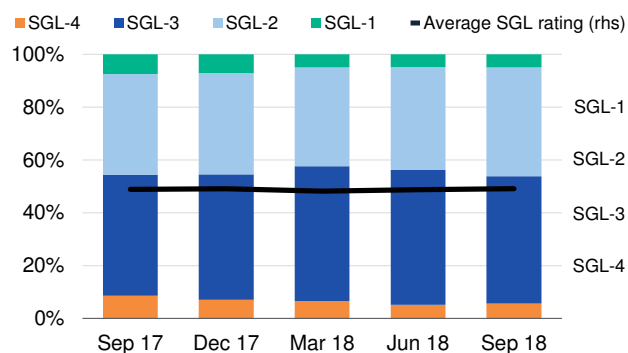


Exhibit 6

### Weakest companies also have weakest liquidity profiles

SGL overall scores by Corporate Family Rating

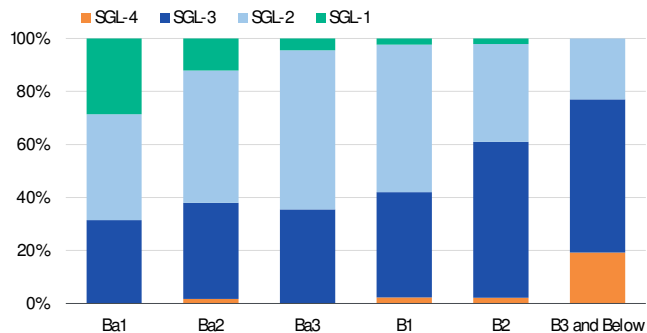


Exhibit 7

### Transportation services has now most SGL-4s in EMEA

SGL overall scores by industry

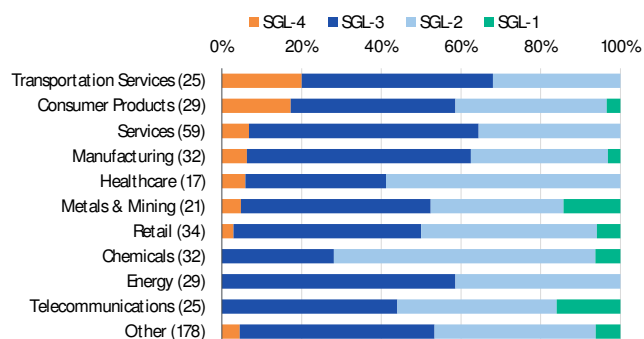


Exhibit 8

### Fallen angels have most SGL-4s

SGL overall scores by type

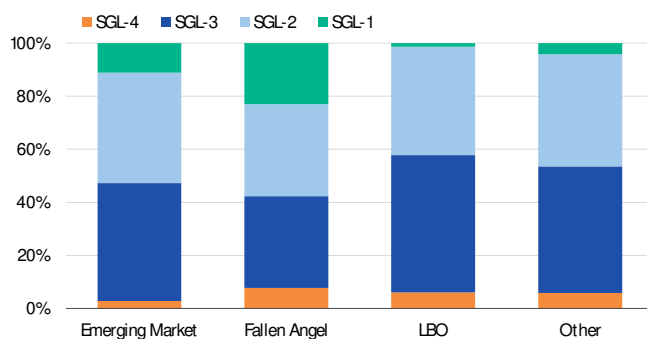
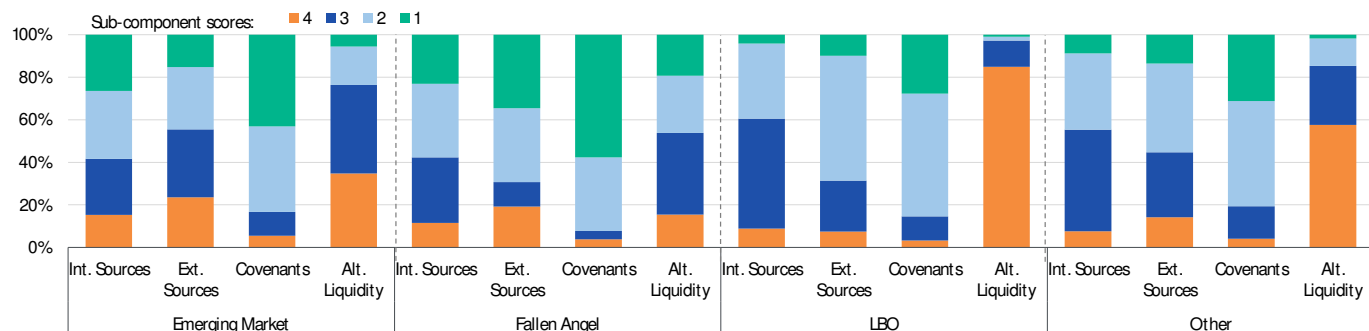


Exhibit 9

### LBOs have limited ability to raise additional funding, but otherwise mostly adequate liquidity

Distribution of SGL sub component scores



Source: Moody's Investors Service

## Speculative-grade universe

As of 30 September 2018

Exhibit 10

### Average CFR going down in 2018

Development of speculative-grade Corporate Family Ratings

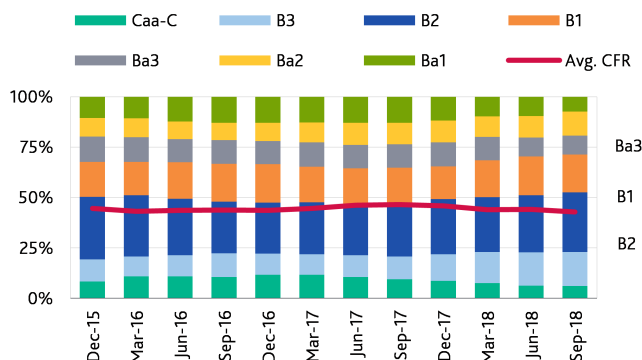


Exhibit 11

### Negative outlooks higher than positive

Development of speculative-grade corporate rating outlooks

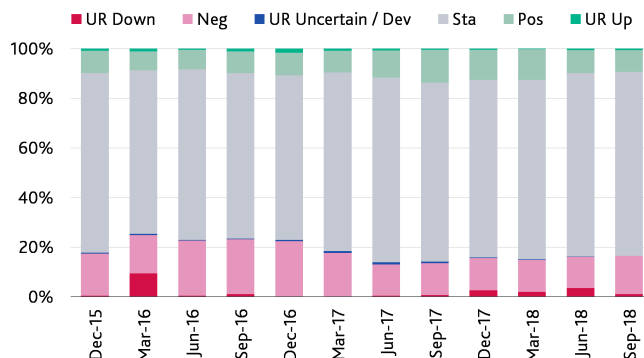


Exhibit 12

### Spec-grade issuer count rising

Development of speculative-grade CFRs by type

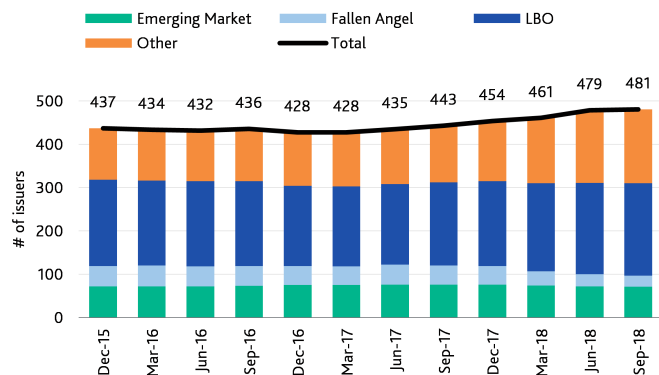


Exhibit 13

### LBOs rated predominantly at B2

Distribution of speculative-grade companies by CFR and type

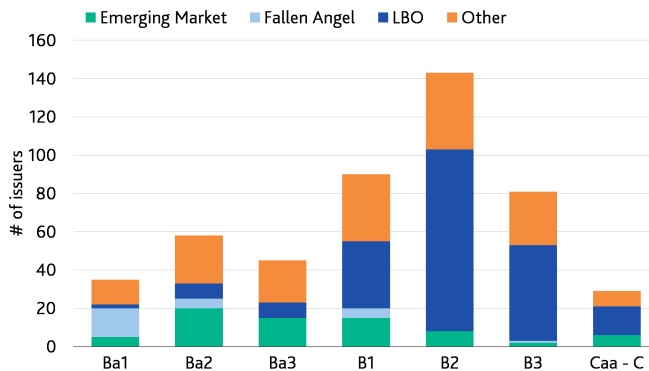


Exhibit 14

### Spec-grade universe diversified

Number of speculative-grade companies by country

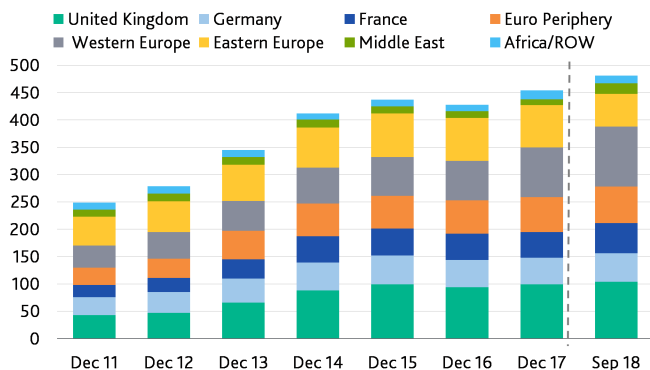
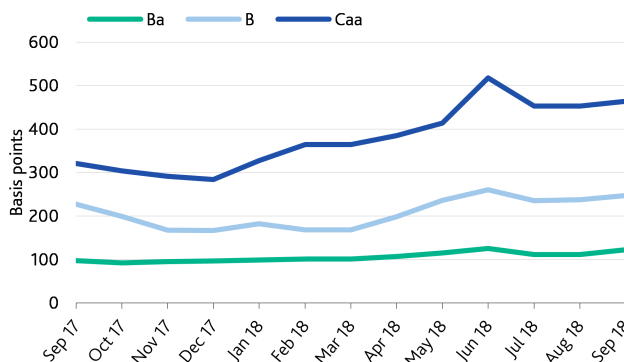


Exhibit 15

### Spreads rising for Caa

European high-yield bond CDS spreads



Source: Moody's Investors Service

## Speculative-grade financial metrics

As of 30 September 2018

Exhibit 16

### Margins broadly stable in 2018

Median EBITDA margin

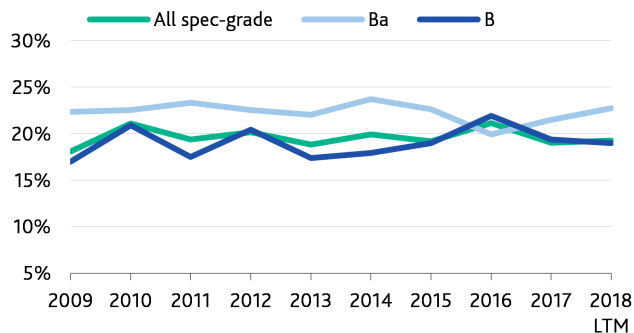


Exhibit 17

### Leverage remained high in 2018

Median debt to EBITDA

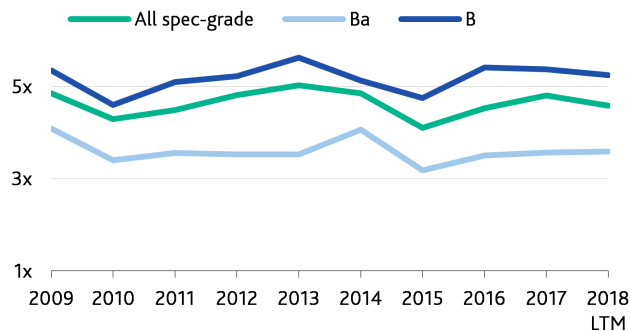


Exhibit 18

### Ba-rated companies benefit most from low interest rates

Median (EBITDA – capex) / interest expense

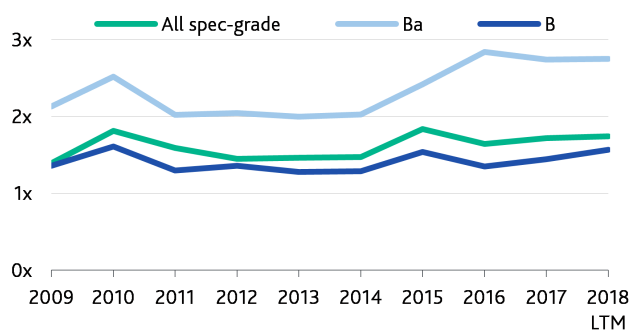


Exhibit 19

### Operating cash flows steady on average

Median FFO to debt

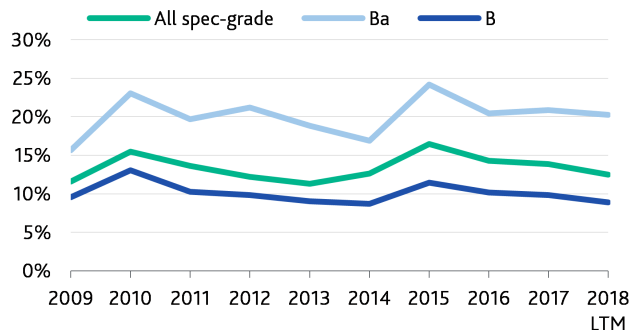


Exhibit 20

### Free cash flow declines in 2018

Median FCF to debt

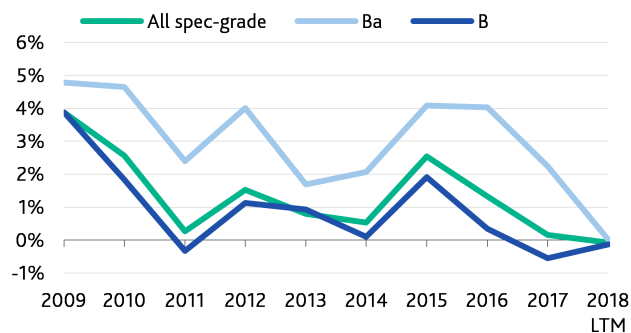
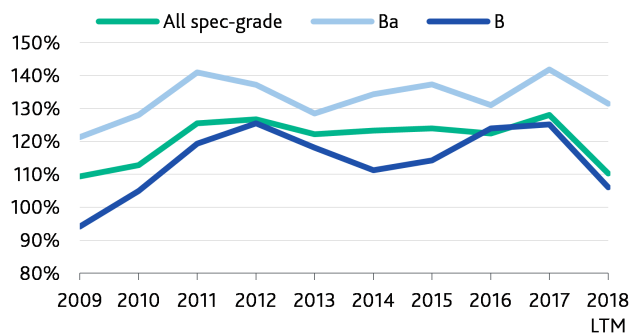


Exhibit 21

### Capex to depreciation still exceeds 100%

Median capex to depreciation



Source: Moody's Investors Service

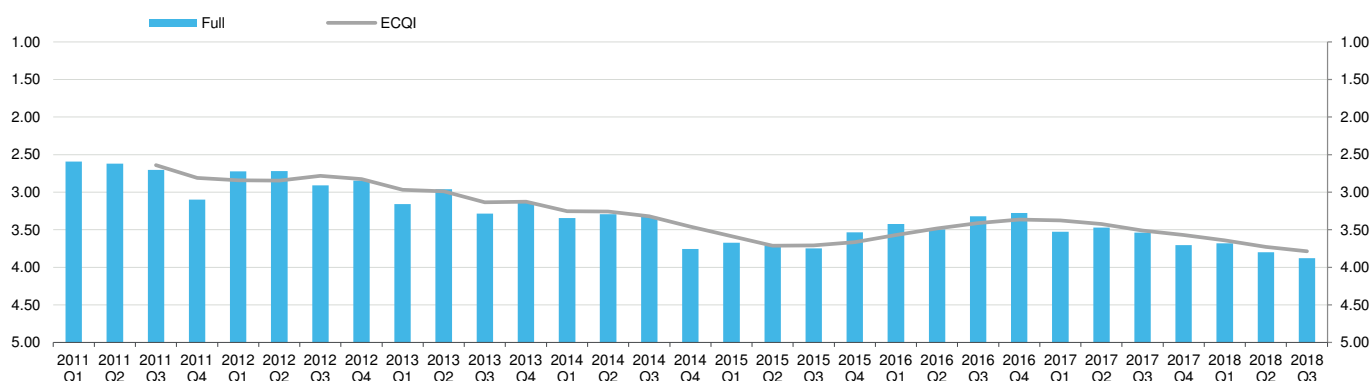
LTM reflects the last available reporting period for issuers which is in most cases the last twelve months to September 2017, but may differ for some issuers.

## Covenant quality surveillance

**The European covenant quality indicator (E-CQI) falls to lowest level ever seen in the 3Q 2018.** A further 0.06 fall of the E-CQI in the 3Q of 2018 to 3.79 (weak) confirmed that the improvements made in between the third quarter of 2015 and fourth quarter of 2016 when the E-CQI sat at 3.71 (weak) and 3.36 (moderate ↓) respectively, have been reversed.

Exhibit 22

**E-CQI weakened to 3.79 (weak), marked the lowest level ever seen**  
Three-quarter rolling average of all full package bonds' covenant quality scores



Source: Moody's Covenant Database

As in 2Q 2018 when the E-CQI was 3.73 (weak), the deterioration in the E-CQI can partly be attributed to the presence of six sponsor led bonds issued by European issuers which scored in our weakest risk category. In addition there were four US issuers issuing Euro-denominated bonds, see Exhibit 23, of which four bonds also scored in the weakest risk category.

Exhibit 23

**Summary of key selected covenant quality scores**  
Average of certain third quarter data

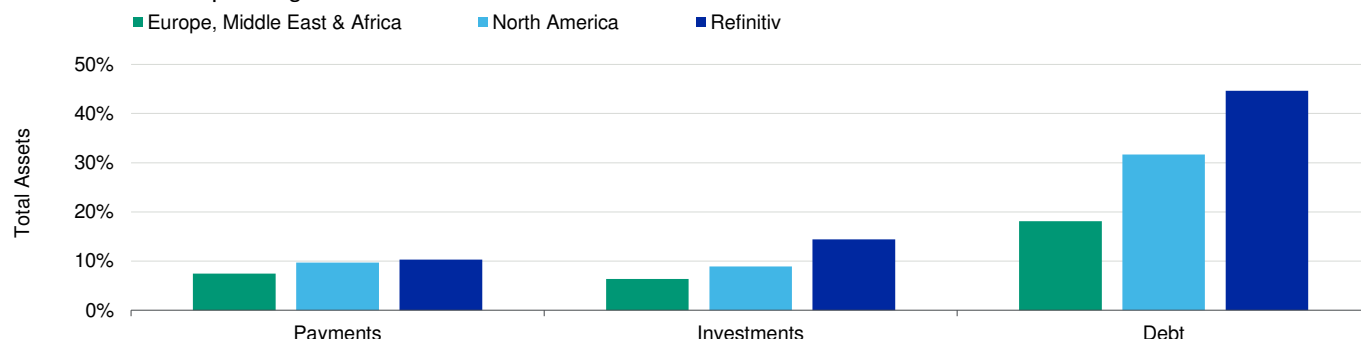
	Overall	HY lite	Full-package	Full-package US issuers	Full-package sponsor led
Number of bonds	30	3	27	6	16
Average CQS	3.99 (weak)	5.00 (weakest)	3.88 (weak)	4.47 (weakest)	4.04 (weak ↓)

Source: Moody's Covenant Database

All the US issuers, except [Financial & Risk US Holdings, Inc.](#) (B3 stable; Refinitiv), used covenant packages that had already cleared the US markets and follow the US market standards. A key difference between the US and Europe is that US bonds have far larger quantifiable carve-outs than typically seen in Europe, as show in Exhibit 24.

Exhibit 24

**US issuers, in particular Refinitiv, have higher carve-outs than the European issuers**  
Carve-outs measured as percentage of total assets



Source: Moody's Covenant Database

– **Weakest full package bond:** the €-denominated unsecured bond issued by Refinitiv, had the weakest package with a CQS of 5.00 (weakest). This is the only Euro-denominated bond that have scored a perfect 5.00 (weakest) since we began scoring in 2011. Some of the non-standard aggressive provisions used include the following: (a) access to the RP income basket does not require pro forma satisfaction of the \$1 debt test and is not subject to “no default” condition; (b) RP income basket includes an add-back for declined excess proceeds; (c) a very unusual and aggressive carve-out permitting debt incurrence based on the unutilized portion of the RP income basket and a number of RP carve-outs, including the general RP carve-out.

– **Strongest full package bonds:** September's most protective bonds were senior secured bonds issued by [eDreams ODIGEO S.A.](#) (B1 stable) with a moderate covenant quality score (CQS) of 3.07. eDreams's bonds offer the strongest protection among all bonds issued in 3Q 2018. Though this repeat issuer broadly followed the same covenants as the €435m 8.50% Senior Secured Notes due 2021 bond issued in 2016, the covenant protection weakened by 0.60 because the issuer upsized the restricted payments, permitted investments and debt carve-outs as a percentage of total assets plus added a portability clause to the change of control risk category.

– **High yield-lite:** [Dometic Group AB \(pub\)](#) (Ba3 positive, Dometic), [International Game Technology PLC](#) (Ba2 stable, International Game) and [Jaguar Land Rover Automotive Plc](#) (Ba2 stable) were the only HY-lite issuers package in 3Q 2018. All issuers are Ba-rated, as is typical for HY-lite bonds. HY-lite bonds comprised 25% of issuance in YTD 2018.

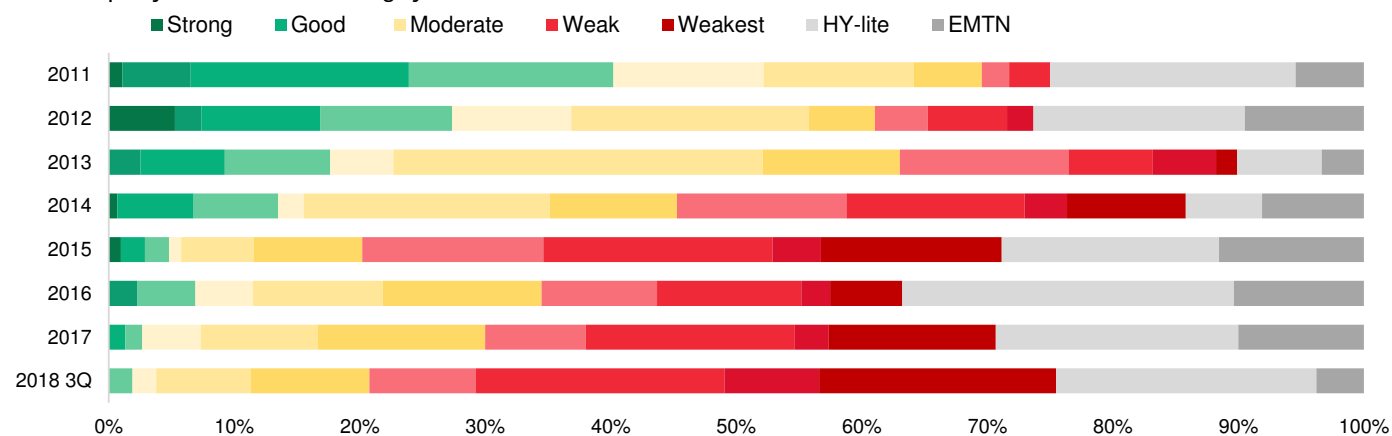
– **Senior secured bonds:** full package senior secured bonds comprised 67% of all bonds for the 3Q 2018. Unusually of the HY-lite issuers, International Game issued a senior secured bond. Historically it has been unusual for HY-lite bonds to have a security package. However, there have been a number of new Ba-rated issuers using a secured HY-lite package in 2018 including [Outokumpu Oyj](#) (B1 stable) in 2Q 2018 and [Playtech Plc](#) (Ba2 stable) in October 2018.

– **Sponsor led bonds:** 53% of the deals issued in 3Q 2018 were sponsor led bonds, exceeding the average of 39% YTD 2018.

Exhibit 25

#### Long-term trend of weakening covenant protection in high-yield bonds (EMEA)

Covenant quality scores distribution for high-yield bonds



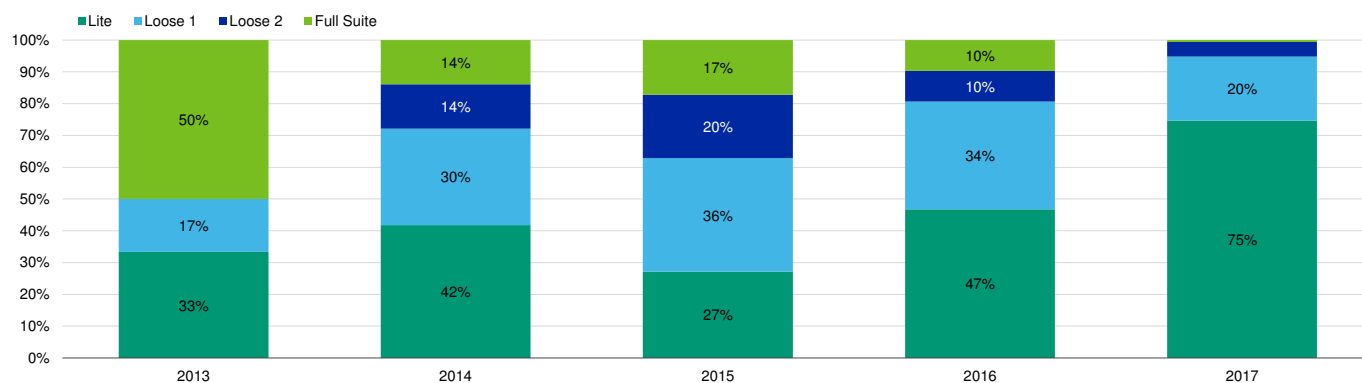
Source: Moody's Covenant Database



Exhibit 26

## EMEA leveraged loan covenants equally weakening

Level of maintenance covenants in leveraged loans (lite=no financial maintenance covenants)



Covenant-lite: absence of any financial maintenance covenant in the term loan. Covenant-loose: inclusion of one or two financial maintenance covenants in the term loan. Full maintenance covenant package (full suite): inclusion of three or more financial maintenance covenants.

Source: Moody's Investors Service

[Download covenant quality scoring criteria](#)

# Leveraged Loan Dashboards:

## Speculative-grade loan issuance (publicly rated loans and PMLRs\*)

As of 30 September 2018

Exhibit 1

### Loans remain high in September

Monthly speculative-grade issuance: bonds vs. loans

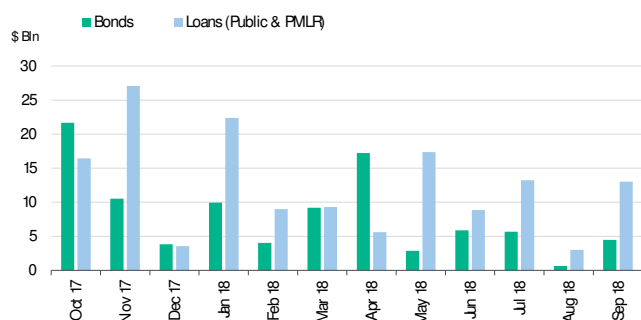


Exhibit 2

### Loans exceed bonds in YTD 2018

Cumulative speculative-grade issuance: bonds vs. loans

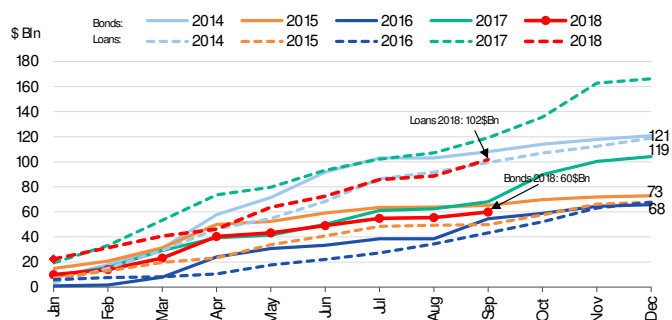
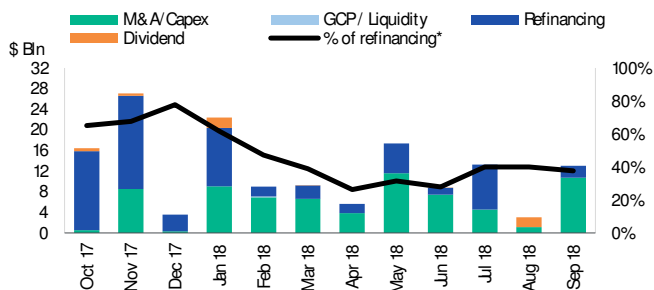


Exhibit 3

### M&A supports volumes, but lack of refi activity

Rated speculative-grade loan issuance by main purpose

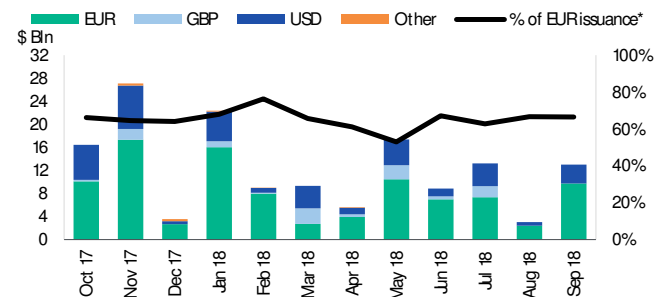


\*Quarterly trailing % of refinancing (rhs)

Exhibit 4

### Issuance across currencies, but mostly euro

Rated speculative-grade loan issuance by currency



\*Quarterly trailing % of EUR issuance (rhs)

Exhibit 5

### UK leads LTM issuance tables

Rated speculative-grade loan issuance by country

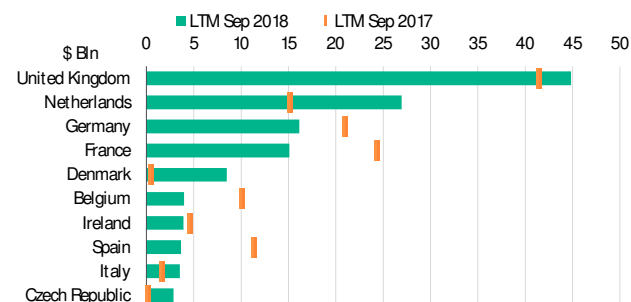
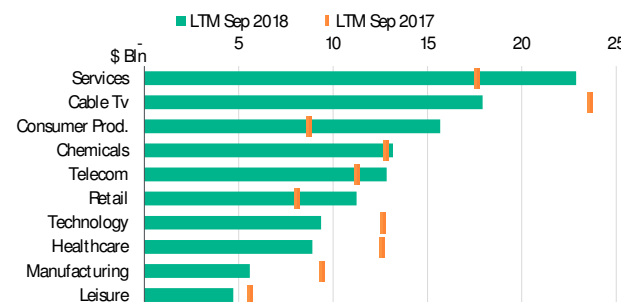


Exhibit 6

### Services most active

Rated speculative-grade loan issuance by industry



Source: Moody's Investors Service; \*PMLR = private monitored loan rating;

## Speculative-grade loan issuance (publicly rated loans and PMLRs\*)

As of 30 September 2018

Exhibit 7

### Only limited second lien issuance

Rated speculative-grade loan issuance by seniority

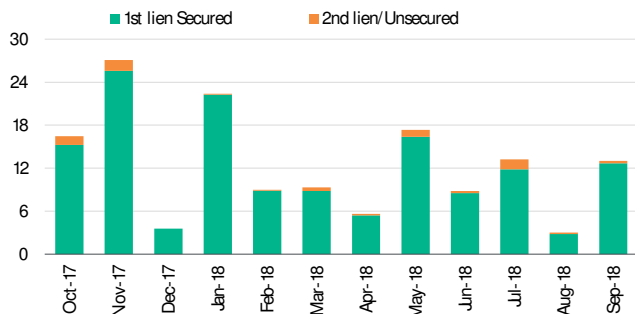


Exhibit 8

### B-rated companies lead the way

Rated speculative-grade loan issuance by Corporate Family Rating

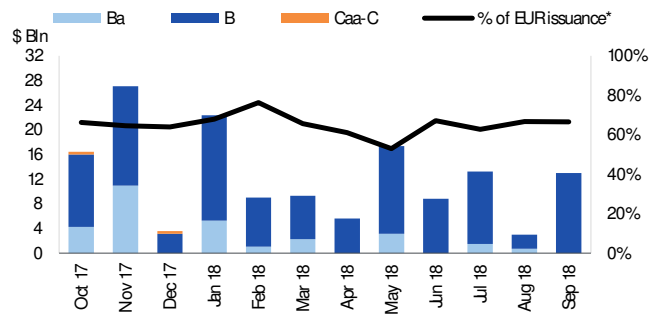


Exhibit 9

### B-rated loan segment most active

Rated speculative-grade loan issuance by instrument rating

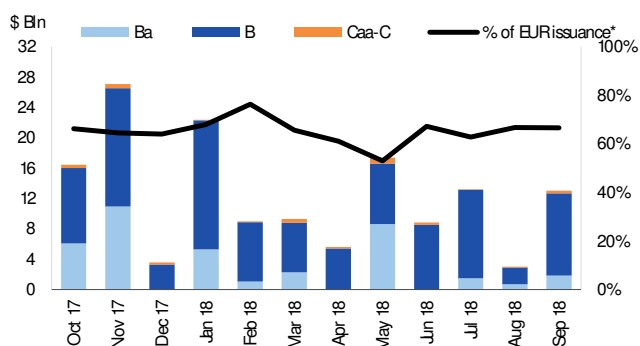
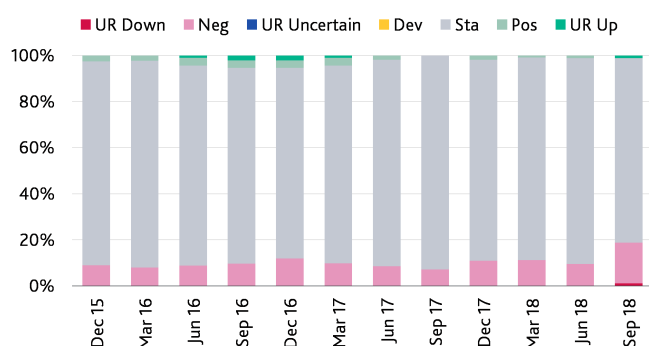


Exhibit 10

### Mostly stable outlooks but rising negative trend

Outlook distribution of PMLR universe



Quarterly trailing % of EUR issuance (rhs)

Exhibit 11

### Weakening rating levels during 2018

Distribution of PMLRs

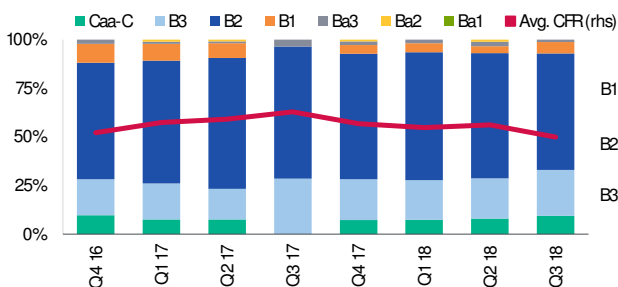
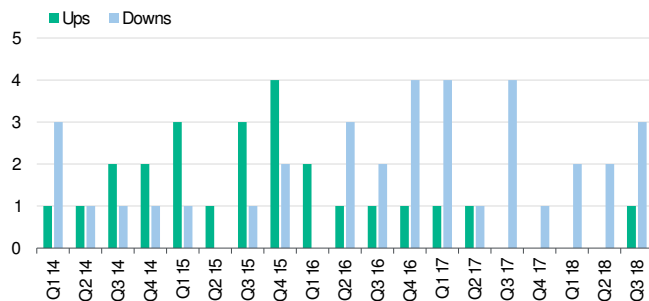


Exhibit 12

### More PMLR downgrades than upgrades

PMLR upgrades and downgrades



Source: Moody's Investors Service; \*PMLR = private monitored loan rating;

## Collateralised loan obligations

### CLOs EMEA - Sector Update - Q2 2018: CLO issuance remained healthy amid mild weakening of CLO performance and macroeconomic metrics

Access the latest [CLO Interest](#) for research around CLOs.

Excerpt from this [report](#).

**European broadly syndicated loan (BSL) collateralized loan obligation (CLO) issuance remained strong, with stable credit quality.** We rated 27 BSL CLOs that closed in Q2 2018, with total par of €10.9 billion, 1 up slightly from 25 totaling €10.6 billion in Q1 2018.

**BSL CLO performance metrics deteriorated.** The credit quality of CLO 2.0s, as measured by weighted average rating factor (WARF), worsened by 9 points to 2774 for CLO 2.0s, its highest level since the European CLO market reopened in 2013. The median exposure to Caa rated assets increased by 12 bps to 1.74%, remaining above the longterm trend, while the median default exposure remained at 0.0%. The median senior and junior over-collateralization (OC) ratios decreased slightly by 10 bps and 9 bps, respectively.

Exhibit 13

#### Moody's European CLO Credit Trends Dashboard

	2008	2009	Q1 2018	Q2 2018	LT Avg	DATA/SOURCE
MACRO/MARKET						
Euro Area Systemic Stress Indicator	0.43	0.25	0.07	0.12	0.12	European Central Bank
Equity Market Vol-FTSE100	38.9	20.3	13.75	13.71	17.2	FTSE100 Volatility Index   Bloomberg
Equity Market Vol-STOXX 50	43.9	24.1	17.44	16.63	22.5	EURO STOXX 50 Volatility Index VSTOXX   Deutsche Borse and Goldi
Leveraged Loan Prices	59.8	88.9	99.5	98.35	98.8	Thomson Reuters TRLPC Euro Top 40 Leveraged Composite
Median Single B CDS Spread (bps)	986	382	192	259.58	353	Moody's data on Single B CDS
CORPORATE CREDIT						
Liquidity Stress Indicator (LSI)	*	*	6.5%	5.1%	11.2%	Moody's Liquidity Stress Indicator
European SG default rate	8.7%	6.7%	2.8%	2.2%	2.6%	Moody's European speculative-grade default rate
B3 negative and lower	*	0.0%	8.6%	8.1%	11.7%	Moody's data on issuance rated B3 negative outlook and below
DNG/UPG Ratio	*	3.0	0.5	1.1	1.2	Moody's data on quarterly trailing Downgrade/ Upgrade ratio
CLO COLLATERAL						
CLO 2.0 Exposure to ratings = Caa	*	*	1.6%	1.7%	1.2%	Moody's data on European CLO 2.0s Median Caa Bucket
CLO 2.0 Exposure to defaults	0.0%	2.8%	0.0%	0.0%	1.5%	Moody's data on European CLO 2.0s Median Default Bucket
CLO 2.0 WARF	*	*	2765	2774	2688	Moody's data on European CLO 2.0s Median WARF Bucket

The long-term average (LT Avg) corresponds to the median of each series.

Source: Moody's Investors Service, Monthly Trustee Reports, Thomson Reuters and European Central Bank

Exhibit 14  
Moody's European CLO Credit Trends Heat Map



Source: Moody's Investors Service, monthly trustee reports, Thomson Reuters and European Central Bank

# High-Yield Bond Dashboards:

## Speculative-grade bond issuance

As of 30 September 2018

Exhibit 1

### Issuance returns in September Speculative-grade bond issuance by CFR

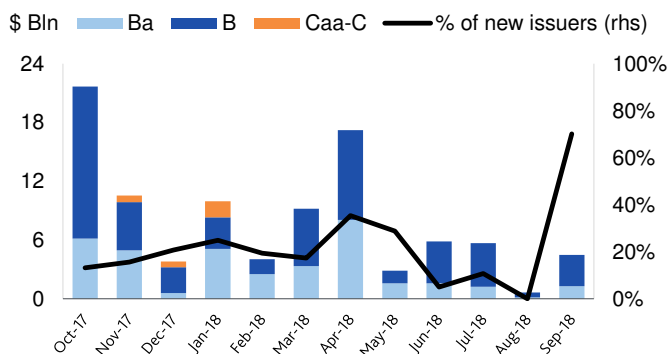
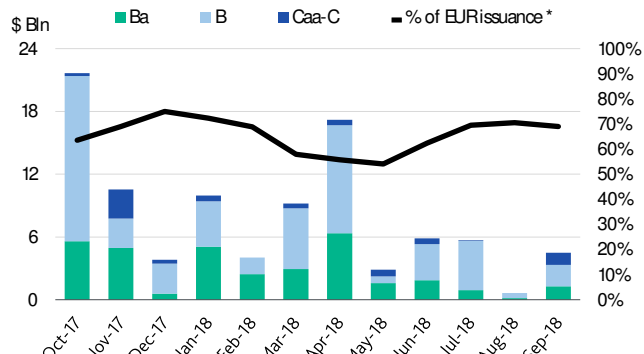


Exhibit 2

### Both B and Ba issuance up Speculative-grade bond issuance by instrument rating



\*Quarterly trailing % of EUR issuance (rhs)

Exhibit 3

### Similar YTD level compared with 2017 Cumulative speculative-grade bond issuance

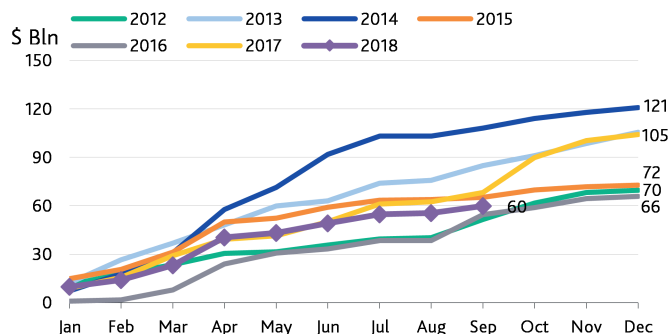
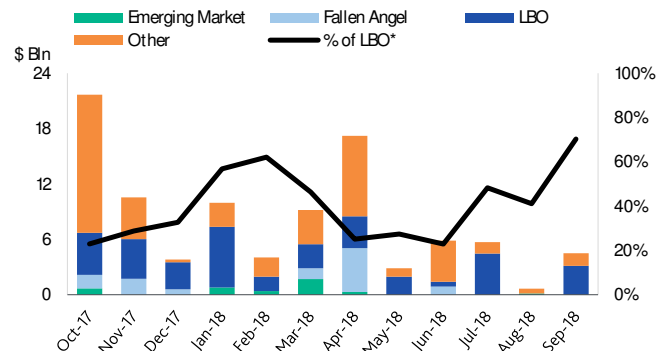


Exhibit 4

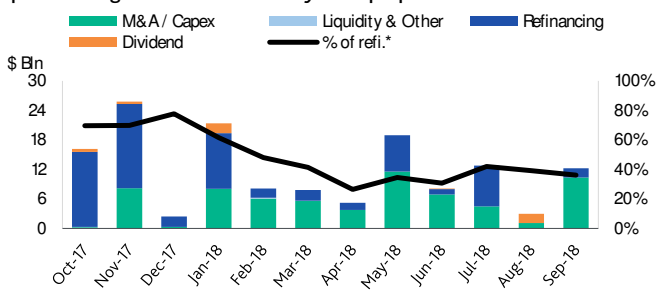
### Higher activity across the board in established markets Speculative-grade bond issuance by type



\*Quarterly trailing % LBO (rhs)

Exhibit 5

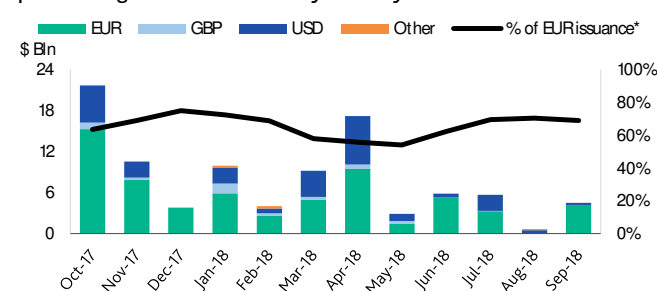
### M&A and refinancings continue to drive activity Speculative-grade bond issuance by main purpose



\*Quarterly trailing % of refinancing (rhs)  
Source: Moody's Investors Service

Exhibit 6

### Markets active accross currencies Speculative-grade bond issuance by currency



\*Quarterly trailing % of EUR issuance (rhs)

## Speculative-grade bond issuance

As of 30 September 2018

Exhibit 7

### Periphery issuance returns in September

Speculative-grade bond issuance from companies based in euro area periphery

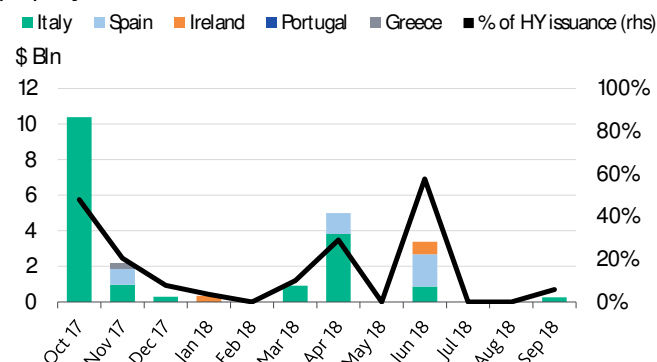


Exhibit 8

### Steady average tenor in 2017

Speculative-grade bond issuance by tenor

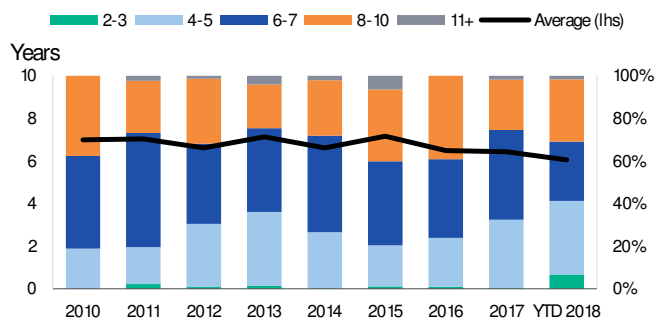


Exhibit 9

### Mostly unsecured issuance in September

Speculative-grade bond issuance by seniority

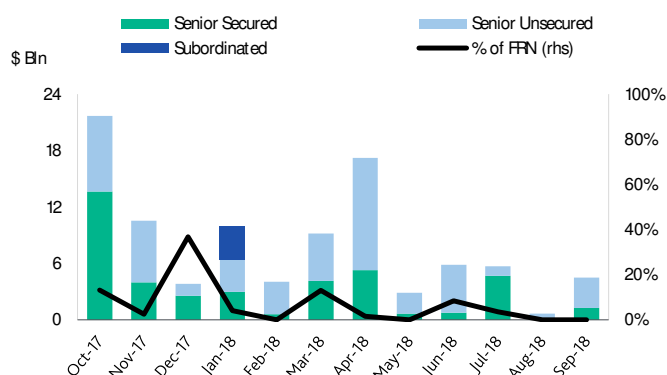


Exhibit 10

### Non call periods steady in 2017

Speculative-grade bond issuance by non-call period

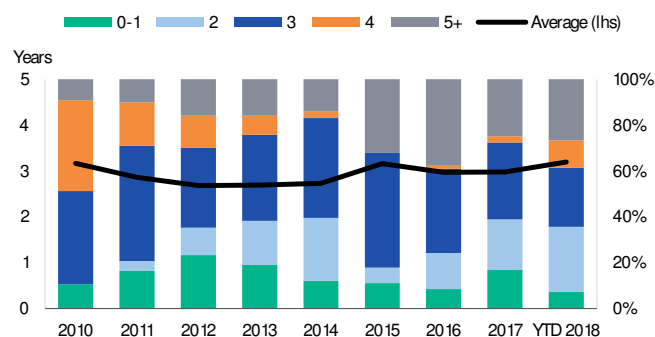


Exhibit 11

### French companies active in 2018

Speculative-grade bond issuance by country (LTM)

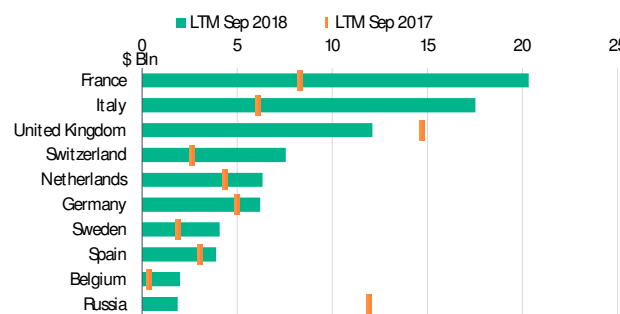
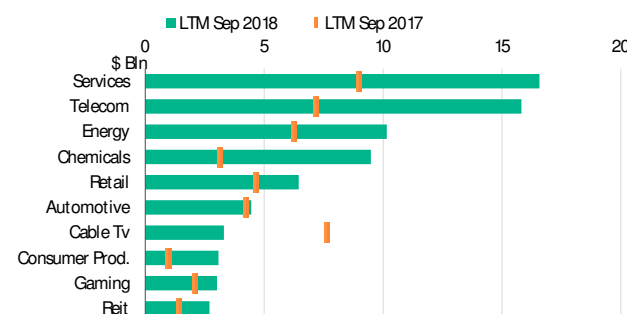


Exhibit 12

### Services/Telecom lead issuance

Speculative-grade bond issuance by industry (LTM)



Source: Moody's Investors Service, FactSet

## Selected speculative-grade bond issuance

Exhibit 13

Selected high yield bond issuance (last 12 months ending 30 September 2018)

\*Note: The colour of the current month pricing indicates month on month price and yield movement; whereby, green is a positive movement and red is negative.

										Bid Price		Yield-To-Maturity (Bid)		
Industry	Issuer Name	Country	CFR / Outlook as of 31 Aug 18	Bond rating as of instrument assignment date	Amount (mil)	Coupon	Maturity	Initial Rating Date	At initial rating	31 Aug 18	30 Sep 18	At initial rating	31 Aug 18	30 Sep 18
Aerospace	<a href="#">Pattonair</a>	United Kingdom	B3 / STA	(P)Caa1	280 USD	9.0%	Nov 2022	10 Oct 17	101.8	103.3	103.3	8.56%	8.05%	8.05%
Automotive	<a href="#">JLR</a>	United Kingdom	Ba2 / STA	Ba1	500 USD	4.5%	Oct 2027	4 Oct 17	99.6	84.6	82.0	4.55%	6.79%	7.26%
	<a href="#">Peugeot</a>	France	Ba1 / STA	Ba1	650 EUR	2.0%	Mar 2025	15 Mar 18	99.4	99.8	100.0	2.06%	1.99%	1.95%
	<a href="#">Volvo</a>	Sweden	Ba1 / STA	Ba2	500 EUR	2.0%	Jan 2025	21 Nov 17	100.6	99.0	97.9	1.86%	2.12%	2.30%
Cable Tv	<a href="#">Telenet</a>	Belgium	Ba3 / STA	Ba3	1000 USD	5.5%	Mar 2028	29 Nov 17	99.8	93.5	94.0	5.50%	6.35%	6.28%
	<a href="#">Virgin Media</a>	United Kingdom	Ba3 / STA	B1	300 GBP	5.75%	Apr 2023	20 Mar 18	100.5	102.3	102.5	5.55%	5.09%	5.05%
Chemicals	<a href="#">OCI</a>	Netherlands	Ba2 / STA	B1	650 USD	6.625%	Apr 2023	9 Apr 18	101.3	103.5	103.5	6.32%	5.74%	5.73%
				B1	400 EUR	5.0%	Apr 2023	9 Apr 18	101.6	105.0	105.4	4.57%	3.73%	3.64%
	<a href="#">Petkim</a>	Turkey	B1 / NEG	B1	500 USD	5.875%	Jan 2023	11 Jan 18	101.3	84.9	92.0	5.57%	10.20%	8.10%
	<a href="#">Syngenta</a>	Switzerland	Ba2 / STA	Ba2	750 USD	3.933%	Apr 2021	18 Apr 18	99.9	100.3	99.7	3.96%	3.82%	4.05%
				Ba2	750 USD	3.698%	Apr 2020	18 Apr 18	100.1	100.1	99.8	3.66%	3.65%	3.85%
				Ba2	1000 USD	4.441%	Apr 2023	18 Apr 18	99.4	100.3	99.4	4.58%	4.36%	4.59%
				Ba2	750 USD	4.892%	Apr 2025	18 Apr 18	97.8	99.7	98.2	5.27%	4.94%	5.23%
				Ba2	1000 USD	5.182%	Apr 2028	18 Apr 18	96.9	96.4	95.7	5.59%	5.67%	5.78%
Ba2				500 USD	5.676%	Apr 2048	18 Apr 18	94.3	92.2	89.9	6.09%	6.25%	6.45%	
Construction	<a href="#">CMC</a>	Italy	B2 / STA	B2	325 EUR	6.0%	Feb 2023	3 Nov 17	98.3	79.3	55.3	6.31%	11.91%	22.19%
	<a href="#">Dar Al-Arkan</a>	Saudi Arabia	B1 / POS	B1	500 USD	6.875%	Mar 2023	21 Mar 18	99.1	95.3	94.4	7.04%	7.98%	8.34%
	<a href="#">Saipem</a>	Italy	Ba1 / STA	Ba1	500 EUR	2.625%	Jan 2025	3 Nov 17	100.1	97.9	97.6	2.58%	2.92%	2.97%
Energy	<a href="#">Aker BP</a>	Norway	Ba1 / STA	Ba2	500 USD	5.875%	Mar 2025	12 Mar 18	101.3	103.8	103.3	5.66%	5.19%	5.28%
	<a href="#">CGG-Veritas</a>	France	B3 / STA	B2	280 EUR	7.875%	May 2023	6 Apr 18	104.3	106.6	107.0	6.80%	6.14%	6.03%
	<a href="#">Gazprom</a>	Russia		Ba1	750 EUR	2.25%	Nov 2024	9 Nov 17	100.1	97.7	98.3	2.21%	2.58%	2.48%
	<a href="#">Puma Energy</a>	Switzerland	Ba2 / STA	Ba2	750 USD	5.0%	Jan 2026	8 Jan 18	99.8	88.0	84.2	4.99%	7.02%	7.77%
	<a href="#">Seplat</a>	Sweden	B2 / STA	B2	350 USD	9.25%	Apr 2023	2 Mar 18	99.8	99.0	100.0	9.30%	9.50%	9.23%
	<a href="#">Tullow</a>	United Kingdom	B1 / STA	B3	800 USD	7.0%	Mar 2025	12 Mar 18	100.0	96.5	97.5	7.00%	7.68%	7.49%
	<a href="#">Tupras</a>	Turkey	Ba2 / NEG	Ba1	700 USD	4.5%	Oct 2024	4 Oct 17	98.7	78.5	87.6	4.70%	9.15%	7.06%
Forest Prod.	<a href="#">Pro-Gest</a>	Italy	B1 / STA	(P)B2	250 EUR	3.25%	Dec 2024	1 Dec 17	98.8	93.9	95.1	3.37%	4.28%	4.09%
	<a href="#">Stora Enso</a>	Finland	Ba1 / POS	Ba1	300 EUR	2.5%	Mar 2028	19 Mar 18	98.4	103.3	102.5	2.63%	2.07%	2.16%
Gaming	<a href="#">Gamenet</a>	Italy	B1 / STA	B1	225 EUR	3.75%	Apr 2023	16 Apr 18	100.1	96.1	97.2	4.04%	4.81%	4.65%
	<a href="#">Intralot</a>	Greece	B1 / NEG	(P)B1	500 EUR	5.25%	Sep 2024	11 Sep 17	101.0	76.2	74.0	5.05%	10.46%	11.21%
	<a href="#">LHMC Bidco</a>	Spain	B1 / STA	B2	663 EUR	6.25%	Dec 2023	15 Jun 18	100.2	103.0	103.4	6.13%	5.52%	5.42%
				B2	425 EUR	5.75%	Dec 2023	15 Jun 18	98.6	101.3	101.8	6.31%	5.74%	5.69%
				B2	550 USD	7.875%	Dec 2023	15 Jun 18	97.7	100.4	101.7	8.40%	7.76%	7.48%
Metals/Mining	<a href="#">ArcelorMittal</a>	United Kingdom		Ba1	500 EUR	0.95%	Jan 2023	4 Dec 17	99.3	98.9	98.5	1.08%	1.18%	1.27%
Packaging	<a href="#">Ardagh</a>	Ireland	B2 / STA	Caa2	350 USD	8.75%	Jan 2023	10 Jan 18	103.5	99.8	100.0	7.89%	8.82%	8.74%



Pharma	<a href="#">Stada</a>	Germany	B2 / STA	(P)B2	735 EUR	3.5%	Sep 2024	7 Sep 17	101.0	99.5	99.9	3.30%	3.53%	3.44%
Reit	<a href="#">Globalworth</a>	Romania	Ba1 / POS	Ba1	550 EUR	3.0%	Mar 2025	28 Mar 18	100.3	100.0	100.4	2.86%	2.91%	2.83%
	<a href="#">RESIDOMO</a>	Czech Republic	Ba3 / STA	Ba3	680 EUR	3.375%	Oct 2024	4 Oct 17	101.7	100.6	100.6	3.09%	3.22%	3.19%
Retail	<a href="#">Aurum</a>	United Kingdom	B2 / STA	B2	265 GBP	8.5%	Apr 2023	9 Apr 18	99.8	100.0	100.3	8.44%	8.36%	8.29%
	<a href="#">Dufry</a>	Switzerland	Ba2 / STA	Ba2	800 EUR	2.5%	Oct 2024	9 Oct 17	101.5	101.0	99.8	2.22%	2.27%	2.48%
	<a href="#">Picard</a>	France	B2 / STA	Caa1	310 EUR	5.5%	Nov 2024	4 Dec 17	100.7	94.5	94.9	5.31%	6.48%	6.40%
Services	<a href="#">Ashtead</a>	United Kingdom	Baa3 / STA	Ba2	600 USD	5.25%	Aug 2026	24 Jul 18	101.4	102.8	101.0	5.04%	4.82%	5.09%
	<a href="#">Europcar</a>	France	B1 / STA	B3	600 EUR	4.125%	Nov 2024	16 Oct 17	103.4	100.0	99.3	3.55%	4.06%	4.21%
	<a href="#">Selecta</a>	Netherlands	B3 / STA	(P)B3	765 EUR	5.875%	Feb 2024	15 Jan 18	98.7	99.6	100.6	6.08%	5.88%	5.68%
Tech. Serv.	<a href="#">Travelport</a>	United Kingdom	B1 / STA	B1	745 USD	6.0%	Mar 2026	6 Mar 18	101.0	101.8	101.6	5.84%	5.71%	5.74%
Technology	<a href="#">TeamSystem</a>	Italy	B3 / STA	B3	550 EUR	3.681%	Apr 2023	20 Mar 18	100.4	100.4	100.5	4.22%	4.03%	4.11%
Telecom	<a href="#">Interxion</a>	Netherlands	B1 / STA	B1	1000 EUR	4.75%	Jun 2025	6 Jun 18	100.8	104.1	104.8	4.58%	4.00%	3.89%
	<a href="#">SFR</a>	France	B1 / NEG	B1	1750 USD	8.125%	Feb 2027	18 Jul 18	101.8	101.5	103.0	7.84%	7.87%	7.63%
	<a href="#">Telecom Italia</a>	Italy	Ba1 / STA	Ba1	1250 EUR	2.375%	Oct 2027	10 Oct 17	101.9	93.7	94.0	2.13%	3.13%	3.09%
				Ba1	750 EUR	2.875%	Jan 2026	25 Jun 18	100.3	99.4	99.6	2.78%	2.92%	2.89%
	<a href="#">Wind</a>	Italy	B1 / STA	B1	2000 USD	5.0%	Jan 2026	18 Oct 17	99.7	89.4	87.0	5.01%	6.74%	7.24%
				B1	1750 EUR	3.125%	Jan 2025	18 Oct 17	99.9	93.4	91.3	3.13%	4.26%	4.68%
				B1	1630 EUR	2.625%	Jan 2023	18 Oct 17	100.1	95.7	94.3	2.57%	3.65%	4.03%
				B1	2250 EUR	2.75%	Jan 2024	18 Oct 17	100.4	94.4	93.3	3.00%	4.18%	4.52%
Transp. Serv.	<a href="#">GSL</a>	France	B3 / STA	B3	360 USD	9.875%	Nov 2022	20 Oct 17	102.5	100.8	99.5	9.08%	9.56%	10.06%
	<a href="#">Navios Holdings</a>	Greece	B3 / STA	Caa2	305 USD	11.25%	Aug 2022	6 Nov 17	96.3	95.0	91.0	12.33%	12.89%	14.34%
Utility	<a href="#">Eskom</a>	South Africa		B3	500 USD	8.45%	Aug 2028	8 Aug 18	101.7	99.9	100.0	8.20%	8.46%	8.45%
Whlsl Dstrbtn	<a href="#">Rexel</a>	France	Ba2 / STA	Ba3	500 EUR	2.125%	Jun 2025	6 Nov 17	98.8	97.7	97.7	2.27%	2.45%	2.45%

Source: Moody's Investors Service, FactSet (maturity, coupon, amount issued, bid price and yield to maturity)

## Further exhibit definitions

Exhibit 14

Exhibit	Definition
Exhibits 4-9 Pages 20-21	Speculative grade liquidity Speculative grade liquidity scores of high yield corporate issuers rated by Moody's in EMEA. Download our special comment on SGL Ratings Type and country have the same meaning as in high yield bond issuance.
Exhibits 10-15 Page 22	High yield universe Overview of the development of high yield corporate issuers rated by Moody's in EMEA. » Average corporate family rating (CFR) is a simple arithmetic average of all Moody's rated issuers in EMEA. » Type and country have the same meaning as in high yield bond issuance. » CDS spreads are monthly median spreads for European corporates with a Moody's rating.
Exhibits 16-21 Page 23	High yield financial metrics Selection of median financial metrics by rating category and reporting period. Figures are adjusted based on Moody's standard methodologies and sourced from Moody's Financial MetricsTM.
Exhibits 1-12 Pages 27-28 Exhibits 1-12 Pages 31-32	Speculative grade loan issuance and high yield bond issuance Monthly issuance of speculative grade loans (publicly-rated and unpublished monitored) and high yield corporate bonds rated by Moody's in EMEA. Issuance is recorded at the date on which Moody's assigns a rating to the instrument. Historical data may change over time as a result of corrections for deals that have been assigned a provisional rating. » Percentage of new issuers and percentage of issuance denominated in euro are volume weighted. » Type comprises Fallen Angels (any issuers historically rated investment grade), LBOs (issuers based in western Europe and owned by a private equity sponsor), Emerging Markets (issuers with operations in eastern Europe, Middle East or Africa), and Others (any issuers that could not be classified in the aforementioned categories). » Amounts for issuance by main purpose are calculated based on the primary purpose reported by the issuer. » Country corresponds to domicile except for issuers incorporated in low tax jurisdictions (e.g. Luxembourg, Cayman Islands, etc) for which the actual location of the headquarters has been used instead.
Exhibits 13-15 Pages 29-30	European CLOs Moody's key indices for CLOs are based on Moody's global EMS data, using trustee reported figures for Moody's rated CLOs. WARF is a median of weighted average rating factors for all CLO deals. Caa basket levels and collateral default levels are medians of the respective trustee reported levels as a percentage of the notional of collateral outstanding for all CLOs. Because Caa basket levels and collateral default levels are trustee reported, they account for non-publicly rated collateral.
Exhibit 13 Pages 33-34	Selected high yield bond issuance (last twelve months) Selection of year to date high yield bond issuance rated by Moody's in EMEA. Maturity, coupon, amount issued, bid price and yield to maturity are sourced from FactSet based on the respective fields: MATURITY, CPN, AMT_ISSUED, PX_BID and YLD_YTM_BID. Where the rating date occurred prior to the issuance date, the first date on which trading prices are available is used instead. Financial metrics are adjusted based on Moody's standard methodologies and sourced from Moody's Financial MetricsTM.

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