High Yield Interest

Rate this Research

CONTACTS

Kristin Yeatman +44.207.772.5213 VP-Senior Analyst kristin.yeatman@moodys.com

Peter Firth +44.20.7772.5222 Associate Managing Director peter.firth@moodys.com

Sandra Veseli +44.20.7772.5593 MD-Corporate Finance sandra.veseli@moodys.com

Richard Etheridge +44.20.7772.1035 Associate Managing Director richard.etheridge@moodys.com

» Contacts continued on last page

KEY LINKS

» Contact us via email

Related Moody's research

- » High-yield chart and data library
- » <u>HY interest European edition</u> (previous)
- » <u>B3 negative and lower ratings</u> (EMEA)
- » <u>An overview of sector credit trends</u> (EMEA)
- » SGL monitor (all regions)
- » <u>LevFin interest North America</u> edition
- » HY interest Asian edition
- » CLO interest
- » SME and mid-cap focus

FEATURE ARTICLES

| Market momentum resumes in September | 2 |
|--|----|
| Global Macro Outlook: 2018-19 | 4 |
| German issuance to slide after strong start to 2018 | 6 |
| Debt-funded M&A wave weighs on payment service companies' metrics | 8 |
| Global tourism growth will support travel services companies' credit quality | 9 |
| What to look out for with IFRS 16 | 10 |

MARKET SNAPSHOT

Exhibit 1

More downgrades than upgrades in July -August 2018 Spec-grade downgrade/upgrade trends

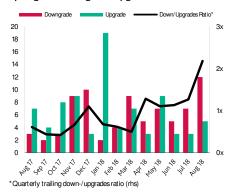
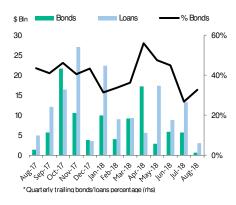


Exhibit 2

Strong loan issuance in July - August 2018 High-yield bond & leveraged loan volumes



| IN THIS ISSUE | | |
|-----------------------------------|----|--|
| Research Highlights: | 12 | |
| Issuance & Rating Actions: | 14 | |
| Stress Indicators & Surveillance: | 17 | |
| Leveraged Loan Dashboards | 26 | |
| | | |



Market momentum resumes in September

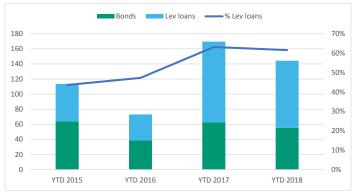
Strong loan issuance in July but high yield bond issuance remains flat

Leveraged loans remained active in July reaching \$13 billion, with bond volume significantly lower at \$6 billion. Total issuance of \$19 billion for July was essentially flat compared with July 2017, however the mix varied, and bonds represented less than 50% of loans this year to date as compared to exceeding loans by 122% in 2017 for the same period. August was very quiet for both loans and high yield bonds, and the July/August combined volumes were \$22 billion versus \$26 billion in 2017. We expect momentum in the first half of the year to resume in September, particular for leveraged loans, but not as vigorously as it did in 2017.

As shown in Exhibit 1 below, 2017 and 2018 stand out on a YTD basis in terms of loan volumes, but bonds show similar levels in all years apart from 2016. With combined issuance of \$144 billion YTD 2018, compared to \$170 billion YTD 2017 the proportion of issuance compared with the prior year is around 85%, similar to where it was at H1. We therefore continue to expect leveraged finance issuance to reach around \$230 billion for the full year 2018, c. \$40 billion short of the \$270 billion issued in 2017.

Exhibit 1

Leveraged finance volumes are unlikely to reach 2017 levels Total leveraged loan and high yield bond issuance January - August



Source: Moody's Investors Service

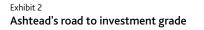
First time ratings remain prominent for loans, reflecting continuance of a steady trend of M&A activity, with a reasonable mix of industries and geographies. The largest new issue transactions included several financings with senior and subordinated debt tranches. Luxembourg-based visa applications processing group <u>Kiwi VFS SUB I S.a.r.l.</u> (VFS, B2 stable) issued a \$796 million 1st lien loan and a \$74 million 2nd lien loan for refinancing and acquisitions, while French roofing materials company <u>LSF10 Impala Investments S.a.r.l.</u> (Impala, B1 stable) issued a \$676 million 1st Lien and a \$117 million 2nd Lien to fund its acquisition by Lone Star. Repeat issuer <u>Optimus</u> (Averys, B2 stable), the French storage systems manufacturer, also issued a senior and subordinated debt package (\$467 million 1st Lien and \$99 million 2nd Lien) for its acquisition by Blackstone. German fire protection solutions manufacturer <u>Minimax Viking Gmbh</u> (B1, stable) issued \$1.2 billion of senior loans, which was partly for the purpose of funding a c. €553 million share buyback. The largest transactions included <u>Auris Luxembourg IIS.A.</u> (Siemens Audiology, B2 negative) with a \$3.1 billion refinancing issue, and <u>Avast</u> (Ba3 stable) with a \$1.5 billion issue for acquisitions and refinancing. Bonds were mostly repeat issuers, dominated by the \$2,911 million issue form <u>Altice France S.A.</u> (SFR, B1 negative) which also issued a \$2.5 billion loan to refinance existing bonds in July.

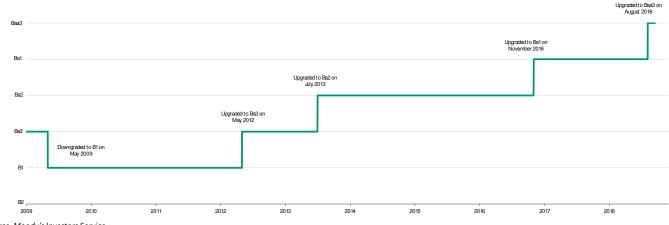
France was the most popular country of issuance clocking up 10 transactions in the period, while the UK remained busy with seven. The other 13 transactions were well mixed across other EMEA geographies, including Germany, South Africa, Russia and the Netherlands.

Downgrades exceeded upgrades in the period, 19 to eight, in part driven by the Sovereign action on Turkey which accounted for 58% of the downgrades. In connection with the sovereign action on Turkey Moody's published the following two articles on 11/09/2018: "Most <u>Rated Turkish Corporates can handle Refinancing Risks</u>" and "Non-Financial Corporates – Turkey: Showing Resilience". Downgrade volume is also being driven by the woes of the UK retail sector. <u>House of Fraser (</u>WR) was downgraded to Caa2 from Caa1 and subsequently defaulted, first with a distressed exchange following the amend and extend transaction completed through a Scheme of Arrangement in the English and Scottish courts, and subsequently when the planned sale of the company didn't materialise

administrators were appointed the CFR rating was downgraded to C and withdrawn. <u>Debenhams plc (B2</u>, negative) was downgraded from B1 stable.

Of the eight rating upgrades in July/August, there was one upgrade to investment grade, <u>Ashtead Group plc</u> (Baa3, stable). Following a downgrade to B1 in connection with the financial crisis in 2009, the company has continued to enhance its credit profile through profitable growth and deleveraging to achieve ratings upgrades.





Source: Moody's Investors Service

Activity so far in September has been reasonably positive, especially loans, with the particularly large €5.1 billion of debt for the <u>Akzo</u> <u>Nobel</u> ((P)Baa1, P2 stable) spin-out, <u>Starfruit</u> (B2 stable), being launched and €1.9billion of debt for <u>SIG's</u> (B2 RUR) planned IPO and refinancing, but overall market volatility remains mainly due to the trade tariff "war" and Brexit concerns. <u>Jaguar Land Rover</u> (Ba2 stable) is being hit by both of these concerns and had to trim its recent bond offering to €500 million from €700 million.

Global Macro Outlook: 2018-19

Originally published on 22 August 2018

Summary

We see early indications that global growth has peaked. Growth prospects for many of the G-20 economies remain solid, but there are indications that the synchronous acceleration of growth heading into 2018 is now giving way to diverging trends. 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 emerging headwinds from rising US trade protectionism, tightening external liquidity conditions and elevated oil prices. We expect the G-20 countries to grow 3.3% in 2018 and 3.1% in 2019. The advanced economies will grow 2.3% in 2018 and 2.0% in 2019, while G-20 emerging markets will remain the growth drivers, at 5.1% in both 2018 and 2019 (see Exhibit 1).

Exhibit 1

| Global macroeconomic outlook for G-20 countries, 2018-19 |
|--|
| (August 2018 Update) |

| Economies | Real GDP Growth % | | | Inflation % c | lation % change (Dec/Dec) 2 | | | | Unemployment Rate % | | | | Monetary policy | | | |
|---------------|-------------------|---|--------------|---------------|-----------------------------|------|------|------------------|------------------------|------|------------|------|--------------------|----|--------|--|
| | 17 | -1.0 0.0 2.0 3.0 3.0 5.0 6.0 6.0 6.0 7.0 | ଛ 18F | 19F | Target | 16 | 17 | 18F | 19F | 16 | 17 | 18F | 19F | | 18F | |
| G-20 Advanced | 2.2 | | 2.3 | 2.0 | | | | | | | | | | | | |
| US | 2.3 | | 2.9 | 2.3 | 2.0% | 2.1 | 2.1 | 2.3 | 2.1 | 4.9 | 4.4 | 4.0 | 4.0 | | | |
| Euro area 1 | 2.5 | | 2.1 | 1.8 | 2.0% | | | | | | | | | ▼ | | |
| Japan | 1.7 | | 1.1 | 1.0 | 2.0% | 0.3 | 1.1 | 0.9 | 2.5 | 3.1 | 2.9 | 2.6 | 2.6 | | | |
| Germany | 2.5 | | 2.2 | 1.7 | 2.0% | 1.7 | 1.7 | 2.2 | 2.2 | 4.1 | 3.8 | 3.4 | 3.2 | | | |
| UK | 1.7 | | 1.3 | 1.6 | 2.0% | 1.8 | 2.7 | 2.3 | 2.0 | 4.8 | 4.3 | 4.2 | <mark>4.</mark> 3 | | | |
| France | 2.2 | | 1.8 | 1.8 | 2.0% | 0.6 | 1.2 | 2.3 | 1.8 | 10.1 | 9.4 | 8.8 | 8.3 | | | |
| Italy | 1.5 | | 1.2 | 1.1 | 2.0% | 0.5 | 0.7 | 1.4 | 1.6 | 11.7 | 11.3 | 11.0 | 10.8 | | | |
| Canada | 3.0 | | 2.1 | 1.9 | 2.0% (+/-1.0%) | 1.5 | 1.9 | 2.1 | 2.0 | 7.0 | 6.3 | 5.9 | 5.9 | | | |
| Australia | 2.3 | | 2.9 | 3.0 | 2.0%- 3.0% | 1.5 | 1.9 | 2.3 | 2.5 | 5.8 | 5.6 | 5.6 | 5.5 | | | |
| South Korea | 3.1 | | 2.9 | 2.6 | 2.0% | 1.3 | 1.5 | 1.6 | 2.0 | 3.7 | 3.7 | 3.6 | 3.3 | | | |
| G-20 Emerging | 5.3 | | 5.1 | 5.1 | | | | | | | | | | | | |
| China | 6.9 | | 6.6 | 6.4 | 3.0% | 2.1 | 1.8 | 2.5 | 2.8 | | | | | | | |
| India | 6.7 | | 7.3 | 7.5 | 4% (+/-2.0%) | 3.9 | 4.3 | 4.9 | 5.0 | | | | | ▼ | | |
| Brazil | 1.0 | | 1.8 | 2.0 | 4.5% (+/-1.5%) | 6.3 | 2.9 | 4.0 | 4.5 | | | | | ▼ | | |
| Russia | 1.5 | | 1.6 | 1.5 | 4.0% | 5.4 | 2.5 | <mark>4.0</mark> | 4.0 | | | | | ▼ | | |
| Mexico | 2.0 | | 2.3 | 2.5 | 3.0% (+/-1.0%) | 3.4 | 6.8 | 4.1 | 3.7 | | | | | | | |
| Indonesia | 5.1 | | 5.2 | 5.2 | 4.0% +/-1.0% | 3.0 | 3.6 | <mark>3.5</mark> | 3.8 | 5.6 | 5.4 | 5.2 | 5.0 | ₹. | | |
| Turkey | 7.4 | | 1.5 | 1.0 | 5.0% (+/-2.0%) | 8.5 | 11.9 | 20.0 | 14.0 | | | | | | | |
| Saudi Arabia | -0.7 | | 1.3 | 1.5 | | 1.2 | -0.9 | 4.1 | 2.0 | | | | | | | |
| Argentina | 2.9 | | -1.0 | 1.0 | 25-9%/15-9% 3 | 40.0 | 24.8 | 32.0 | 22.0 | | | | | ▼ | | |
| South Africa | 1.3 | | 1.5 | 1.8 | 3.0% - 6.0% | 7.1 | 4.5 | 5 .1 | 5.3 | | | | | ▼ | | |
| G-20 All | 3.3 | | 3.3 | 3.1 | | | | | | | | | | | •••••• | |

A deterioration (downward adjustment) from May 2018 Global Macroeconomic Outlook.

Maintain current policy

1. G-20 Euro Area forecasts include 19 countries. 2. CPI for Euro Area reflects average. 3. The authorities are using the inflation band based on numerical guideline. Source: Moody's Investors Service

US trade tensions with China will worsen this year, weighing on global growth in 2019. Our base case now assumes that the US administration will go forward with some of the proposed additional restrictions on imports from China. Further tariffs, similar in magnitude to the newly proposed 25% US tariffs on \$200 billion of imports from China and 25% US tariffs on all auto and auto part imports, represent a disruptive downside risk to our baseline forecasts.

Exhibit 2

World Trade Volume World Trade Volume: 3 Months moving average 6 5 4 YoY % Change 3 2 1 0 -1 2015 2016 2017 2014 2018 2019

An escalation of the trade dispute risks dampening trade growth % change year-over-year

Source: CPB World Trade Monitor

» Elevated oil prices, mounting trade tensions and tightening of financial conditions already weigh on economic activity in many major emerging market countries. External headwinds constrain near-term economic prospects in Turkey, Argentina and Brazil. In contrast, for India and Indonesia, robust domestic growth drivers and a build-up of financial buffers in recent years have conferred a degree of stability amid external headwinds. Overall, emerging market countries remain inherently vulnerable to the risk of capital outflows associated with tightening global liquidity as advanced economy central banks reverse their quantitative easing measures. Escalating trade frictions further add to overall uncertainty. Those with weak fundamentals and relatively shallow, but open, capital markets are particularly vulnerable.

German issuance to slide after strong start to 2018

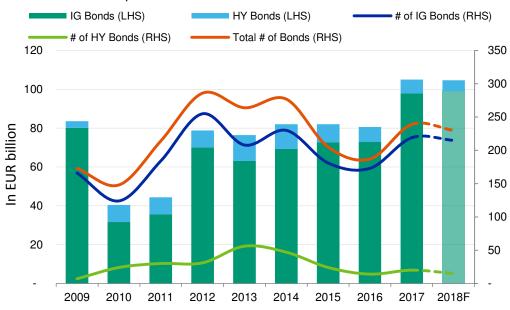
Originally published on 13 August 2018

We expect German bond issuance to remain robust in 2018, but be below last year's record of €105 billion. Although

continued low interest rates will support demand, the expected phase out of the European Central Bank's (ECB) Corporate Sector Purchase Programme (CSPP) by this December is likely to dampen issuance volumes.

Exhibit 1

German corporate bond issuance hit a record high in 2017 (Issuance volumes since 2009)



Source: Dealogic, Moody's Investors Service

Loan issuance to slow down in the second half of the year. In the first half of 2018 German loan issuance hit €88 billion, up 91% from the €46 billion issued during the same period last year. However, market volatility amid rising global trade tensions, the expectation of tighter monetary policy from the ECB and the approach of Brexit will likely lead to a decline in issuance in the second half of this year and into early 2019.

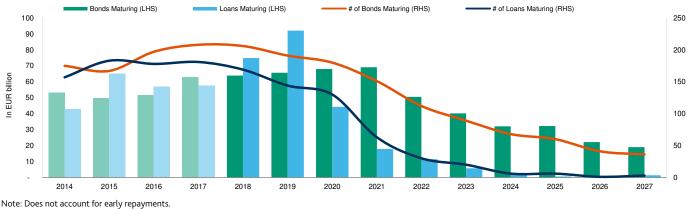
Corporate Schuldschein (SSD) market volumes to fall well below the record set last year, but 2019 could herald a recovery. Last year SSD issuance hit \in 27 billion. While several recent credit events appear to have given investors' pause and depressed issuance, we think the market is likely to pick up in the second half of the year and into 2019. The simplicity, flexibility and diversification that SSDs offer will continue to make them an attractive source of funding to investors and issuers.

The German green bond market is poised for continued growth. Although issuance by non-financial corporates continues to be only a small part of the German green bond market, we are seeing signs of growth that we expect to accelerate in the coming years. Rising demand for eco-friendly projects as big corporations continue to implement sustainable business practices and government commitments to climate-friendly policies and other environmental initiatives will spur further market expansion.

The automotive and chemicals sectors will continue to drive bond issuance in 2018. In the second quarter of 2018 Bayer AG (Baa1 negative) concluded the refinancing of its \$63 billion Monsanto acquisition by placing \$15 billion and €5 billion of bonds. We foresee large repeat issuers from the auto sector because their captive finance operations usually issue bonds with short maturities of one to three years.

Exhibit 2

German corporates face around €140 billion in bond and loan maturities in 2018 (Total value of German corporate bonds and loans by maturity year)

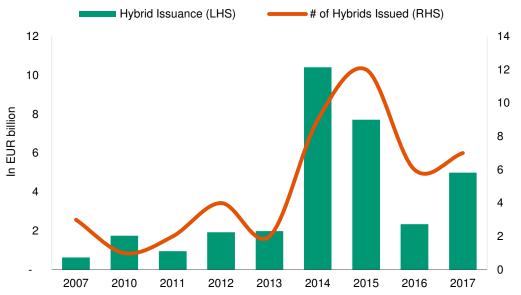


Source: Dealogic, Moody's Investors Service

» German hybrid issuance to stay robust in 2018. Last year German corporate hybrid issuance was the strongest in Europe and market activity continued to be solid in the first half of 2018. We expect continued low interest rates, investors' appetite for some additional yield and upcoming maturities to support demand for hybrid issuance.

Exhibit 3

Hybrid issuance more than doubled in 2017 compared to 2016 (German corporate hybrid issuance since 2007)



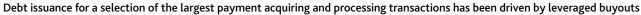
Source: Dealogic, Moody's Investors Service

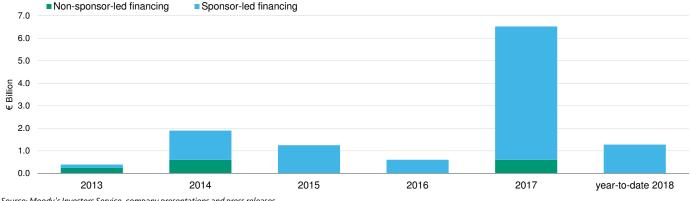
Debt-funded M&A wave weighs on payment service companies' metrics

Originally *published* on 19 July 2018

Sustained M&A will drive debt issuance in the payment acquiring and processing industry in Europe. We expect large volumes of issuance over the next five years as a result of new M&A opportunities. The ability of buyers to fund their investments with a high debt component due to the sector's good growth prospects will weigh on companies' credit metrics. Recent deals include the acquisitions of Concardis Payment Group by Nets A/S and iPayment by PI UK Holdco II Limited (Paysafe, B2 stable).

Exhibit 1





Source: Moody's Investors Service, company presentations and press releases

The sector's high fragmentation is one of the main catalysts for M&A. There are more than 50 merchant acquirers operating in the euro area, mostly focused on their domestic markets, while about half of the issuing and acquiring processing volumes are still handled by individual banks. Pan-European consolidation, which has been eased by regulatory changes aimed at harmonising payment standards, will create European champions looking for geographical diversification and economies of scale.

M&A will continue to be an attractive alternative to capital spending to enhance product offerings. The industry is capital intensive with large investments required to update platforms to accommodate the growing number of payment methods, regulatory changes and demand for value-added services. In this rapidly evolving environment, payment acquirers and processors will rely partly on acquisitions to keep their products competitive and fend off innovative start-ups.

M&A will enable payment acquirers and processors to circumvent high barriers to entry for new markets. The merchant acquiring industry's high barriers to entry reflect the need to build partnerships with banks and intermediaries for the distribution of services and local regulatory hurdles, among other factors. Barriers are even higher in the issuing processing sector, where long-term contracts and low customer churn make it difficult to displace incumbents. M&A is often the quickest and most cost-effective way to expand operations.

Strong organic growth underpinned by ongoing shift to cards from cash will complement M&A. We expect the volume of card transactions in Europe will continue to grow at above mid-single digit rates over the next five years. Volumes will be driven by changing consumer habits, new technologies, the development of e-commerce and the sharing economy, as well as a positive regulatory framework. Growth rates will differ depending on the relative maturity of the country of operations and the position of the service providers within the payment value chain.

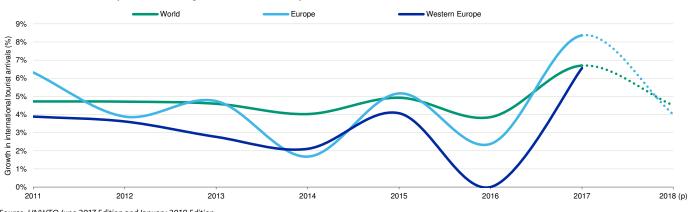
Global tourism growth will support travel services companies' credit quality

Originally published on 14 September 2018

Summary

Continued global tourism growth will support travel services companies' credit quality. Sales will be supported by steady macroeconomic growth prospects and continued traveler inflows from emerging markets. We expect visitor numbers to Europe to continue to grow in the next 12-18 months, although not as much as in 2017. This growth will support the sales and profit of the travel related services companies we rate.

Exhibit 1



Visitor numbers to Europe continue to grow, but at a slower pace than in 2017

Source: UNWTO June 2017 Edition and January 2018 Edition

Increasing exposure to emerging markets will drive profit growth and will help offset potential decline in individual markets. Companies like Global Blue Finance S.à.r.l. (B1 positive), Franklin UK Midco Limited (Planet, B2 stable) and Dufry AG (Ba2 stable) benefit from a growing number of customers from emerging markets as economic growth in these markets continues and disposable incomes rise. This also translates into increased geographical diversification which will help smooth out potential shifts in travel demand

Emergence of new technologies, digitalisation and direct booking pose competitive threats and long term risks to the travel industry. Companies will strive to further diversify their activities and make capital investment, and possibly acquisitions, to remain competitive. This may delay deleveraging and curb free cash flow generation, ultimately constraining credit quality improvement.

Travel services sector bonds will continue to have weaker covenant quality scores (CQS) than the rest of the European market. This is partly because 45% of bond issuance is unsecured, compared with 37% of full package bonds in the wider European market. Unsecured deals frequently have weak or weakest covenant protection in the structural subordination risk category, including two-thirds of the unsecured travel sector bonds in our analysis

What to look out for with IFRS 16

Originally <u>published</u> on 25 July 2018

International Financial Reporting Standard 16 (IFRS 16) replaces International Accounting Standard 17 (IAS 17) for periods commencing on or after 1 January 2019, but judging the likely effect of bringing off-balance-sheet leases onto the balance sheet is tricky because:

Some existing "leases" may not be leases after all. IFRS 16 contains new guidance on how to determine whether a contract is (or contains) a lease. When ITV plc (Baa3 stable) assessed certain of its contracts under the new approach, future minimum lease payments were reduced by 72%

Certain leases may have a different duration to the term currently intimated. IFRS 16 contains new guidance on how to ascertain the duration of a lease when the lessee has an option to extend or terminate the arrangement. The early adoption of IFRS 16 by Play Communications S.A. (Play, Ba3 stable) revealed a future cash outflow for leases at the end of 2015 that was 141% higher than the amount disclosed under IAS 17.

Free cash flow (FCF) will be higher unless the company revises its definition of the metric. When Deutsche Post AG (A3 stable) adopted IFRS 16 ahead of schedule in the three months to 31 March 2018, a cash outflow from leases totalling \leq 487 million was excluded from operating cash flow (before net interest paid). This prompted the company to revise its definition of FCF to include the repayment of lease liabilities (\leq 398 million) and interest paid on lease liabilities (\leq 89 million) totalling \leq 487 million.

Exhibit 1

Deutsche Post amended its definition of FCF in 2018 to include the cash outflow from leases

Calculation of free cash flow Q1 2017 Q1 2018 €m Net cash from operating activities 90 368 Sale of property, plant and equipment and intangible assets 51 22 Acquisition of property, plant and equipment and intangible assets -535 -557 -484 -535 Cash outflow from change in property, plant and equipment and intangible assets 0 0 Disposals of subsidiaries and other business units Disposals of investments accounted for using the equity method and other investments 0 0 -4 -2 Acquisition of subsidiaries and other business units -23 -17 Acquisition of investments accounted for using the equity method and other investments Cash outflow from acquisitions/divestitures -27 -19 Repayment of lease liabilities -398 Interest on lease liabilities --89 Cash outflow from leases -487 -10 12 Interest received Interest paid (not including leases) -19 -18 Net interest paid -9 -6 Free cash flow -430 -679

Source: company annual reports for 2015 and 2016

FCF is a "non-GAAP" metric and although many companies (like Deutsche Post in Exhibit 6) include interest paid in the calculation, repayments of debt principal are usually excluded. However, Deutsche Post noted that "without an adjustment of its definition, this would have had a significant impact on free cash flow, a performance indicator that is relevant for internal management purposes ...". With this in mind, the company decided that "for reasons of comparability, we have therefore included interest payments and repayments of lease liabilities in free cash flow."

The measurement of the lease liability will be affected by the transition option chosen by the company. Yields on intermediate-term Euro-denominated bonds rated Baa, for example, are currently about 210 basis points lower than five years ago. As a result, the lease liability calculated under the modified retrospective approach will usually be higher than the outcome under the full retrospective approach. The former approach uses the company's incremental borrowing rate at the start of the accounting period in which IFRS 16 is first applied, whereas the latter uses the discount rate applicable at commencement of the lease (unless a reassessment of the rate has been triggered).

Some of the amounts payable by the lessee will not be captured on the balance sheet. A lessee may elect not to capitalise short-term leases, and leases for which the underlying asset is of low value. Certain variable lease payments will also be excluded from the measurement of the lease liability. In the three months to 31 March 2018, Deutsche Post recorded an expense of €197 million in relation to payments that were legitimately excluded from the lease liability reported on the balance sheet under IFRS 16.

Research Highlights:

Selected speculative-grade relevant research

New issuers

In July and August, we published initial reports on the following newly rated companies: Netherlands-headquartered active pharmaceutical ingredients and finished dosage forms B2B supplier <u>DSM</u> (B2, Stable), France-headquartered clay roof tiles provider <u>Impala</u> (B1, Stable), France-based private higher education group <u>Insignis</u> (B2, Stable), England-based provider of business critical software solutions <u>IRIS</u> (B2, Stable), Bremen-headquartered insulation, access solutions, surface protection and passive fire protection (IASP) provider <u>KAEFER</u> (Ba3, Stable), Zurich-headquartered automotive supplier <u>Kongsberg</u> (Ba3, Stable), UK-based infrastructure services provider <u>MGS</u> (B2, Stable), Norway-based satellite communication services provider <u>Marlink</u> (B3, Stable), Netherlands-based holiday park operator <u>Roompot</u> (B2, Stable), and Luxembourg-based visa application processor <u>VFS</u> (B2, Stable).

Issuer comments

Selected issuer comments included the following credit positive reports:

- » Fabric (BC) S.p.A.: Higher prices offset substantial cost inflation; a credit positive
- » TransContainer PJSC and Global Ports Investments Plc: Acquisition of terminal is credit positive for both parties
- » Petro Welt Technologies AG: Loan extension will strengthen liquidity and financial flexibility, a credit positive
- » Air Newco 5 S.A.R.L.: Advanced's acquisition of Docman and add-on term loan are modestly credit positive
- » Heidelberger Druckmaschinen AG: Heidelberg's first quarter results are credit positive
- » Leonardo S.p.a.: Leonardo's H1-18 results are credit positive; sustainability of improvements in profitability and cash flow remain key
- » Almirall, S.A.: Strong H1 2018 results together with positive product news flow are credit positive
- » Stora Enso Oyj: Strengthening of financial policy supports positive outlook on Stora Enso's Ba1
- » <u>Sibanye Gold Limited: Sibanye-Stillwater's \$500 million streaming agreement credit positive</u>

Selected issuer comments included the following credit negative reports:

- » HT Global IT Solutions Holdings Limited: HT Global reduces its stake in Hexaware Technologies Limited, a credit negative
- » Tele Columbus AG: Tele Columbus' delayed results publication and share price fall are credit negative

Issuer and sector reports

Voyage Bidco Limited — UK: Cost and pricing pressures are likely to constrain improvement in profitability

Voyage Bidco Limited's (Voyage, B2 stable) staff cost as a percentage of revenue has risen to 67.5% in the fourth quarter of the fiscal year ended 31 March 2018 (fiscal 2018), from 61.1% in the first quarter of fiscal 2015, leading to a corresponding decline in EBITDA margin. We expect this trend to continue, driven by further increases in the UK's national living wage (NLW) and pension auto-enrolment rates, Voyage's discretionary pay increases and the budget constraints of its customer base.

<u>Liberty Global plc — UK: Vendor financing (VF) weakens leverage, enhances liquidity to support share buybacks when capital spending is</u> <u>high</u>

While VF is included in <u>Liberty Global plc's</u> (Ba3 stable) group financial policy leverage guidance ratio, it is excluded in the covenant leverage ratios of its subsidiaries. We treat VF as debt and its increased use is weakening Moody's adjusted gross debt/EBITDA across most of Liberty's subsidiaries.

Non-financial corporates - Turkey: Showing resilience, but rising uncertainty in financial system is the biggest credit risk

We expect Turkey's real GDP growth to slow sharply to 1.5% this year and 1.0% in 2019 from 7.4% in 2017. The tighter financial conditions and weaker exchange rate, associated with the country's high and rising external financing risks, are likely to fuel already

high inflation and undermine corporate growth. On 28 August 2018, we took <u>rating actions on 13 non-financial corporates domiciled</u> <u>in Turkey</u>. The ratings of 11 of the 13 companies had been placed on review for downgrade on 6 June. Twelve companies have negative outlooks, while <u>Dogus Holding A.S.'s</u> B1 rating has been left on review for downgrade.

Oil & Gas: The Caspian Sea convention sets a credit positive framework to facilitate developing its hydrocarbons base

On 12 August, the presidents of the Caspian Sea's five littoral countries – Russia, Kazakhstan, Azerbaijan, Iran and Turkmenistan – signed a convention about the legal status of the Caspian Sea. The convention sets a legal framework that will reduce potential future conflicts among the bordering countries and provides incentives to develop oil and gas extraction activities and transport infrastructure (trunk pipelines) across the Caspian Sea. This is credit positive for exploration, integrated oil and gas companies as well as infrastructure companies active in the Caspian region.

Cross Sector - United Kingdom: CVAs do not affect credit quality of tenants, negative for some landlords and CMBS

Recent high profile company voluntary arrangements (CVAs) in the UK retail sector do not affect the credit quality of retail corporates (tenants). However, the effects are credit negative for some retail real estate corporates (landlords) and some CMBS deals. Such CVAs are weakening landlords' position via rent reductions to the benefit of other unsecured creditors.

Cross-Sector - UK: Probability of a 'no-deal' Brexit has risen, and would be negative for an array of issuers

The prospect of the <u>United Kingdom</u> (Aa2 stable) leaving the <u>European Union</u> (Aaa stable) without an agreement to preserve many of the current trading arrangements – a "no-deal" scenario – has risen in recent months. Such an outcome would disrupt these trading arrangements and have a material, negative impact on the UK economy and on the economies of certain EU member states. While the precise impact of a no-deal outcome is impossible to define, it would clearly pose more significant credit challenges than a negotiated exit.

Issuance & Rating Actions:

Issuance update

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

Exhibit 1

July - August 2018: Bonds

| lssuer | Rating Date | Industry | Country | CFR | Instrument Rating | Amount (USD mil) |
|---------------------|-------------|---------------|----------------|-----|-------------------|------------------|
| Autodistribution | 04-Jul | Whlsl Dstrbtn | France | B2 | B2 | 203 |
| KAEFER | 09-Jul | Services | Germany | Ba3 | B1 | 291 |
| Kongsberg | 09-Jul | Automotive | Switzerland | Ba3 | Ba3 | 321 |
| <u>SFR</u> | 18-Jul | Telecom | France | B1 | B1 | 2,911 |
| Perform | 18-Jul | Leisure | United Kingdom | B2 | B3 | 54 |
| <u>Cerba</u> | 20-Jul | Services | France | B2 | Caa1 | 70 |
| WFS | 23-Jul | Services | France | B3 | B2 | 771 |
| Ashtead | 24-Jul | Services | United Kingdom | Ba1 | Ba2 | 600 |
| CEVA | 24-Jul | Transp. Serv. | United Kingdom | B1 | B1 | 351 |
| Schenck | 27-Jul | Manufacturing | Germany | B3 | B3 | 116 |
| Eskom | 08-Aug | Utility | South Africa | B2 | B3 | 500 |
| <u>SUEK</u> | 17-Aug | Energy | Russia | Ba2 | Ba2 | 149 |
| Total July and Augu | st | | | | | 6,337 |

Exhibit 2

July - August 2018 issuance: Loans

| RIS05-JulTechnologyUnited KingdomB2B2Impala06-JulBuilding Mat.FranceB1B1Siemens Audiology09-JulHealthcareSingaporeB2B2SolutionsServicesDenmarkB2B1Nets10-JulServicesDenmarkB1B1VFS10-JulTransp. Serv.United KingdomB1B1VFS10-JulServicesLuxembourgB2B2Caa1MGS10-JulServicesUnited KingdomB2B2Caa1MGS10-JulServicesFranceB1B1ArroceB1B1Azelis11-JulServicesFranceB2B2Serv.United KingdomB2B2ServicesFranceB1B1Azelis16-JulWhisl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Avast20-JulServicesFranceB1B3Iberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB1B3CarchB2B2Carch RepublicB3B3B2B2Carch Republic <td< th=""><th>676 676 3,126</th></td<> | 676 676 3,126 |
|---|---------------------|
| Siemens Audiology Solutions09-JulHealthcareSingaporeB2B2SolutionsNets10-JulServicesDenmarkB2B1CEVA10-JulTransp. Serv.United KingdomB1B1B1VFS10-JulServicesLuxembourgB2B2Caa1MCS10-JulServicesUnited KingdomB2B2Caa1MCS10-JulServicesFranceB2B2ServicesUnited KingdomB2B2ServicesUnited KingdomB2B2ServicesFranceB1B1Azelis11-JulServicesFranceB1B1Azelis16-JulWhisl DistribinLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1 | |
| SolutionsNets10-JulServicesDenmarkB2B1CEVA10-JulTransp. Serv.United KingdomB1B1YFS10-JulServicesLuxembourgB2B2Caa1MCS10-JulServicesUnited KingdomB2B2Caa1MCS10-JulServicesFranceB2B2ServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3B3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1 | 3,126 |
| Nets10-JulServicesDenmarkB2B1CEVA10-JulTransp. Serv.United KingdomB1B1VFS10-JulServicesLuxembourgB2B2Caa1MGS10-JulServicesUnited KingdomB2B2Insignis11-JulServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3B3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB1B1Minimax08-AugManufacturingGermanyB1B1 | |
| CEVA10-julTransp. Serv.United KingdomB1B1VFS10-julServicesLuxembourgB2B2Caa1MGS10-JulServicesUnited KingdomB2B2Insignis11-JulServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Minimax08-AugManufacturingGermanyB1B1 | |
| VFS10-JulServicesLuxembourgB2B2Caa1MGS10-JulServicesUnited KingdomB2B2Insignis11-JulServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 559 |
| MGS10-JulServicesUnited KingdomB2B2Insignis11-JulServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 475 |
| MGS10-JulServicesUnited KingdomB2B2Insignis11-JulServicesFranceB2B2SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 796 |
| Insignis11-julServicesFranceB2B2SFR13-julTelecomFranceB1B1Azelis16-julWhlsl DstrbtnLuxembourgB3B2Avast18-julTechnologyCzech RepublicBa3Ba3Roompot18-julLodgingNetherlandsB2B2Cerba20-julServicesFranceB1B3Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 74 |
| SFR13-JulTelecomFranceB1B1Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 431 |
| Azelis16-JulWhlsl DstrbtnLuxembourgB3B2Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB1B3Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 323 |
| Avast18-JulTechnologyCzech RepublicBa3Ba3Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB2B1Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 2,500 |
| Roompot18-JulLodgingNetherlandsB2B2Cerba20-JulServicesFranceB2B1Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2CaalMinimax08-AugManufacturingGermanyB1B1 | 897 |
| Cerba20-JulServicesFranceB2B1Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2CaalMinimax08-AugManufacturingGermanyB1B1 | 1,481 |
| Impala01-AugBuilding Mat.FranceB1B3Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 313 |
| Liberty02-AugCable TVUnited KingdomBa3Ba3Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 478 |
| Optimus03-AugManufacturingFranceB2B2Caa1Minimax08-AugManufacturingGermanyB1B1 | 117 |
| Caa1 Minimax 08-Aug Manufacturing Germany B1 B1 | 714 |
| Minimax 08-Aug Manufacturing Germany B1 B1 | 467 |
| | 99 |
| DSP 31-Aug Chemicals Netherlands B2 B1 | 1,202 |
| | 388 |
| July and August Public Loans | 15,792 |
| PMLRs* | |
| - New Issuers | 431 |
| - Existing Issuers | 29 |
| Total July and August PMLRs | 460 |
| Total July and August Loans | 16,252 |

*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 – July - August 2018

| ing Action | Date | lssuer | Industry | Country | CFR / Outlook | Previous |
|-----------------|------------------|-----------------------------|-------------------------|----------------|-----------------------|----------------------|
| New Ratings | | | | | | |
| * | 05-Jul | IRIS | Technology | United Kingdom | B2 / STA | New |
| * | 06-Jul | <u>Impala</u> | Building Materials | France | B1 / STA | New |
| * | 09-Jul | KAEFER | Services | Germany | Ba3 / STA | New |
| * | 09-Jul | Kongsberg | Automotive | Switzerland | Ba3 / STA | New |
| * | 09-Jul | Marlink | Services | Norway | B3 / STA | New |
| * | 10-Jul | VFS | Services | Luxembourg | B2 / STA | New |
| * | | MGS | Services | United Kingdom | B2 / STA | New |
| * | | Insignis | Services | France | B2 / STA | New |
| * | 18-Jul | Roompot | Lodging | Netherlands | B2 / STA | New |
| * | 31-Aug | DSP | Chemicals | Netherlands | B2 / STA | New |
| Rating/ Outlook | 517146 | | | | 52, 6 | |
| Changes | | | | | | |
| NEG | 02-Jul | Springer | Media Publishing | Germany | B2 / STA | B2 / UR Up |
| UP | 02-Jul 03-Jul | Odigeo | Services | France | B1 / STA | B2 / POS |
| NO CHANGE | 04-Jul | Autodistribution | Whisi Dstrbtn | France | B2 / STA | B2 / FO3 |
| UP | | | Chemicals | | | |
| DOWN | 06-Jul | Kerling | Healthcare | United Kingdom | Ba3 / STA B2 / NEG | B1 / STA B1 / STA |
| | 09-Jul | Siemens Audiology Solutions | | Singapore | | |
| NO CHANGE | 09-Jul | NKNK | Chemicals | Russia | Ba3 / STA | Ba3 / STA |
| NEG | 11-Jul | Navios Midstream | Transportation Services | Greece | B2 / UR Down | B2 / STA |
| DOWN | 12-Jul | Jaguar Land Rover | Automotive | United Kingdom | Ba2 / STA | Ba1 / STA |
| DOWN | 13-Jul | <u>Pfleiderer</u> | Forest Products | Germany | B1 / STA | Ba3 / STA |
| DOWN | 16-Jul | <u>Keter</u> | Consumer Products | Netherlands | B3 / STA | B2 / STA |
| DOWN | 17-Jul | <u>Safilo</u> | Consumer Products | Italy | B2 / NEG | B1 / STA |
| UP | 17-Jul | VAT | Manufacturing | Switzerland | Ba2 / STA | Ba3 / STA |
| POS | 17-Jul | <u>SPIE</u> | Services | France | Ba3 / STA | Ba3 / UR |
| | | | | | | Down |
| NO CHANGE | 17-Jul | <u>Schenck</u> | Manufacturing | Germany | B3 / POS | B3 / POS |
| POS | 18-Jul | Ericsson | Telecommunications | Sweden | Ba2 / STA | Ba2 / NEG |
| NEG | 19-Jul | <u>MegaFon</u> | Telecommunications | Russia | Ba1 / UR Down | Ba1 / POS |
| NO CHANGE | 20-Jul | Foncia | Services | France | B2 / STA | B2 / STA |
| POS | 23-Jul | WFS Global Holding | Services | France | B3 / UR Up | B3 / STA |
| DOWN | 24-Jul | House of Fraser | Retail | United Kingdom | Caa2 / NEG | Caa1 / NEG |
| DOWN | 27-Jul | Powerflute | Forest Products | Finland | B2 / STA | B1 / UR Dov |
| UP | 01-Aug | Oxea | Chemicals | Germany | B2 / STA | B3 / POS |
| DOWN | 01-Aug | Debenhams | Retail | United Kingdom | B2 / NEG | B1 / STA |
| NO CHANGE | 01-Aug | Impala | Building Materials | France | B1 / STA | B1 / STA |
| UP | 03-Aug | Eurasian Resources Group | Metals & Mining | Kazakhstan | B2 / POS | B3 / STA |
| UP | 06-Aug | Ashtead | Services | United Kingdom | Baa3 / STA | Ba1 / STA |
| NEG | 06-Aug | Elior | Services | France | Ba2 / NEG | Ba2 / STA |
| UP | 08-Aug | Constellium | Metals & Mining | France | B2 / STA | B3 / STA |
| | | | <u>0</u> | | | |
| NO CHANGE | | Zephyr Faarch | Media | United Kingdom | B3 / STA | (P)B3 / STA |
| NO CHANGE | 17-Aug | Faerch | Packaging | Denmark | B3 / STA | B3 / STA |
| NEG | 17-Aug | National Company Food | Services | Kazakhstan | B1 / UR Down | B1 / NEG |
| | | Contract Corporation | | | D. 0. (07) | |
| UP | 21-Aug | NCSP | Transportation Services | Russia | Ba2 / STA | Ba3 / STA |
| DOWN | 28-Aug | Turkcell | Telecommunications | Turkey | Ba2 / NEG | Ba1 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | <u>Dogus</u> | Investment Management | Turkey | B1 / UR Down | Ba2 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | OYAK | Investment Management | Turkey | Ba2 / NEG | Ba1 / UR |
| | - | | - | | | Down |
| DOWN | 28-Aug | Erdemir | Metals & Mining | Turkey | Ba3 / NEG | Ba2 / UR |
| | 5 | | | - | | Down |
| DOWN | 28-Aug | Yaşar Holding | Consumer Products | Turkey | Caa1 / NEG | B2 / NEG |

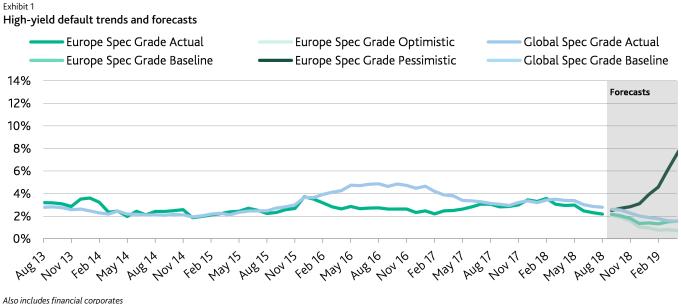
| DOWN | 28-Aug | <u>Tupras</u> | Energy | Turkey | Ba2 / NEG | Ba1 / UR |
|-----------|--------|--------------------|---------------------------|----------------|-------------|--------------|
| | | | | | | Down |
| DOWN | 28-Aug | <u>Sisecam</u> | Manufacturing | Turkey | Ba2 / NEG | Ba1 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | <u>Koc Holding</u> | Investment Management | Turkey | Ba2 / NEG | Ba1 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | <u>CCI</u> | Consumer Products | Turkey | Ba2 / NEG | Ba1 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | <u>Efes</u> | Consumer Products | Turkey | Ba2 / NEG | Ba1 / UR |
| | | | | | | Down |
| DOWN | 28-Aug | RGY | Constr & Engineering Serv | Turkey | Ba3 / NEG | Ba2 / UR |
| | | | | | | Down |
| NEG | 28-Aug | Petkim | Chemicals | Turkey | B1 / NEG | B1 / STA |
| POS | 28-Aug | Turk Hava Yollari | Transportation Services | Turkey | Ba3 / NEG | Ba3 / UR |
| | - | | | | | Down |
| POS | 29-Aug | Sagax | Real Estate Finance | Sweden | Ba1 / UR Up | Ba1 / POS |
| Withdrawn | | | | | | |
| WR | 10-Jul | Ideal Standard | Consumer Products | Belgium | WR | Ca / STA |
| WR | 17-Jul | <u>Sky Bet</u> | Gaming | United Kingdom | WR | B2 / UR Dowr |
| WR | 20-Jul | Kaztemirtrans | Transportation Services | Kazakhstan | WR | Ba1 / STA |
| WR | 01-Aug | MRH | Retail | United Kingdom | WR | B1 / STA |
| WR | 08-Aug | Guala | Packaging | Italy | WR | B2 / STA |
| WR | 09-Aug | Coveris | Packaging | United States | WR | B3 / STA |
| WR | 13-Aug | Daisy | Telecommunications | United Kingdom | WR | B2 / STA |
| WR | 14-Aug | Heckler & Koch | Defense | Germany | WR | Caa1 / NEG |
| WR | 15-Aug | House of Fraser | Retail | United Kingdom | WR | Caa2 / NEG |
| | | | | <u>v</u> | | |

Source: Moody's Investors Service

Stress Indicators & Surveillance:

Defaults

Global speculative-grade default rate at 2.8% in August



Source: Moody's Investors Service

The global speculative-grade default rate fell to 2.8% in August, 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 3.4%, and the rate in Europe to decline to 1.4% from 2.2%.

Exhibit 2 Non-financial corporate defaults in EMEA (last 12 months) Updated through 31 August 2018

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

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 31 August 2018

As of 31 August 2018, the percentage of issuers rated B3 negative and below (PDR) decreased to 7.7% compared to 7.8% achieved in July 2018, and remains above the low of 7.3% in July 2015.

| above the low of 7.3% in July 2 Company | PDR / Outlook | Total Outstanding | Industry | Country |
|--|---------------|-------------------|----------------------------|----------------|
| DH | B3 / NEG | 764 | Healthcare | United Kingdom |
| Navios Acquisition | B3 / NEG | 1,065 | Transportation Services | Greece |
| thaca | B3 / NEG | 643 | Energy | United Kingdom |
| Travelex | B3 / NEG | 526 | Services | United Kingdom |
| Doncasters | B3 / NEG | 1,093 | Manufacturing | United Kingdom |
| First Quantum Minerals | B3 / NEG | 5,024 | Metals & Mining | Canada |
| CAAB | B3 / NEG | 675 | Chemicals | Germany |
| Swissport | B3 / NEG | 1,681 | Services | Luxembourg |
| Dynagas Partners | B3 / NEG | - | Transportation Services | Monaco |
| 01 | B3 / UR Down | 3,063 | Real Estate Finance | Russia |
| errexpo | Caa1 / POS | 1,043 | Metals & Mining | Ukraine |
| Metinvest | Caa1 / POS | 2,981 | Metals & Mining | Ukraine |
| MHP | Caa1 / POS | 1,286 | Natural Products Processor | Ukraine |
| Cognor | Caa1 / POS | 154 | Metals & Mining | Poland |
| Moby | Caa1 / STA | 858 | Transportation Services | Italy |
| Boparan | Caa1 / STA | 1,211 | Consumer Products | United Kingdom |
| Britax Group | Caa1 / STA | 390 | Consumer Products | United Kingdom |
| Care UK | Caa1 / STA | 887 | Healthcare | United Kingdom |
| indemol | Caa1 / STA | 1,558 | Media | Netherlands |
| loatel | Caa1 / STA | 875 | Energy | Sweden |
| Ocean Rig | Caa1 / STA | 3,888 | Energy | Norway |
| Perstorp | Caa1 / STA | 1,503 | Chemicals | Sweden |
| echniplas | Caa1 / STA | 257 | Automotive | United States |
| Astaldi | Caa1 / NEG | 2373 | Constr & Engineering Serv | Italy |
| Deoleo | Caa1 / NEG | 611 | Consumer Products | Spain |
| Galapagos | Caa1 / NEG | 1,118 | Manufacturing | Germany |
| SL Education | Caa1 / NEG | 370 | Media Publishing | United Kingdom |
| <u>hotonis</u> | Caa1 / NEG | | Aircraft & Aerospace | France |
| <u> (aşar Holding</u> | Caa1 / NEG | 250 | Consumer Products | Turkey |
| Aenova | Caa2 / STA | 851 | Services | Germany |
| Seadrill Partners | Caa2 / STA | 3,878 | Energy | Norway |
| New Look | Caa2 / NEG | 1,653 | Retail | United Kingdom |
| Exterion | Caa2 / NEG | | Media | United Kingdom |
| <u>/ivarte</u> | Caa3 / STA | 1,524 | Retail | France |
| ohnston Press | Caa3 / NEG | 326 | Media Publishing | United Kingdom |
| Four Seasons Health Care | Caa3 / NEG | 864 | Healthcare | United Kingdom |
| Eletson | Ca / NEG | 809 | Transportation Services | Liberia |
| Total | | 41,323 | | |

Note: new additions to the list during the month are highlighted in blue. Source: Moody's Investors Service

Speculative-grade liquidity

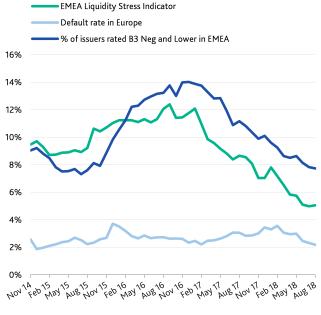
EMEA LSI at record low in July, slightly increases in August

The EMEA LSI – the percentage of speculative-grade companies with the weakest liquidity profile (SGL 4) – slightly increased to 5.1% in August 2018 from 5% in July 2018. The EMEA LSI was 5.1% in June and 5.8% in May 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 was unchanged at 3.2% in August following a climb from its record low of 2.5% in April to an 11-month high in July. The LSI for Asia decreased to 31.1% in August from 32.7% in July, reversing a six month trend of weakening. The Asian LSI 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



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

Source: Moody's Investors Service

Speculative-grade liquidity

As of 31 August 2018

Exhibit 5 Stable liquidity profiles Distribution of SGL overall scores

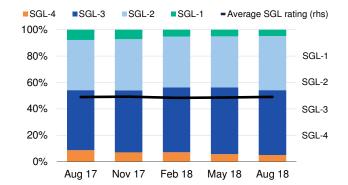


Exhibit 7

Transportation Services has now most SGL-4s in EMEA SGL overall scores by industry

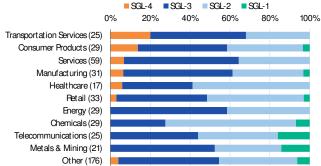


Exhibit 6

Weakest companies also have weakest liquidity profiles SGL overall scores by Corporate Family Rating

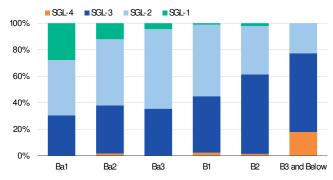
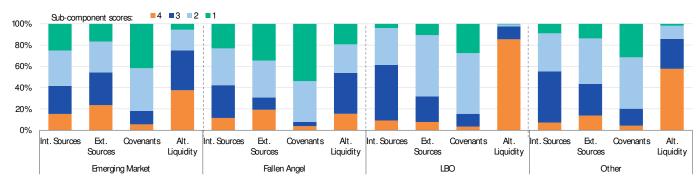


Exhibit 8 Fallen angels have most SGL-4s SGL overall scores by type



Exhibit 9

LBOs have limited ability to raise additional funding, but otherwise most have adequate liquidity Distribution of SGL sub component scores



Source: Moody's Investors Service

Speculative-grade universe

As of 31 August 2018

Exhibit 10

Average CFR going down in 2018

Development of speculative-grade Corporate Family Ratings

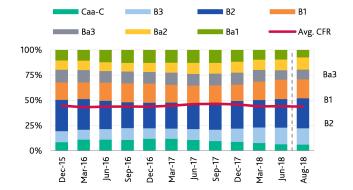


Exhibit 12

Spec-grade issuer count rising Development of speculative-grade CFRs by type

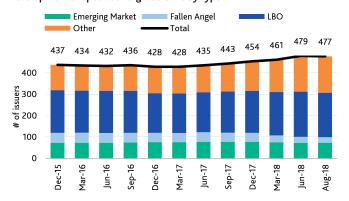
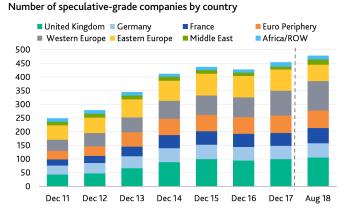


Exhibit 14

Spec-grade universe diversified



Source: Moody's Investors Service

Exhibit 11

Negative outlooks slightly increasing Development of speculative-grade corporate rating outlooks

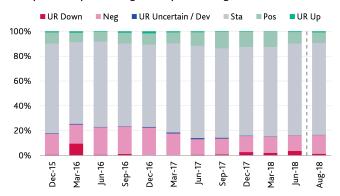


Exhibit 13

LBOs rated predominantly at B2 Distribution of speculative-grade companies by CFR and type

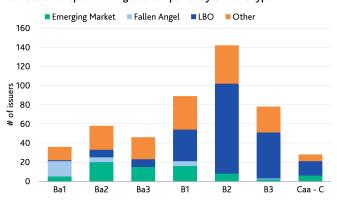
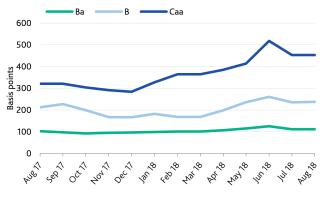


Exhibit 15

Spreads rising for Caa

European high-yield bond CDS spreads



Speculative-grade financial metrics

As of 31 August 2018

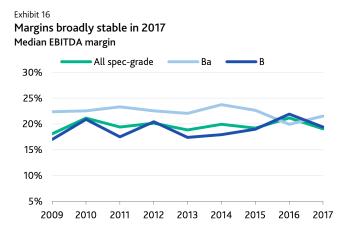


Exhibit 18

Ba-rated companies benefit most from low interest rates Median (EBITDA – capex) / interest expense

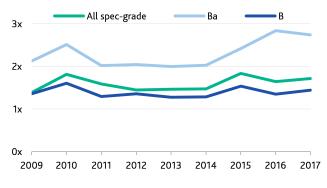
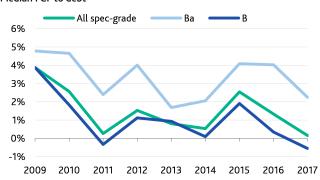


Exhibit 20 Free cash flow declines in 2017 Median FCF to debt



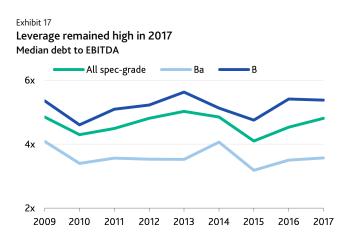


Exhibit 19 Operating cash flows steady on average Median FFO to debt

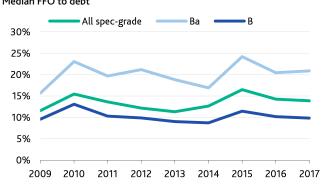
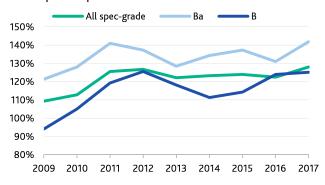


Exhibit 21

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) fell to lowest level ever seen in 2018**. The E-CQI in 2Q of 2018 continued the weakening trend which started in the first quarter of 2017, and recorded an all-time high of 3.74 (weak). This reversed improvements made in between the second quarter of 2015 and fourth quarter of 2016 when it sat at 3.71 (weak) and 3.40 (weak \uparrow), respectively. The deterioration in the E-CQI can partly be attributed to the five Euro-denominated bonds issued by US issuers, using US style covenant packages which have far larger quantifiable carve-outs than typically seen in Europe. U.S issuers issued nine Euro-denominated bonds in the course of 1H of 2018. Of these six were full package and all but one scored in our weakest score category.

The E-CQI is the three-quarter rolling average of all full package bonds' covenant quality scores from those quarters, weighted by those quarters' total number of bonds.

Exhibit 22



E-CQI weakened 0.1 points from Q1 2018, marked the lowest level ever seen Three-quarter rolling average of all full package bonds' covenant quality scores

Source: Moody's Covenant Database

- The strongest full package bond: June's most protective bond was senior secured bond issued by <u>Premier Foods Finance plc</u> (B2 negative) with an upper-tier moderate covenant quality score (CQS) of 2.78. This repeat issuer broadly followed the same covenants as the bonds issued in 2017, but disclosed an accumulated credit under its net income basket.

- The weakest full package bond: the unsecured bond issued by <u>Teekay Offshore Partners L.P.</u> (B3 stable) had the weakest package, with a CQS of 4.59 (weakest). As an exploration & production issuer, Teekey's restricted payments income basket is typical of master limited partnership structure, as it allow a payment of all available cash from operating surplus subject to satisfaction of an FCCR (fixed coverage ratio test; EBITDA/interest expense) test of 1.75x which lies at the low end of the MLP spectrum (thresholds typically range from 1.75x to 2.25x).

- High yield-lite: HY-lite packages comprised 46% of total HY bonds issued in June compared to 23% in May and 34% in 1H of 2018. All issuances but one are Ba-rated, as is typical for HY-lite bonds. The only B-rated bond in June was issued by <u>Interxion Holding N.V.</u> (B1 stable). This is the first HY-lite issuance by InterXion. Its bond issued in 2013 had a full covenant package.

- **Senior secured bonds**: full package senior secured bonds comprised 54% of all bonds. This is well above the averages of 31% and 46% for May and for 1H 2018, respectively. Among the HY-lite issuers in June, <u>International Game Technology PLC</u> (Ba2 stable) and <u>Outokumpu Oyj</u> (B1 stable) issued senior secured bonds. It is unusual for HY-lite bonds to have a security package. The only other secured HY-lite bonds in our database were issued by <u>Stena International S.A.</u> (Ba3 negative) in 2014.

- **Sponsor led bonds**: three of the seven full package deals issued in June were sponsor led bonds, exceeds May's average of 30% but still below the average of 53% for 1H 2018.

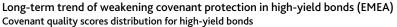
Exhibit 23

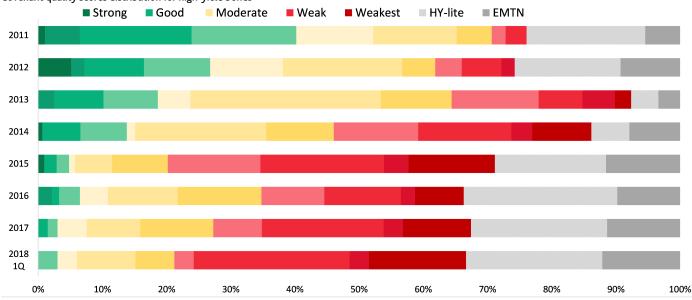
The Covenant Quality Score (CQS) for full package bonds in June scores into weak category.

| | CQS: all HY bonds | % HY-lite | CQS: full package bonds |
|---------|-------------------|-----------|-------------------------|
| June-18 | 4.46 (weakest) | 46% | 3.99 (weak) |
| May-18 | 4.20 (weakest) | 23% | 3.96 (weak) |
| 1H 2018 | 4.19 (weakest) | 34% | 3.78 (weak) |

Source: Source: Moody's Covenant Database

Exhibit 24





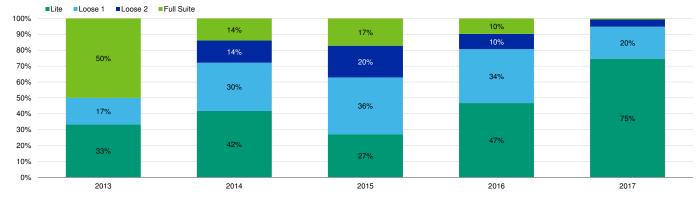
Source: Moody's Covenant Database

Download covenant quality scoring criteria

Exhibit 25

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*

Leveraged Loan Dashboards

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

As of 31 August 2018

Exhibit 1

Loans remain high in July - August 2018 Monthly speculative-grade issuance: bonds vs. loans

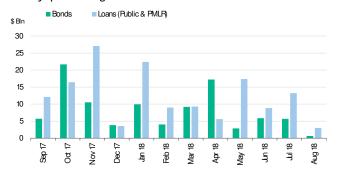
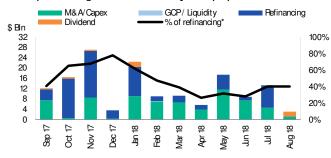


Exhibit 3

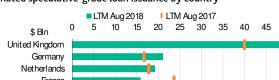
M&A supports volumes, more refi activity in July Rated speculative-grade loan issuance by main purpose



*Quarterly trailing % of refinancing (rhs)

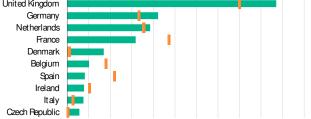
Exhibit 5

UK leads LTM issuance tables



50

Rated speculative-grade loan issuance by country 55



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

Exhibit 2 Loans exceed bonds in YTD 2018 Cumulative speculative-grade issuance: bonds vs. loans

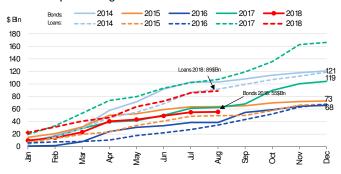
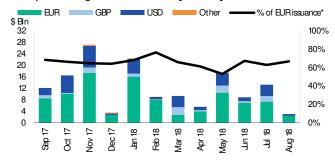


Exhibit 4

Issuance across currencies, but mostly euro Rated speculative-grade loan issuance by currency



*Quarterly trailing % of EUR issuance (rhs)

Exhibit 6 Services most active

Rated speculative-grade loan issuance by industry



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

As of 31 August 2018

Exhibit 7

Only limited second lien issuance

Rated speculative-grade loan issuance by seniority

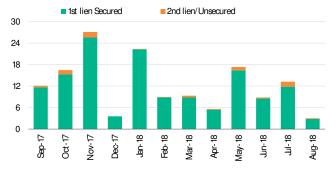
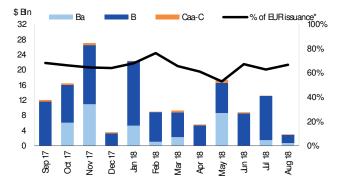


Exhibit 9

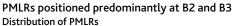
B-rated loan segment most active

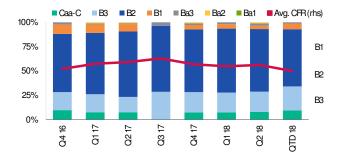
Rated speculative-grade loan issuance by instrument rating



Quarterly trailing % of EUR issuance (rhs)

Exhibit 11





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

Exhibit 8

B-rated companies lead the way

Rated speculative-grade loan issuance by Corporate Family Rating

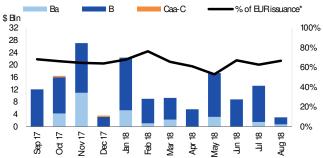


Exhibit 10

Mostly stable outlooks consistent with public universe Outlook distribution of PMLR universe

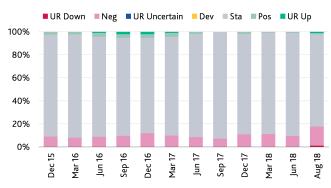
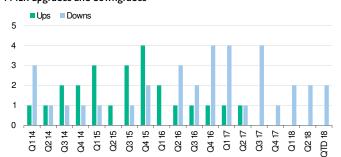


Exhibit 12

More PMLR downgrades than upgrades PMLR upgrades and downgrades



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 <u>CLO Interest</u> for research around CLOs.

Excerpt from this report.

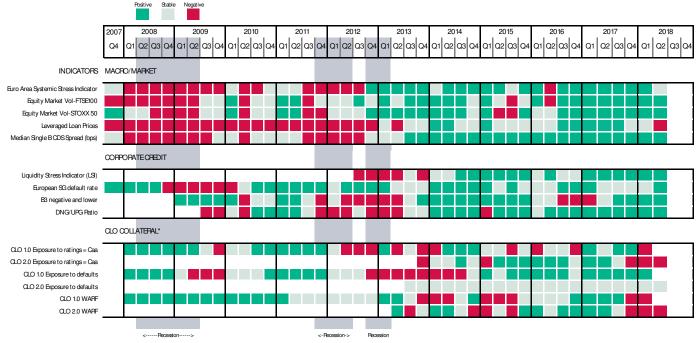
European broadly syndicated loan (BSL) collateralized loan obligation (CLO) issuance remained strong, with stable credit quality. We rated 27 BSL CLOs that closed in Q2 2018, with total par of €10.9 billion,1 up slightly from 25 totaling €10.6 billion in Q1 2018.

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 Tr | | | | | | |
|--|---------------|--------------|----------|---------|--------|--|
| | 2008 | 2009 | Q1 2018 | Q2 2018 | LT Avg | DATA/SOURCE |
| INDICATORS | MACRO/M | ARKET | | | | |
| 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 |
| | CORPORAT | FCBEDIT | | | | |
| Liquidity Stress Indicator (LS) | * | * | 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 Patio | * | 3.0 | 0.5 | 1.1 | 1.2 | Moody's data on quarterly trailing Downgrade/Upgrade ratio |
| | | | 0.0 | | | |
| | | TERAL | | | | |
| 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 |
| | | | | | | |
| | Positive | Stable | Negative | | | |
| | | | | | | |
| ne long-term average (LT Avg) corresponds | to the mediar | of each seri | es. | | | |

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

Exhibit 14 Moody's European CLO Credit Trends Heat Map

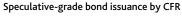


Source: Moody's Investors Service, monthly trustee reports, Thomson Reuters and European Central Bank

Speculative-grade bond issuance

As of 31 August 2018

Exhibit 1 Issuance falls in August



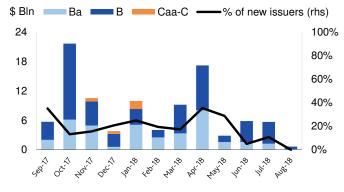


Exhibit 3
Similar YTD level compared with 2017

Cumulative speculative-grade bond issuance

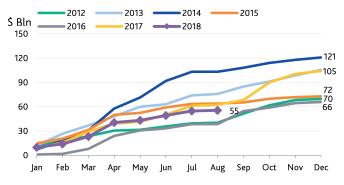
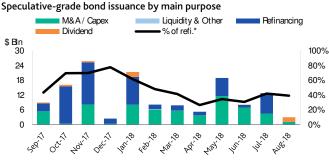


Exhibit 5

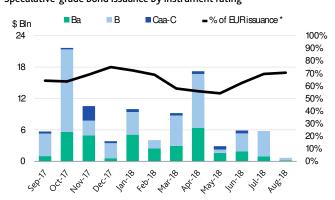
Refinancings continue to drive activity



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

Exhibit 2

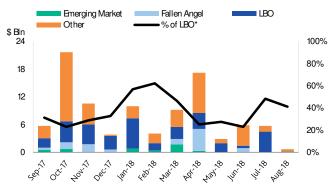
Both B and Ba issuance remain low Speculative-grade bond issuance by instrument rating



*Quarterly trailing % of EUR issuance (rhs)

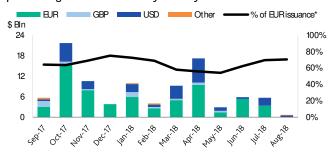
Exhibit 4

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



*Quarterly trailing % LBO (rhs)

Exhibit 6 Markets active across currencies Speculative-grade bond issuance by currency



*Quarterly trailing % of EUR issuance (rhs)

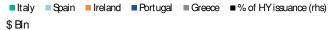
Speculative-grade bond issuance

As of 31 August 2018

Exhibit 7

No Periphery issuance in July - August

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



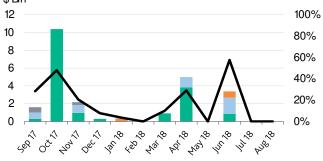


Exhibit 9

Mostly unsecured issuance in August Speculative-grade bond issuance by seniority

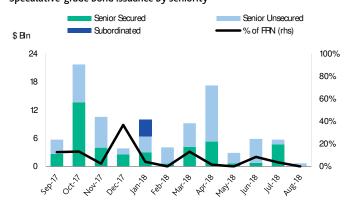
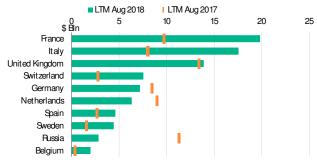


Exhibit 11

French companies active in 2018

Speculative-grade bond issuance by country (LTM)



Source: Moody's Investors Service, FactSet

Exhibit 8

Steady average tenor til YTD 2018

Speculative-grade bond issuance by tenor

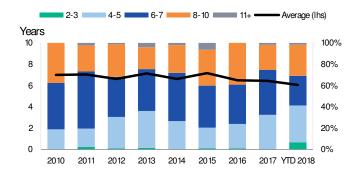


Exhibit 10

Non call periods steady in 2018 Speculative-grade bond issuance by non-call period

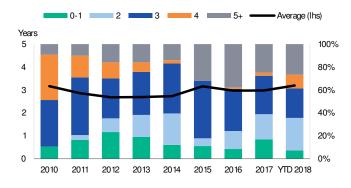
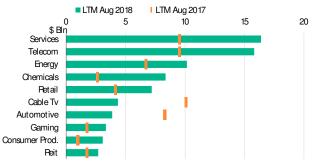


Exhibit 12

Services/Telecom lead issuance Speculative-grade bond issuance by industry (LTM)



Selected speculative-grade bond issuance

Exhibit 13

Selected high yield bond issuance (last 12 months ending 31 August 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.

| | | nonth pricing indicat | | Bond | - | | • | | | id Price | | Yield-T | o-Maturity | (Bid) |
|--------------|-----------------|-----------------------|-----------------|--------------|--------------|--------|----------|---------------|------------|----------|-----------|------------|------------|-----------|
| | | | | rating as of | | | | | | | | | | |
| | | | | instument | | | | | | | | | | |
| | | | CFR / Outlook | | | | | nitial Rating | At initial | | | At initial | | |
| Industry | Issuer Name | Country | as of 31 Aug 18 | | Amount (mil) | Coupon | Maturity | Date | rating | | 31 Aug 18 | rating | | 31 Aug 18 |
| Aerospace | Pattonair | United | B3 / STA | (P)Caa1 | 280 USD | 9.0% | Nov 2022 | 10 Oct 17 | 101.8 | 103.3 | 103.3 | 8.56% | 8.07% | 8.05% |
| | | Kingdom | | | | | | | | | | | | |
| Automotive | <u>JLR</u> | United | Ba2 / STA | Ba1 | 500 USD | 4.5% | Oct 2027 | 4 Oct 17 | 99.6 | 88.6 | 84.6 | 4.55% | 6.14% | 6.79% |
| | | Kingdom | | | | | | | | | | | | |
| | Peugeot | France | Ba1 / STA | Ba1 | 650 EUR | 2.0% | Mar 2025 | 15 Mar 18 | 99.4 | 100.4 | 99.8 | 2.06% | 1.90% | 1.99% |
| | <u>Volvo</u> | Sweden | Ba1 / STA | Ba2 | 500 EUR | 2.0% | | 21 Nov 17 | 100.6 | 99.0 | | 1.86% | 2.12% | 2.12% |
| Cable Tv | <u>Telenet</u> | Belgium | Ba3 / STA | Ba3 | 1000 USD | 5.5% | Mar 2028 | 29 Nov 17 | 99.8 | 91.3 | | 5.50% | 6.68% | 6.35% |
| | Virgin Media | United | Ba3 / STA | B1 | 300 GBP | 5.75% | Apr 2023 | 20 Mar 18 | 100.5 | 101.6 | 102.3 | 5.55% | 5.24% | 5.09% |
| | | Kingdom | | | | | | | | | | | | |
| Chemicals | <u>OCI</u> | Netherlands | Ba2 / STA | B1 | 650 USD | 6.625% | Apr 2023 | 9 Apr 18 | 101.3 | 102.2 | | 6.32% | 6.08% | 5.74% |
| | | | | B1 | 400 EUR | 5.0% | Apr 2023 | 9 Apr 18 | 101.6 | 105.1 | 105.0 | 4.57% | 3.70% | 3.73% |
| | <u>Petkim</u> | Turkey | B1 / NEG | B1 | 500 USD | 5.875% | Jan 2023 | 11 Jan 18 | 101.3 | 89.5 | 84.9 | 5.57% | 8.74% | 10.20% |
| | <u>Syngenta</u> | Switzerland | Ba2 / STA | Ba2 | 750 USD | 3.933% | Apr 2021 | 18 Apr 18 | 99.9 | 99.9 | | 3.96% | 3.97% | 3.82% |
| | | | | Ba2 | 750 USD | 3.698% | Apr 2020 | 18 Apr 18 | 100.1 | 99.9 | 100.1 | 3.66% | 3.78% | 3.65% |
| | | | | Ba2 | 1000 USD | 4.441% | Apr 2023 | 18 Apr 18 | 99.4 | 99.7 | 100.3 | 4.58% | 4.50% | 4.36% |
| | | | | Ba2 | 750 USD | 4.892% | Apr 2025 | 18 Apr 18 | 97.8 | 99.5 | 99.7 | 5.27% | 4.97% | 4.94% |
| | | | | Ba2 | 1000 USD | 5.182% | Apr 2028 | 18 Apr 18 | 96.9 | 97.0 | 96.4 | 5.59% | 5.58% | 5.67% |
| | | | | Ba2 | 500 USD | 5.676% | Apr 2048 | 18 Apr 18 | 94.3 | 91.9 | 92.2 | 6.09% | 6.28% | 6.25% |
| Construction | <u>CMC</u> | Italy | B2 / STA | B2 | 325 EUR | 6.0% | Feb 2023 | 3 Nov 17 | 98.3 | 87.0 | 79.3 | 6.31% | 9.39% | 11.91% |
| | Dar Al-Arkan | Saudi Arabia | B1/POS | B1 | 500 USD | 6.875% | Mar 2023 | 21 Mar 18 | 99.1 | 94.7 | 95.3 | 7.04% | 8.16% | 7.98% |
| | <u>Saipem</u> | Italy | Ba1 / STA | Ba1 | 500 EUR | 2.625% | Jan 2025 | 3 Nov 17 | 100.1 | 97.6 | 97.9 | 2.58% | 2.95% | 2.92% |
| Energy | Aker BP | Norway | Ba1 / STA | Ba2 | 500 USD | 5.875% | Mar 2025 | 12 Mar 18 | 101.3 | 102.5 | 103.8 | 5.66% | 5.42% | 5.19% |
| | CGG-Veritas | France | B3 / STA | B2 | 280 EUR | 7.875% | May 2023 | 6 Apr 18 | 104.3 | 106.6 | 106.6 | 6.80% | 6.16% | 6.14% |
| | Gazprom | Russia | | Ba1 | 750 EUR | 2.25% | Nov 2024 | 9 Nov 17 | 100.1 | 99.7 | | 2.21% | 2.25% | 2.58% |
| | Puma Energy | Switzerland | Ba2 / STA | Ba2 | 750 USD | 5.0% | Jan 2026 | 8 Jan 18 | 99.8 | 90.3 | 88.0 | 4.99% | 6.59% | 7.02% |
| | Seplat | Sweden | B2 / STA | B2 | 350 USD | 9.25% | Apr 2023 | 2 Mar 18 | 99.8 | 99.5 | 99.0 | 9.30% | 9.36% | 9.50% |
| | Tullow | United | B1 / STA | B3 | 800 USD | 7.0% | Mar 2025 | 12 Mar 18 | 100.0 | 97.4 | 96.5 | 7.00% | 7.50% | 7.68% |
| | | Kingdom | | | | | | | | | | | | |
| | Tupras | Turkey | Ba2 / NEG | Ba1 | 700 USD | 4.5% | Oct 2024 | 4 Oct 17 | 98.7 | 87.6 | 78.5 | 4.70% | 6.99% | 9.15% |
| Forest Prod. | Pro-Gest | Italy | B1 / STA | (P)B2 | 250 EUR | 3.25% | Dec 2024 | 1 Dec 17 | 98.8 | 94.6 | | 3.37% | 4.12% | 4.28% |
| | Stora Enso | Finland | Ba1 / POS | Ba1 | 300 EUR | 2.5% | Mar 2028 | 19 Mar 18 | 98.4 | 102.3 | 103.3 | 2.63% | 2.18% | 2.07% |
| Gaming | Gamenet | Italy | B1 / STA | B1 | 225 EUR | 3.422% | Apr 2023 | 16 Apr 18 | 100.1 | 96.0 | | 4.04% | 4.92% | 4.81% |
| 6 | Intralot | Greece | B1 / NEG | (P)B1 | 500 EUR | 5.25% | Sep 2024 | 11 Sep 17 | 101.0 | 78.8 | | 5.05% | 9.73% | 10.46% |
| | LHMC Bidco | Spain | B1/STA | B2 | 663 EUR | 6.25% | | 15 Jun 18 | 100.2 | 102.6 | | 6.13% | 5.59% | 5.52% |
| | | - F | | | | | | | | | | | 2.2270 | |

| | | | | B2 | 425 EUR | 5.426% | Dec 2023 | 15 Jun 18 | 98.6 | 100.9 | 101.3 | 6.31% | 5.88% | 5.74% |
|---------------|--------------------|----------------|------------|-------|----------|--------|----------|-----------|-------|-------|-------|--------|--------|--------|
| | | | | B2 | 550 USD | 7.875% | Dec 2023 | 15 Jun 18 | 97.7 | 100.2 | 100.4 | 8.40% | 7.82% | 7.76% |
| Metals/Mining | ArcelorMittal | United | | Ba1 | 500 EUR | 0.95% | Jan 2023 | 4 Dec 17 | 99.3 | 98.8 | 98.9 | 1.08% | 1.19% | 1.18% |
| | | Kingdom | | | | | | | | | | | | |
| Packaging | <u>Ardagh</u> | Ireland | B2 / STA | Caa2 | 350 USD | 8.75% | Jan 2023 | 10 Jan 18 | 103.5 | 100.0 | 99.8 | 7.89% | 8.75% | 8.82% |
| Pharma | Stada | Germany | B2 / STA | (P)B2 | 735 EUR | 3.5% | Sep 2024 | 7 Sep 17 | 101.0 | 97.6 | 99.5 | 3.30% | 3.84% | 3.53% |
| Reit | <u>Globalworth</u> | Romania | Ba1 / POS | Ba1 | 550 EUR | 3.0% | Mar 2025 | 28 Mar 18 | 100.3 | 100.1 | 100.0 | 2.86% | 2.88% | 2.91% |
| | RESIDOMO | Czech Republic | Ba3 / STA | Ba3 | 680 EUR | 3.375% | Oct 2024 | 4 Oct 17 | 101.7 | 100.8 | 100.6 | 3.09% | 3.17% | 3.22% |
| Retail | Aurum | United | B2 / STA | B2 | 265 GBP | 8.5% | Apr 2023 | 9 Apr 18 | 99.8 | 100.0 | 100.0 | 8.44% | 8.38% | 8.36% |
| | | Kingdom | | | | | | | | | | | | |
| | <u>Dufry</u> | Switzerland | Ba2 / STA | Ba2 | 800 EUR | 2.5% | Oct 2024 | 9 Oct 17 | 101.5 | 100.5 | 101.0 | 2.22% | 2.36% | 2.27% |
| | Picard | France | B2 / STA | Caa1 | 310 EUR | 5.5% | Nov 2024 | 4 Dec 17 | 100.7 | 96.2 | 94.5 | 5.31% | 6.15% | 6.48% |
| Services | <u>Ashtead</u> | United | Baa3 / STA | Ba2 | 600 USD | 4.125% | Aug 2025 | 2 Aug 17 | 100.9 | 95.1 | 96.3 | 4.00% | 4.95% | 4.76% |
| | | Kingdom | | | | | | | | | | | | |
| | | | | Ba2 | 600 USD | 4.375% | Aug 2027 | 2 Aug 17 | 100.4 | 95.2 | 96.4 | 4.33% | 5.04% | 4.88% |
| | | | | Ba2 | 600 USD | 5.25% | Aug 2026 | 24 Jul 18 | 101.4 | 100.9 | 102.8 | 5.04% | 5.11% | 4.82% |
| | <u>Europcar</u> | France | B1 / STA | B3 | 600 EUR | 4.125% | Nov 2024 | 16 Oct 17 | 103.4 | 98.8 | 100.0 | 3.55% | 4.26% | 4.06% |
| | <u>Selecta</u> | Netherlands | B3 / STA | (P)B3 | 765 EUR | 5.875% | Feb 2024 | 15 Jan 18 | 98.7 | 99.1 | 99.6 | 6.08% | 5.97% | 5.88% |
| Tech. Serv. | <u>Travelport</u> | United | B1 / STA | B1 | 745 USD | 6.0% | Mar 2026 | 6 Mar 18 | 101.0 | 101.8 | 101.8 | 5.84% | 5.71% | 5.71% |
| | | Kingdom | | | | | | | | | | | | |
| Technology | <u>TeamSystem</u> | Italy | B3 / STA | B3 | 550 EUR | | Apr 2023 | 20 Mar 18 | 100.4 | 100.5 | 100.4 | 4.22% | 4.10% | 4.03% |
| Telecom | <u>Interxion</u> | Netherlands | B1 / STA | B1 | 1000 EUR | 4.75% | Jun 2025 | 6 Jun 18 | 100.8 | 103.8 | 104.1 | 4.58% | 4.07% | 4.00% |
| | <u>SFR</u> | France | B1 / NEG | B1 | 1750 USD | 8.125% | Feb 2027 | 18 Jul 18 | 101.8 | 102.1 | 101.5 | 7.84% | 7.78% | 7.87% |
| | Telecom Italia | Italy | Ba1 / STA | Ba1 | 1250 EUR | 2.375% | Oct 2027 | 10 Oct 17 | 101.9 | 94.8 | 93.7 | 2.13% | 2.98% | 3.13% |
| | | | | Ba1 | 750 EUR | 2.875% | Jan 2026 | 25 Jun 18 | 100.3 | 100.1 | 99.4 | 2.78% | 2.79% | 2.92% |
| | Wind | Italy | B1 / STA | B1 | 2000 USD | 5.0% | Jan 2026 | 18 Oct 17 | 99.7 | 89.8 | 89.4 | 5.01% | 6.67% | 6.74% |
| | | | | B1 | 1750 EUR | 3.125% | Jan 2025 | 18 Oct 17 | 99.9 | 93.4 | 93.4 | 3.13% | 4.24% | 4.26% |
| | | | | B1 | 1630 EUR | 2.625% | Jan 2023 | 18 Oct 17 | 100.1 | 94.9 | 95.7 | 2.57% | 3.80% | 3.65% |
| | | | | B1 | 2250 EUR | 2.421% | Jan 2024 | 18 Oct 17 | 100.4 | 93.8 | 94.4 | 3.00% | 4.38% | 4.18% |
| Transp. Serv. | <u>GSL</u> | France | B3 / STA | B3 | 360 USD | 9.875% | Nov 2022 | 20 Oct 17 | 102.5 | 99.4 | 100.8 | 9.08% | 10.09% | 9.56% |
| | Navios Holdings | Greece | B3 / STA | Caa2 | 305 USD | 11.25% | Aug 2022 | 6 Nov 17 | 96.3 | 95.3 | 95.0 | 12.33% | 12.78% | 12.89% |
| Whlsl Dstrbtn | Rexel | France | Ba2 / STA | Ba3 | 500 EUR | 2.125% | Jun 2025 | 6 Nov 17 | 98.8 | 96.8 | 97.7 | 2.27% | 2.57% | 2.45% |
| - | | | | | | | | | | | | | | |

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

Further exhibit definitions

| Exhibit 14 | Definition | | | | | |
|----------------|---|--|--|--|--|--|
| Exhibit | Definition | | | | | |
| Exhibits 4-9 | Speculative grade liquidity | | | | | |
| Pages 20-21 | 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 | High yield universe | | | | | |
| Page 22 | 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 | High yield financial metrics | | | | | |
| Page 23 | Selection of median financial metrics by rating category and reporting period. | | | | | |
| 0 | Figures are adjusted based on Moody's standard methodologies and sourced from Moody's Financial MetricsTM. | | | | | |
| Exhibits 1-12 | Speculative grade loan issuance and high yield bond issuance | | | | | |
| Pages 26-27 | Monthly issuance of speculative grade loans (publicly-rated and unpublished monitored) and high yield corporate bonds rated by | | | | | |
| Exhibits 1-12 | Moody's in EMEA. Issuance is recorded at the date on which Moody's assigns a rating to the instrument. Historical data may change | | | | | |
| Pages 30-31 | 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. | | | | | |
| | » Another 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 | | | | | |
| | | | | | | |
| Exhibits 13-14 | which the actual location of the headquarters has been used instead. | | | | | |
| | European CLOs | | | | | |
| Pages 28-29 | 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 | Selected high yield bond issuance (last twelve months) | | | | | |
| Pages 32-33 | 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. | | | | | |

Editorial Board

Sandra Veseli Managing Director - Corporate Finance Corporate Finance Group – EMEA +44.20.7772.5593 sandra.veseli@moodys.com

Peter Firth

Associate Managing Director - Corporate Finance Corporate Finance Group – EMEA +44.20.7772.5222 peter.firth@moodys.com

Kristin Yeatman

Vice President – Senior Analyst Corporate Finance Group – EMEA +44.20.7772.5213 kristin.yeatman@moodys.com

Diana Morejon Hernandez

Associate Analyst Corporate Finance Group – EMEA diana.morejon@moodys.com

Iker Ballestero Barrutia, CFA Associate Analyst Corporate Finance Group – EMEA iker.barrutia@moodys.com

Richard Etheridge

Associate Managing Director - Corporate Finance Corporate Finance Group – EMEA +44.20.7772.1035 richard.etheridge@moodys.com

Tobias Wagner, CFA

Vice President – Senior Analyst Corporate Finance Group – EMEA +44.20.7772.5308 tobias.wagner@moodys.com

Marco Sforna

Associate Analyst Corporate Finance Group – EMEA marco.sforna@moodys.com

Sotia Hadjineocleous

Associate Analyst Corporate Finance Group – EMEA sotia.hadjineocleous@moodys.com

Aquib Jamal

Data Analyst Corporate Finance Group – EMEA aquib.jamal@moodys.com © 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

REPORT NUMBER 1141372

CONTACTS

aquib.jamal@moodys.com

| Kristin Yeatman VP-Senior Analyst kristin.yeatman@moodys.com | +44.207.772.5213 | Peter Firth Associate Managing Director peter.firth@moodys.com | +44.20.7772.5222 |
|---|---------------------------|--|------------------|
| Sandra Veseli MD-Corporate Finance sandra.veseli@moodys.com | +44.20.7772.5593 | Richard Etheridge Associate Managing Director richard.etheridge@moodys.co | +44.20.7772.1035 |
| Sotia Hadjineocleous Associate Analyst sotia.hadjineokleous@moody. | +44.20.7772.8768 s.com | Marco Sforna Associate Analyst marco.sforna@moodys.com | +44.20.7772.1074 |
| Diana Morejon Associate Analyst diana.morejon@moodys.com | +44.20.7772.5312 | Iker Ballestero Barrutia, CFA <i>Associate Analyst</i> iker.barrutia@moodys.com | +44.20.7772.1699 |
| Aquib Jamal Data Analyst | +91.80.6113.3639 | | |

CLIENT SERVICES

| Americas | 1-212-553-1653 |
|--------------|-----------------|
| Asia Pacific | 852-3551-3077 |
| Japan | 81-3-5408-4100 |
| EMEA | 44-20-7772-5454 |

MOODY'S INVESTORS SERVICE

MOODYS.COM