CLO Interest

January 2021 Edition

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Nonfinancial Corporates – Global: Low-rated companies in hard-hit sectors will remain vulnerable through slow, bumpy economic recovery

Originally published on 25 January 2021

Summary

Many low-rated companies avoided default during the pandemic-induced recession in 2020 as a result of supportive financial conditions. But the fundamental credit quality of low-rated companies, particularly in the sectors hardest hit by the pandemic, will remain weak during the slow and bumpy economic recovery, and these companies will remain reliant on access to liquidity during this period. Our examination of the rating transitions of low-rated companies during past economic cycles helps underscore this expectation. Our analysis shows that the pace of economic normalization in past cycles helped determine to what extent these companies were able to restore their financial strength.

» **Supportive financial conditions have sustained companies with weak credit profiles during the pandemic.** Among speculative-grade nonfinancial companies, 38% were rated Caa2 or below (in senior unsecured rating) as of year-end 2020, up from 33% a year earlier. Supportive financial market conditions, buttressed by aggressive policy measures by central banks, allowed many low-rated companies to raise liquidity and avoid default in 2020 despite difficult operating conditions. We expect the fundamental credit quality of these companies to remain strained in 2021. Thus, continued access to liquidity will remain crucial for those confronting looming debt maturities to avoid default.

» **Despite access to liquidity, a slow and listless recovery will hamper the improvement of low-rated companies' credit profiles.** Data from past cycles show that the recovery in the credit fundamentals of low-rated companies is correlated with improvement in macroeconomic conditions. The economic recovery that began in the third quarter of 2020 could weaken or reverse if the pandemic significantly worsens and more stringent lockdowns are needed. If financial conditions tighten, companies that staved off default in 2020 could again face rising default risks.

» **Low-rated companies in sectors hardest hit by virus disruption remain vulnerable to further credit stress and default.** In the past two recessions, low-rated companies in sectors under high credit stress were typically less likely than those in other sectors to experience rating upgrades once economic and financial conditions normalized. Following the pandemic-induced recession, low-rated companies in the most disrupted sectors have had the biggest challenges in restoring their credit fundamentals. These sectors include travel, hospitality and oil & gas.

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FEATURE ARTICLES

Moody's Financial Monitor: Financial conditions to remain supportive as economic weakness persists

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» **Equity markets continue their rebound with considerable differences by sector; the gap between financial markets and the real economy persists**. A number of major equity markets reached record highs by year-end 2020, led by the tech and communication services sectors, which benefited from the structural shifts to remote work and changing consumer behaviour toward e-commerce. The gap between the performance of financial markets and that of the real economy persists, in part because of accommodative monetary policy and the low-rate environment.

» **Government debt will reach all-time highs amid unprecedented fiscal measures; bond yields to remain subdued as monetary policy remains accommodative**. Many governments passed large fiscal packages to counter the economic impact of the pandemic. But expectations of sovereign borrowing costs have often fallen despite the surge in government debt, as central bank asset purchase programmes help contain interest costs.

» **Systemic risks in the financial markets have stabilised at moderate levels with Moody's financial conditions indicators around their long-term averages**. We expect systemic risks in the financial markets to remain moderate over the next year, supported by accommodative policies in advanced economies. Despite some asset prices appearing elevated, credit spreads and liquidity risk premia have both returned to around their pre-crisis levels.

» **Systemic risks in the banking sector remain low with modest falls in average capital ratios**. Banks were in a much stronger position at the onset of the pandemic than they were ahead of the 2007/8 crisis. Although their capital ratios will weaken in 2021 as loan losses pick up, a systemic banking crisis is unlikely because banks have ample capacity to absorb potential losses from the pandemic.

» **Both investment grade and high yield debt issuance surged in 2020, notably in sectors exposed to the pandemic; debt maturity profiles remain favourable**. Both investment grade and high yield corporate bond issuances surpassed their five-year averages by 38% and 35%, respectively, in 2020. Investment grade excess issuance was concentrated in Q2, while high yield excess issuance picked up strongly in the second half of 2020 when financial conditions showed clear signs of stabilisation.

» **Default rates will peak in early 2021, particularly in the sectors most exposed to the pandemic**. The global speculative-grade default rate was around its highest level over the decade to 6.6% in December 2020, double the pre-pandemic level. We expect the rate to rise further and peak at 7.3% in March before declining to 4.7% thereafter.

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Government Policy – US: New administration's swift policy pivot on health, economy and climate will affect energy and consumer-related sectors

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Hours after his inauguration on January 20, US President Joe Biden began to act on his policy agenda with a series of executive orders and measures that address four main and overlapping priorities for the US (Aaa stable): slowing the spread of COVID-19, mitigating the effects of the economic slowdown on households, addressing climate change, and promoting racial equity. These initial actions, which will be followed by additional orders and legislative proposals in the coming days and weeks, mark a distinct repositioning on key issues from the Trump administration. These shifts will have economic and policy implications that will affect credit conditions in sectors including structured finance, oil and gas, automobiles, tourism and higher education.

Coordinated federal public health response to curb infections will underpin the economic recovery, with potential costs to employers

Biden has signed a series of executive orders setting forth a coordinated public health response by the federal government to the COVID-19 crisis and for rejoining global efforts to rein in the pandemic. These measures are designed to support the economic recovery and help ensure a healthy workforce. However, such steps may also come with costs in the form of limits on economic activity or increased costs for employers to comply with health and safety rules.

The Biden administration's plans to address the pandemic include coordinating government efforts to accelerate the production and distribution of personal protective equipment, improve and expand healthcare access, reduce social inequities in access to treatment of COVID-19, and increase virus testing and vaccine production and distribution. The administration also is providing federal guidelines for employers to protect their workers from the virus under the Occupational Safety and Health Act and guidance for reopening schools. Measures to reduce the spread of the disease include mandating Centers for Disease Control and Prevention guidelines for wearing masks, maintaining physical distance, and other public health measures in federal buildings, federal lands and on certain domestic modes of transportation. In reversing the previous administration's withdrawal from the World Health Organization, the US will reengage with global counterparts on the COVID-19 response and future multinational health security efforts.

Household economic relief will underpin economic recovery and support credit quality of some structured finance transactions

The new administration announced that US agencies will extend federal COVID-related moratoriums on evictions and foreclosures until at least March 31, and principal and interest suspensions for loans issued under the Department of Education's Direct Loan Program until at least September 30. The extended moratoriums will continue to be positive for consumer credit performance – supporting lenders and various consumer-related asset-backed securitizations – as they provide financially stressed households with additional liquidity to meet financial obligations. Such measures will also alleviate strains on the safety net at a time when the economic recovery remains fragile.

However, while consumer asset quality remains exceptionally strong, thanks in part to past fiscal support packages and payment and eviction moratoriums, the moratoriums also could create longer-term risks for creditors if borrowers' repayment capacity erodes further while the moratoriums remain in effect.

Rejoining Paris climate accord and tightening environmental regulations address climate change risks, but increase challenges for energy and auto sectors

Biden announced several actions that will have significant credit implications for rated entities in sectors most exposed to the energy transition, including oil and gas and automotive manufacturing. The shift in climate policy from the prior administration, together with environmental commitments from other countries and changing consumer preferences, points to the increasing need for these sectors to position their business models for a likely faster energy transition.

Biden's executive order to rejoin the Paris Agreement, along with other climate-related policies, increases the focus on bolstering and enforcing regulation of the energy sector to help reduce carbon emissions. These measures will realign federal policy with the energy transition strategies that many US states and corporations have already adopted.

Additionally, Biden has tasked relevant regulatory agencies with reviewing and potentially revising vehicle fuel economy and emissions standards, in what is likely a first step in reducing carbon emissions and accelerating the transition toward alternative fuel vehicles. Meeting regional emission requirements, particularly those that relate to CO_2, is one of the most pressing and challenging objectives for the auto industry over the next several years. Our Carbon Transition Assessment scores for the 20 leading global automakers indicate that most of them are not strongly positioned for the transition to a low-carbon future. More stringent fuel efficiency standards and a move toward zero-emission vehicles would also accelerate peak oil demand and possibly limit the oil and gas industry's recovery from the coronavirus-induced collapse in oil demand in the first half of 2020.

Biden also signed an executive order that rescinds drilling leases in the Alaskan National Wildlife Reserve. This action will have limited impact on rated oil and gas issuers, given the very low demand in the lease auctions. More broadly, though, the action likely portends moves to ban future permitting on federal land and in US waters.

In a move that likely indicates the tough road new oil and gas infrastructure will generally face under the new administration, Biden signed an order revoking the March 2019 permit for TransCanada Pipelines Limited (Baa1 stable) to continue construction of the Keystone XL Pipeline. Revocation of the permit eliminates the very high level of execution risk related to environmental, social and governance factors that the project entailed. Subsequently, on 21 January, we changed the outlook on the company's ratings to stable from negative. The revocation of the pipeline permit also underscores the challenges for the Province of Alberta (Aa3 stable) in easing shipment bottlenecks for its oil, and raises the likelihood that the province will have to take a loss on its roughly CAD1.5 billion investment in the project. However, the action does not materially affect our long-term credit view of the province, which faces an extended period of outsized deficits as a result of the dual impact of continued low oil prices and the COVID-19 pandemic.

Policy reforms on undocumented workers and reversal of travel restrictions will support longer-term growth

The Biden administration has initiated its reform of US immigration policy with several executive orders and has also signaled that it plans to send a legislative proposal on immigration reform to Congress. Such measures are positive for the economy, as they increase labor productivity and generate tax revenue.

Biden announced that he would preserve the Deferred Action for Childhood Arrivals (DACA) guidance, as well as revise civil immigration enforcement policies. The administration also has a legislative proposal outlining a pathway for the more than 11 million undocumented immigrants who arrived in the US before January 1, 2021 to obtain legal resident status and eventually citizenship. The plan also would expand admission of refugees to the country.

Expanding labor force participation among lower-income migrants would be positive for sectors that rely on unskilled workers, such as agriculture, hospitality and home care. Moreover, policies that expand present and future immigration would, over the medium term, help offset the credit implications of a dramatic shift in demographics from the rapidly aging US workforce. Such policies also would address the long-term sustainability of fundamental welfare and entitlement programs.

In addition, the administration's reversal of several rules limiting temporary entry into the US for individuals from certain countries deemed a threat to national security will be credit positive for tourism sectors and for higher education institutions that have high enrollments of students from these countries.

Strengthening anti-discrimination protections and addressing social and racial inequities will support credit quality across sectors

The Biden administration also set in motion its agenda to address social and racial disparities. If effectively implemented, such policies would help stymie rising inequity in the US, which left unaddressed could weigh on the country's fiscal, economic and institutional strength.

Biden's executive orders strengthen protection for individuals against discrimination on the basis of gender identity or sexual orientation. They also include a focus on equity in the review of federal agency programs. These measures will establish rules and norms that expand access to job opportunities and public services. Wider access to these opportunities and programs would advance households' financial stability and well-being, and help support consumption and economic activity.

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Macroeconomics – Europe: COVID-19 will reinforce credit-negative risks of secular stagnation in the euro area

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Summary

COVID-19 has further accelerated the risk of persistent secular stagnation in the euro area, given the potential for even slower long-term growth and a longer period of extremely low interest rates driven by secular factors, including a further increase in savings over investments. The region's combination of low growth, low inflation and interest rates at or below zero has drawn comparisons with the experience of Japan (A1 stable) since the 1990s. In the event the euro area enters a similar scenario as Japan, the credit implications across sectors would be negative overall. However, the magnitude of the effects would differ widely.

» **Japan's experience offers lessons, but there are differences**. Even before the pandemic, the euro area had low growth and very low interest rates driven by secular factors that were broadly similar to those in Japan over recent decades. The most important difference between the two regions relates to the euro area's structure, under which countries share a single currency and effectively a fixed exchange rate against each other.

» **Euro area sovereigns would find it tougher to cut debt in a persistently low-growth and low-inflation environment**. Greece (Ba3 stable), Italy (Baa3 stable), Portugal (Baa3 positive) and Cyprus (Ba2 positive) would be at the highest risk, while Germany (Aaa stable) and the Netherlands (Aaa stable) would be much better positioned. Pressure on sovereigns also would spill over to regional and local governments (RLGs).

» **Persistently low interest rates would weigh on financial institutions**. Banks would find it harder to preserve profits, which would compound the effects of weakening asset quality. Life insurance earnings would be especially affected, especially in countries with high guarantees on products. Lower-for-longer rates would further erode traditional asset managers' returns and fee revenue.

» **Long period of secular stagnation likely would drive more aggressive M&A**. Persistent low growth would slow the recovery in corporate profits and delay deleveraging. Sluggish economic growth in domestic markets would likely lead companies to look to M&A over the long term for external growth or cost synergies, supported by cheap debt funding.

» **Secular stagnation would have a mixed impact for structured finance.** Although low rates benefit floating-rate borrowers, lower asset values are credit negative for securitisations.

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CLOs — US: November 2020 Market Pulse: CLO credit metrics broadly improve

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Exhibit 1

US BSL CLO 2.0 key performance metrics in November[1]

To see this data in excel click here.

Vintage	WARF	Defaults (%)	Caa Buckets (%)	Senior OC (%)	Junior OC (%)	WAS (%)	Reinvesting/ Amortizing
2013	3244 (+2)	1.30 (-0.25)	7.50 (-0.10)	129.84 (+0.44)	105.45 (+0.35)	3.72 (+0.07)	51 / 16
2014	3305 (-59)	2.23 (-0.18)	10.20 (0.00)	131.31 (+0.21)	105.08 (+0.35)	3.76 (+0.02)	49 / 49
2015	3281 (-61)	1.28 (-0.15)	8.13 (-0.10)	130.57 (+0.44)	105.85 (+0.16)	3.70 (+0.03)	71 / 66
2016	3206 (-33)	1.10 (-0.05)	7.90 (-0.10)	129.27 (+0.36)	105.97 (+0.05)	3.75 (+0.04)	85 / 30
2017	3206 (-20)	0.94 (-0.03)	7.60 (-0.24)	129.44 (+0.09)	106.44 (+0.19)	3.77 (+0.03)	151 / 3
2018	3217 (-28)	0.86 (-0.06)	7.50 (-0.27)	129.98 (+0.05)	106.57 (+0.03)	3.76 (+0.04)	187 / 15
2019	3116 (-28)	0.39 (-0.05)	5.95 (+0.02)	131.50 (+0.06)	108.39 (-0.03)	3.77 (+0.02)	142 / 0
Amortizing CLO 2.0s	3405 (-58)	1.97 (-0.25)	10.23 (-0.37)	134.18 (-0.23)	105.11 (+0.48)	3.73 (+0.02)	181
Reinvesting CLO 2.0s	3183 (-31)	0.87 (-0.06)	7.30 (-0.21)	129.98 (+0.13)	106.56 (+0.13)	3.76 (+0.04)	771
All CLO 2.0s	3216 (-24)	0.97 (-0.09)	7.59 (-0.21)	130.26 (+0.19)	106.36 (+0.12)	3.75 (+0.04)	952

Source: Moody's Investors Service

CLO 2.0s' defaulted holdings declined across all cohorts

Median defaulted holdings declined by 16 basis points (bps) to 0.87% for reinvesting CLOs and by 25 bps to 1.97% for amortizing CLOs, while all CLO 2.0s recorded a median decrease of 9 bps to 0.97%. The decrease in median defaults was partially attributable to issuers no longer being treated as defaulted. Reasons for exiting default included completion of debt exchanges, as in the case of Anchor Glass Container Corporation (CFR Caa1 - negative), a manufacturer of premium glass packaging products whose debt is in 116 CLO 2.0s we rate, with a median exposure of 0.38%.

However, issuers newly treated as defaulted by some CLOs in November include: Frontera Generation Holdings LLC (ratings withdrawn), a distributor of gas and energy whose debt is in 110 CLOs we rate, with median exposure of 0.48%, CDRH Parent (Healogics), Inc. (CFR Caa3 - stable), a holding company whose principal operating subsidiary is Healogics, Inc. a healthcare services company whose debt is in 52 CLOs we rate, with median exposure of 0.58%, and Peabody Energy Corporation (CFR Caa1 - stable), a global pure-play coal producer, whose debt is in 144 CLOs we rate, with median exposure of 0.31%.

Notably, in the midst of historically high distressed holdings, credit risk sales also continue to contribute to the decline in defaulted holdings.

Caa holdings decrease for amortizing and reinvesting CLO 2.0s

Median Caa holdings decreased by 21 bps to 7.30% for reinvesting CLOs and by 21 bps to 7.59% overall for CLO 2.0s, still exceeding the 7.5% limit permitted in most CLOs we rate. Amortizing CLOs recorded a median decrease of 37 bps to 10.23%. The proportion of CLOs reporting Caa holdings higher than 7.5% decreased to 51.3% in November, the lowest month on record since April 2020.

The decrease was driven in part by the sale of deteriorated credits. These include: ASP MCS Acquisition Corp. (ratings withdrawn), a company that provides property inspection and preservation services on behalf of lenders and loan servicers for homes with defaulted mortgage loans whose debt is in 53 CLOs we rate with median exposure of 0.02%; Central Security Group, Inc. (ratings withdrawn), a company that provides alarm monitoring services to residential customers whose debt is in 59 CLOs we rate with median exposure of 0.24%; Doncasters Group Ltd (ratings withdrawn); and Summit Midstream Partners Holdings, LLC. (ratings withdrawn), owner of SMLP which is a publicly-traded master limitedpartnership primarily engaged in natural gas, crude oil production whose debt is in 80 CLOs we rate with median exposure of 0.16%.

Senior and junior OC ratios improve across most vintages

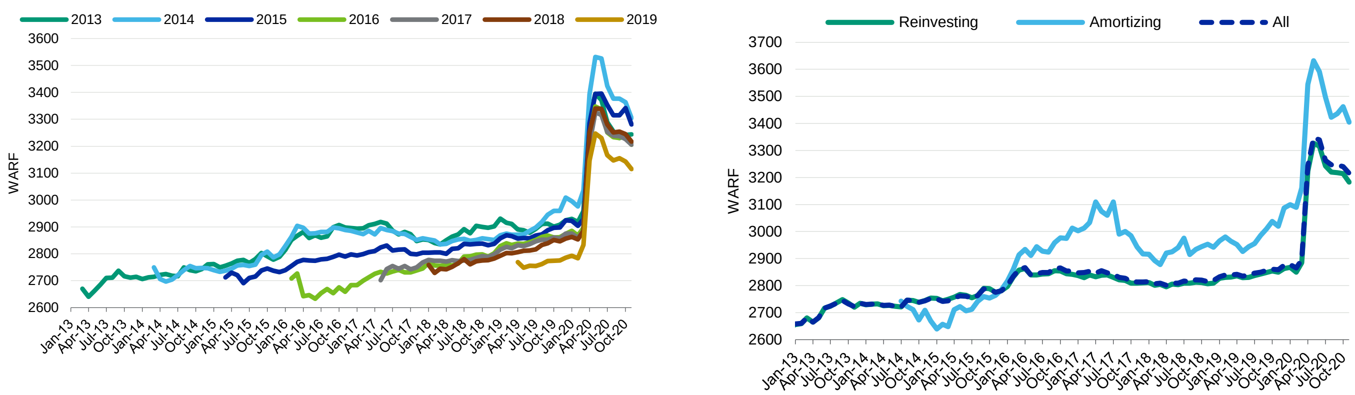
Median senior over-collateralization (OC) ratios increased by 19 bps overall for CLO 2.0s and by 13 bps for reinvesting CLOs, but decreased by 23 bps to 134.18% for amortizing CLOs. Median junior and senior OC ratios improved across most vintages, led by the 2013 and 2016 deals, which recorded a 35 bps increase for junior OC ratios and 44 bps for senior OC ratios, respectively. Median junior OC ratios increased by 12 bps to 106.36% overall for CLO 2.0s. Junior OC ratios also increased by 13 bps to 106.56% and by 48 bps to 105.11% for reinvesting and amortizing deals, respectively.

Moderate decreases in defaulted and Caa holdings contributed to the improvement in median OC ratios.

Exhibit 2

Median weighted average rating factor (WARF)

Among US BSL CLO 2.0s we rate, by vintage and reinvestment type

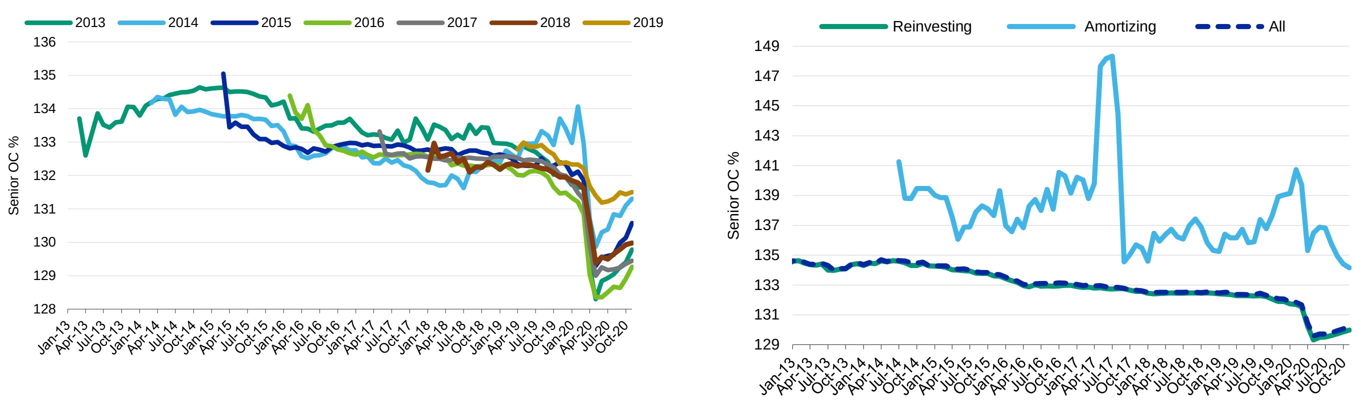


Source: Moody's Investors Service

Exhibit 3

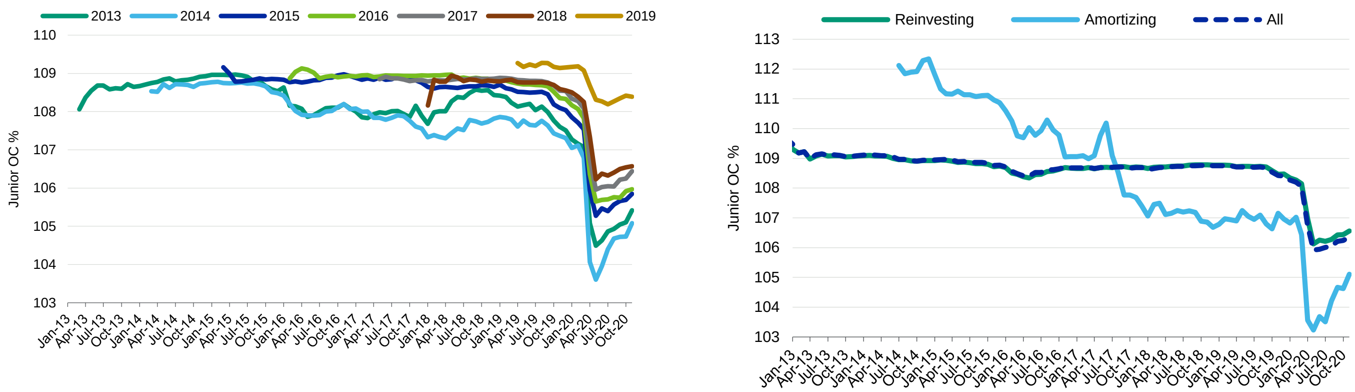
Median senior over-collateralization (OC) ratio

Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



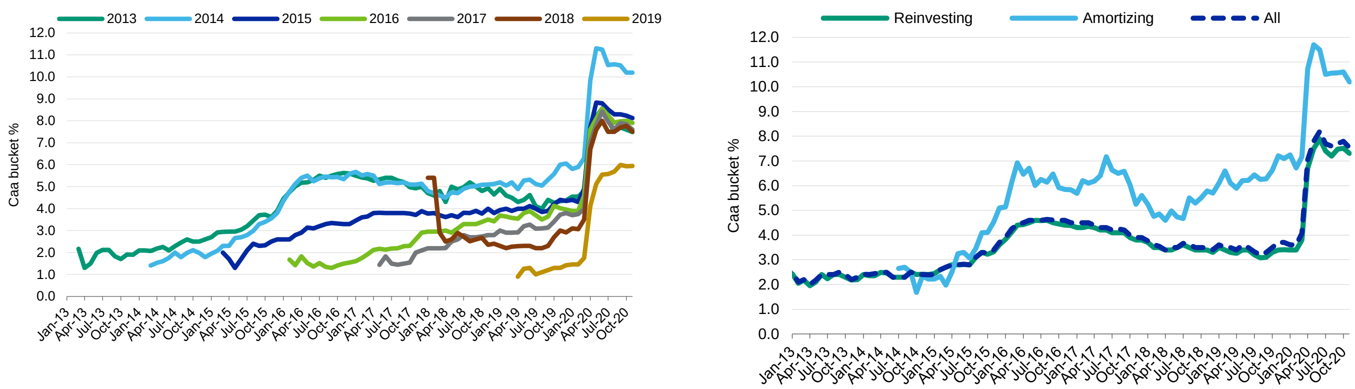
Source: Moody's Investors Service

Exhibit 4
Median junior over-collateralization (OC) ratio
Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



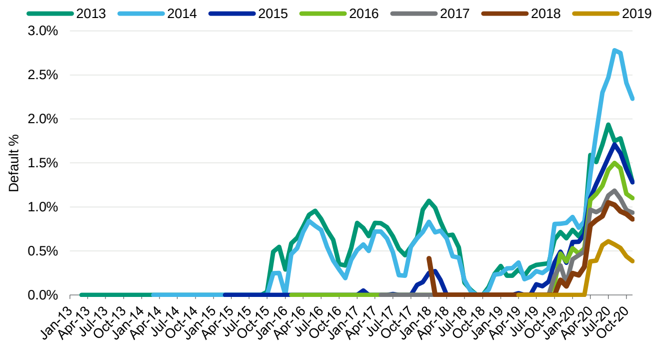
Source: Moody's Investors Service

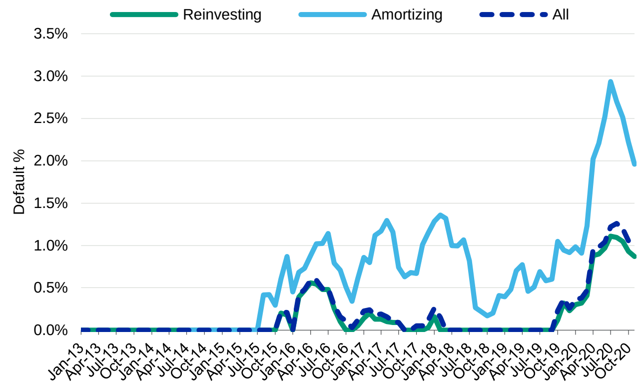
Exhibit 5
Median Caa bucket
Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



Source: Moody's Investors Service

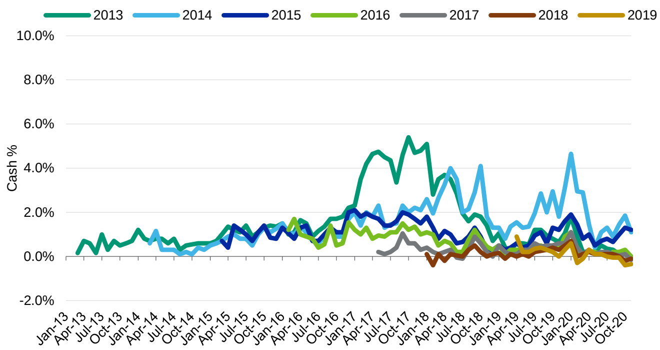
Exhibit 6
Median collateral defaulted asset holdings
Among US BSL CLO 2.0s we rate, by vintage and reinvestment type

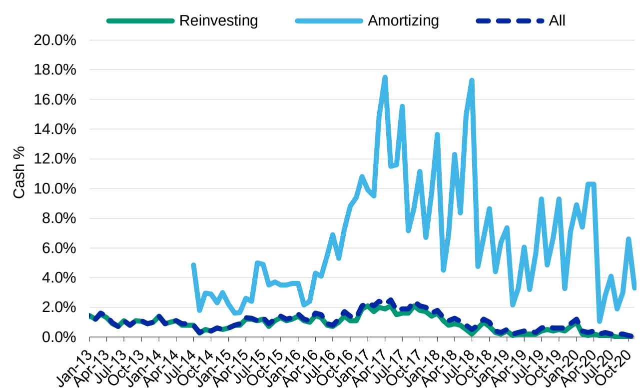




Source: Moody's Investors Service

Exhibit 7
Median cash holdings
Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



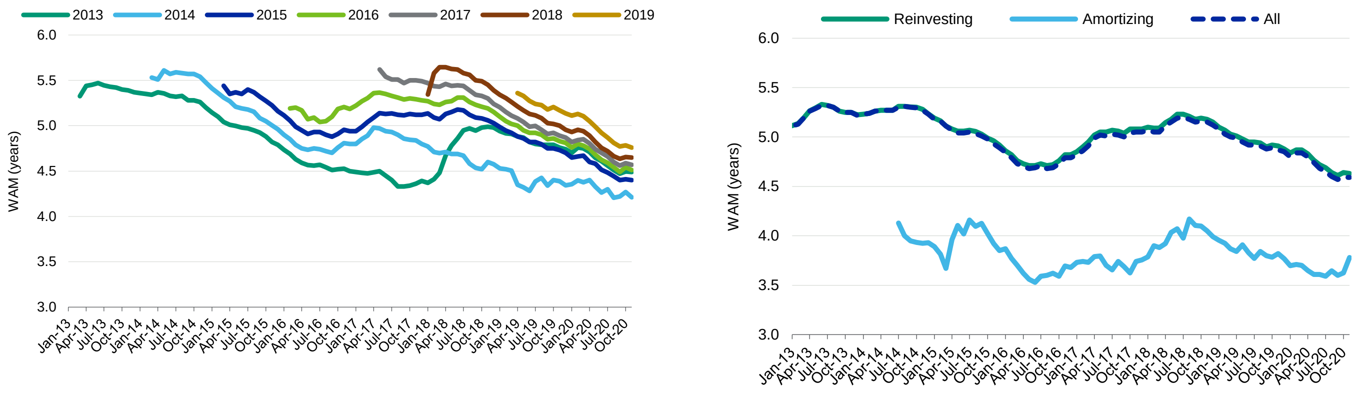


Source: Moody's Investors Service

Exhibit 8

Median collateral weighted average maturity (WAM)

Among US BSL CLO 2.0s we rate, by vintage and reinvestment type

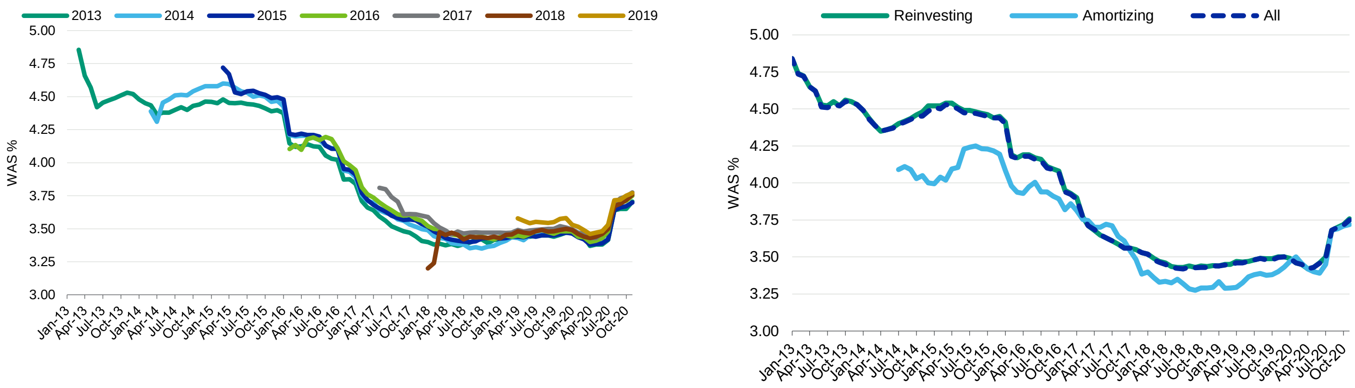


Source: Moody's Investors Service

Exhibit 9

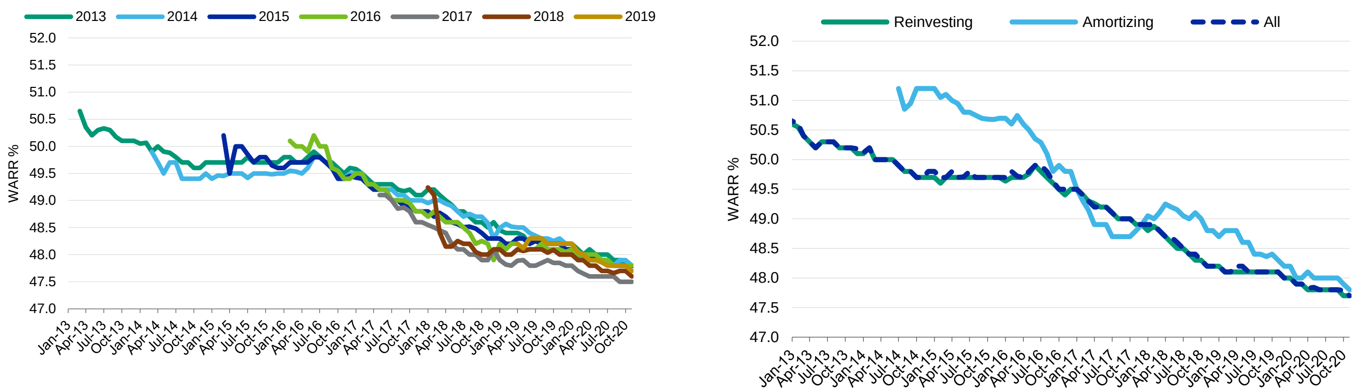
Median collateral weighted average spread (WAS)

Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



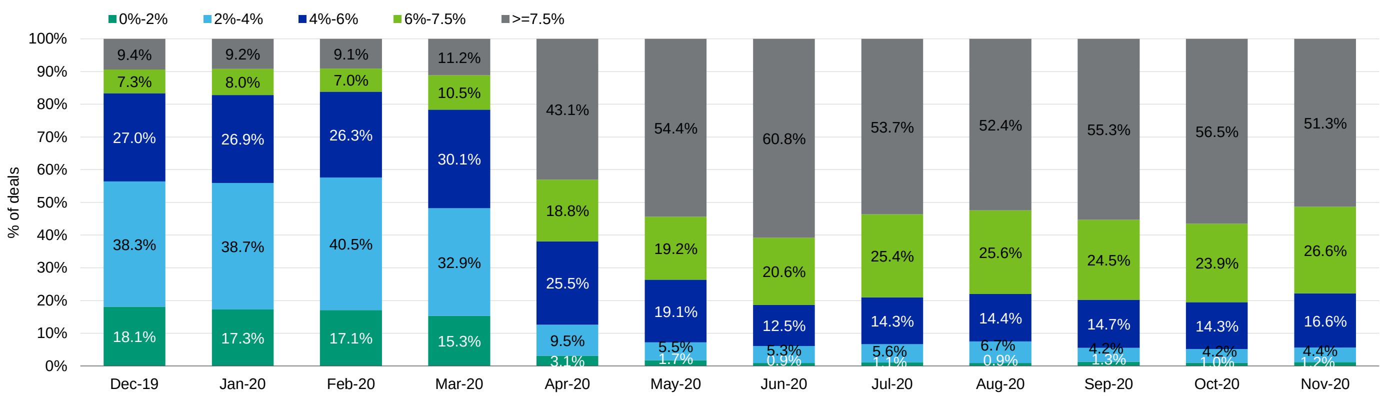
Source: Moody's Investors Service

Exhibit 10
Median collateral weighted average recovery rate (WARR)
Among US BSL CLO 2.0s we rate, by vintage and reinvestment type



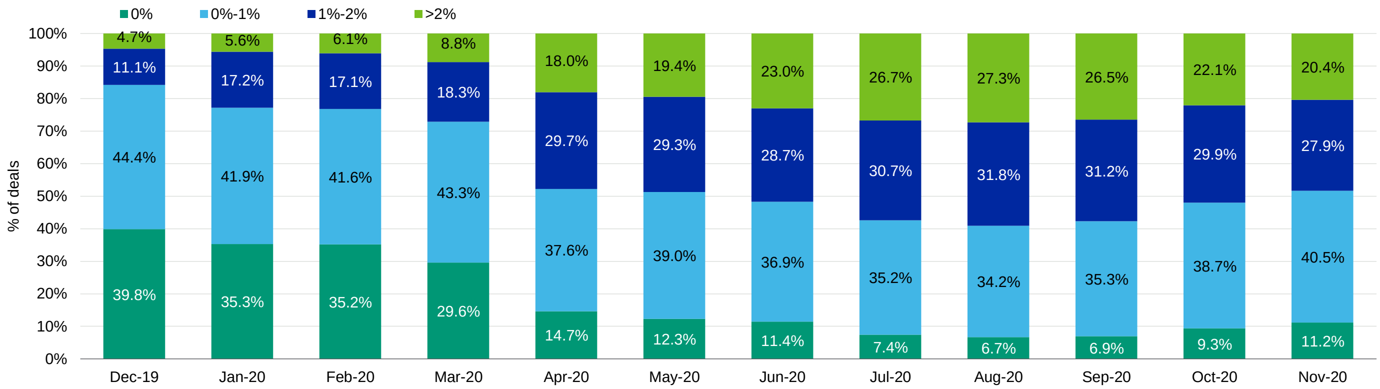
Source: Moody's Investors Service

Exhibit 11
Caa bucket - distribution in US CLO 2.0s over time*
% of US CLO 2.0s we rate, December 2019 - November 2020



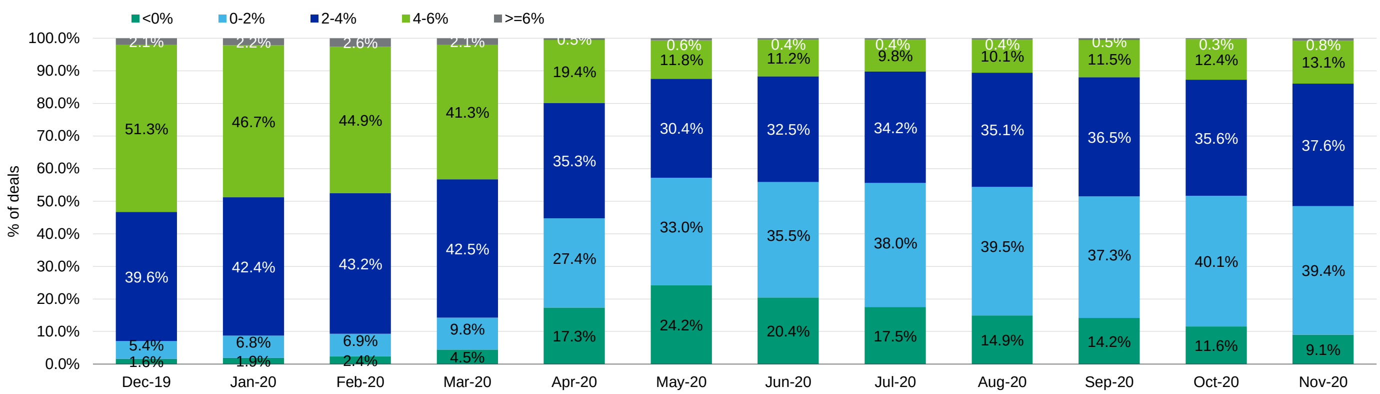
*Note: Caa bucket levels are based on trustee reported data.
Source: Moody's Investors Service

Exhibit 12
Defaulted holdings distribution in US CLO 2.0s over time*
% of US CLO 2.0s we rate, December 2019 - November 2020



*Note: Defaulted asset levels are based on trustee reports.
Source: Moody's Investors Service

Exhibit 13
Junior OC cushion distribution in US CLO 2.0s over time*
% of US CLO 2.0s we rate, December 2019 - November 2020



*Note: Junior OC cushion levels are based on trustee reports.
Source: Moody's Investors Service

Endnotes

1 (1) Monthly changes are based on deals that have provided trustee reports as of 1 January 2021 for the month of November and that include such information. "Monthly change" compares November and October 2020 medians for deals that have reported data for both months, as a result, numbers may differ from the charts below, for which all available deals were used. (2) Assumptions in our rating analysis may differ from the levels shown in exhibits below. (3) The vintage cohorts are based on original closing dates that fall within the applicable calendar years, and are not reclassified after resets or refinancings. Each cohort data is reported after the number of deals reporting performance metrics reach five or higher. Deals remain in their respective cohorts up to 60 days from their final termination date or until we no longer rate them. (4) The reinvesting, amortizing and all CLO 2.0 cohorts include all deals we rate with performance metrics from year 2010 onward.

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CLOs – EMEA: November 2020 Market Pulse: Credit quality continues to improve

Originally published on 22 January 2021

Exhibit 1

European BSL CLO 2.0 key performance metrics in November [1]

To see this data in excel Click Here

Vintage	WARF	Defaults (%)	Caa Bucket (%)	Senior OC (%)	Junior OC (%)	WAS (%)	Reinvesting/ Amortising
2013	3368 (-36)	0.18 (-0.12)	6.91 (+0.18)	137.48 (+0.19)	111.40 (-0.10)	3.96 (+0.02)	5 / 1
2014	3275 (-16)	0.00 (-0.40)	6.58 (-0.04)	137.58 (-0.17)	110.26 (+0.17)	3.75 (0.00)	24 / 4
2015	3334 (-14)	0.00 (0.00)	7.33 (+0.39)	139.46 (+0.25)	110.45 (+0.05)	3.92 (+0.03)	17 / 14
2016	3292 (-12)	0.00 (-0.22)	7.38 (+0.50)	137.49 (+0.24)	110.15 (+0.03)	3.75 (-0.03)	30 / 8
2017	3341 (-18)	0.42 (-0.21)	7.30 (+0.10)	136.22 (-0.16)	110.07 (+0.01)	3.82 (0.00)	43 / 0
2018	3278 (-24)	0.00 (-0.10)	6.60 (+0.29)	138.90 (-0.05)	110.62 (-0.06)	3.73 (0.00)	73 / 0
2019	3243 (-11)	0.00 (0.00)	4.50 (0.00)	139.16 (-0.04)	110.78 (-0.05)	3.76 (-0.01)	52 / 0
Amortising CLO 2.0s	3412 (-19)	0.00 (0.00)	7.70 (+0.77)	143.44 (+0.69)	111.17 (+0.19)	4.01 (0.00)	27
Reinvesting CLO 2.0s	3277 (-20)	0.00 (-0.15)	6.48 (+0.17)	138.13 (0.00)	110.47 (+0.02)	3.75 (-0.01)	255
All CLO 2.0s	3288 (-17)	0.00 (-0.11)	6.61 (+0.14)	138.24 (-0.08)	110.51 (-0.08)	3.78 (0.00)	282

Source: Moody's Investors Service

WARF continues to improve

The median CLO 2.0 weighted average rating factor (WARF) for all CLO 2.0s improved again across all cohorts in November, decreasing by a further 17 points to 3288. Among vintages of significant sample sizes, 2018 deals recorded the largest decrease, improving by 24 points to 3278, followed by the 2017 deals, for which WARF decreased by 18 points to 3341. For the remaining vintages of significant sample sizes, WARF improved by 11-16 points. Factors that contributed to WARF improvement include credit risk sales and our rating actions on several widely held issuers. These issuers included (1) Nets Topco 3 S.a r.l. (B2, rating under review), a European payments company domiciled in Luxemburg, whose corporate family rating (CFR) we placed under review for upgrade and whose debt is in 236 European CLOs with a median exposure of 0.9%, and (2) I-Logic Technologies Bidco Limited (B2, stable), a US-domiciled software services company providing data and analytics to capital markets participants, whose CFR we upgraded from B3 and whose debt is in 77 European CLOs with a median exposure of 0.5%.

Defaulted holdings decline

The overall CLO 2.0s' median exposure to defaults was at 0.0% in November, after declining by 11 basis points (bps). The total number of deals reporting at least one defaulted asset dropped to 124 from 143 the previous month. On a vintage level, the decreases ranged from 10 bps to 40 bps, led by a 40 bps decrease for the 2014 vintage. The decrease in median defaults was largely a result of several issuers no longer being treated as defaulted, including Codere S.A. (Caa3, stable), an international gaming operator domiciled in Spain, whose outlook we changed to stable from negative, and whose debt is in 31 CLO 2.0s with a median exposure of 0.8%.

Median Caa holdings increase for most cohorts

The median Caa holdings increased overall by 14 bps to 6.61%, mainly as a result of rating downgrades to widely held issuers including Piolin II S.a.r.l. (Piolin II, Caa1 negative), whose senior secured term loan B rating we downgraded to Caa1 from B3. Piolin II is a global operator of regional amusement, animal and water parks and its debt is held by 173 European CLOs with a median exposure of 0.6%. The two-notch downgrade of the senior secured facility of Vue International Bidco plc (Caa2, negative) mentioned last month also contributed to the increase as it continued to filter through to November trustee reports.

The proportion of deals reporting a Caa concentration of 7.5% or higher increased in November to 37.4% from 31.3% in the previous month. CLOs' excess Caa haircut language generally requires CLOs to carry Caa rated loans at market value for OC tests calculation purposes once they comprise more than 7.5% of collateral.

Senior and junior OC ratios decrease

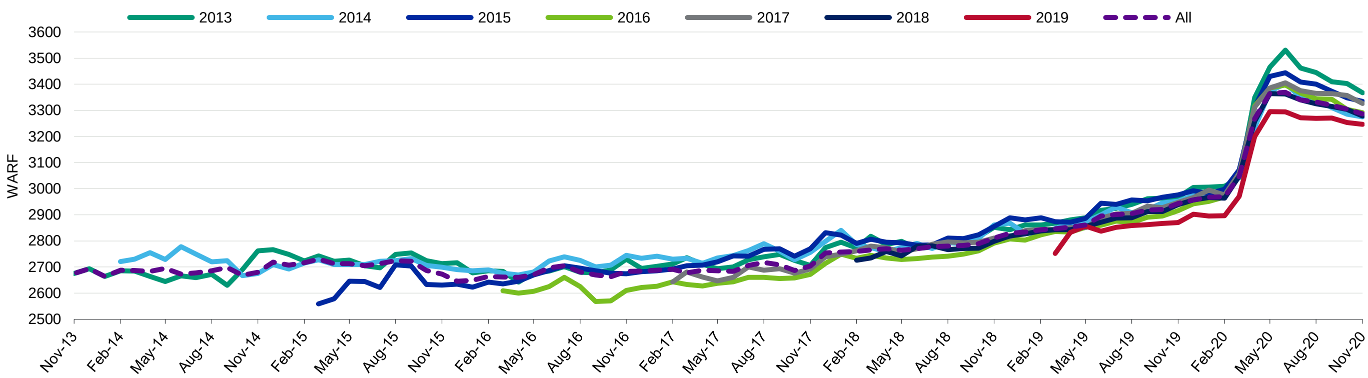
The overall median senior and junior over-collateralization (OC) ratios both decreased by 8 bps, to 138.24% and 110.51%, respectively. On a vintage level, the senior OC decreased the most for 2014 vintage deals, by 17 bps to 137.58%, followed by 2016 deals, down by 16 bps to 136.22%. For junior OC, among the vintages with significant sample sizes, 2018 and 2019 vintage deals recorded decreases of 5 bps and 6 bps, to 110.62% and 110.78%, respectively. Meanwhile, 2014-17 vintages recorded increases in junior OC, ranging from 1 bp to 17 bps.

The junior OC levels reported in November were below test thresholds for six transactions.

Exhibit 2

Median WARF

Among European BSL CLO 2.0s we rate, by vintage

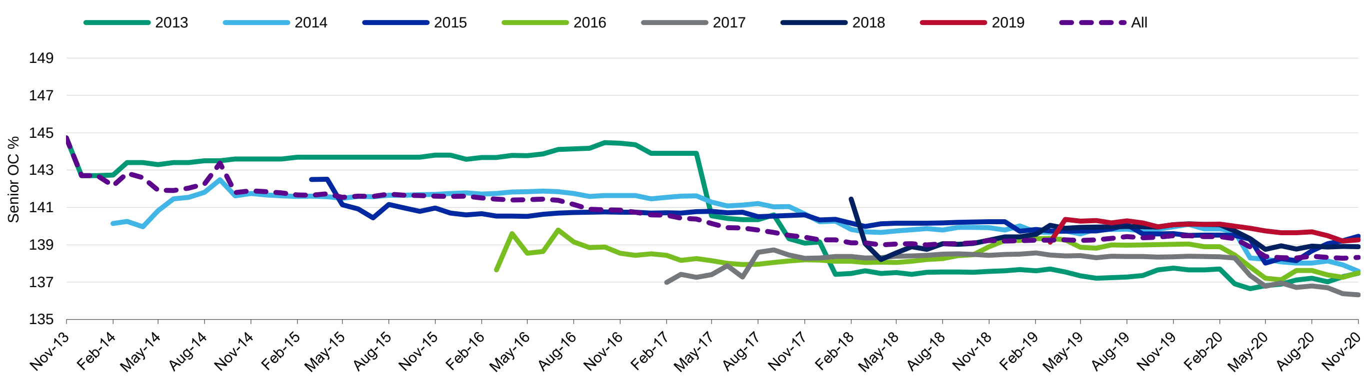


Source: Moody's Investors Service

Exhibit 3

Median senior OC ratio

Among European BSL CLO 2.0s we rate, by vintage

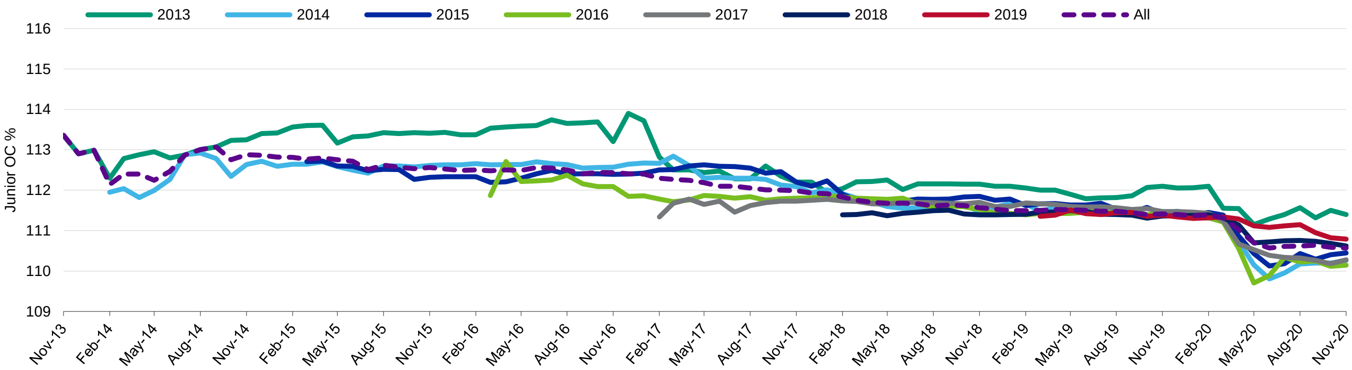


Source: Moody's Investors Service

Exhibit 4

Median junior OC ratio

Among European BSL CLO 2.0s we rate, by vintage

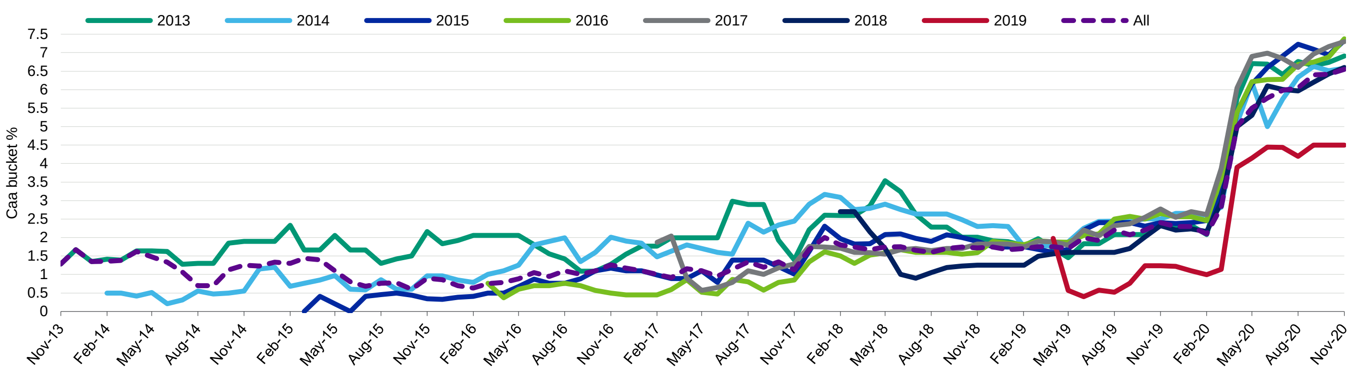


Source: Moody's Investors Service

Exhibit 5

Median Caa bucket

Among European BSL CLO 2.0s we rate, by vintage

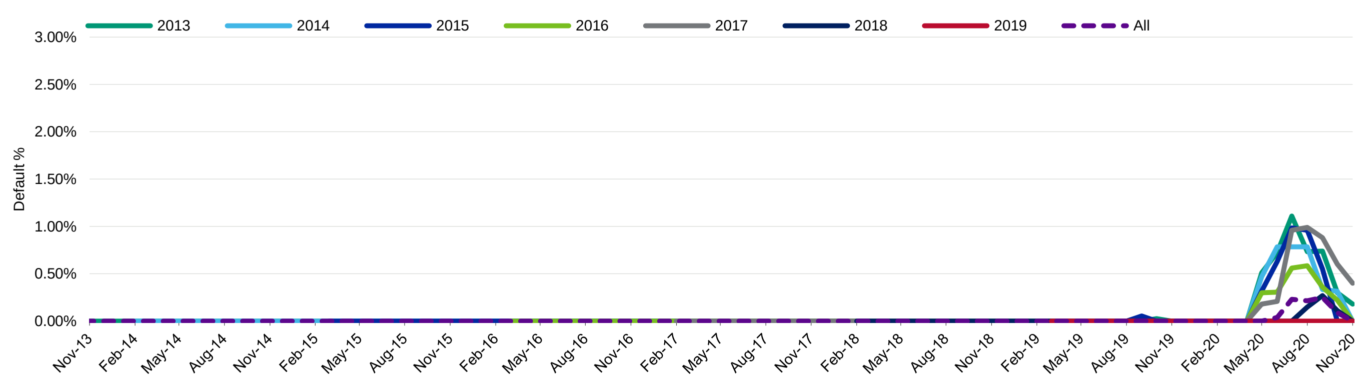


Source: Moody's Investors Service

Exhibit 6

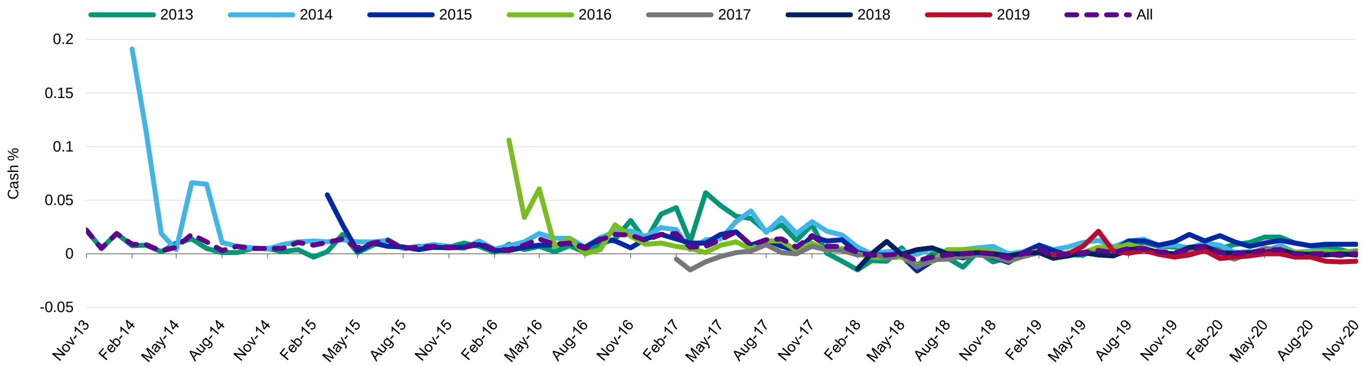
Median collateral defaulted asset holdings

Among European BSL CLO 2.0s we rate, by vintage



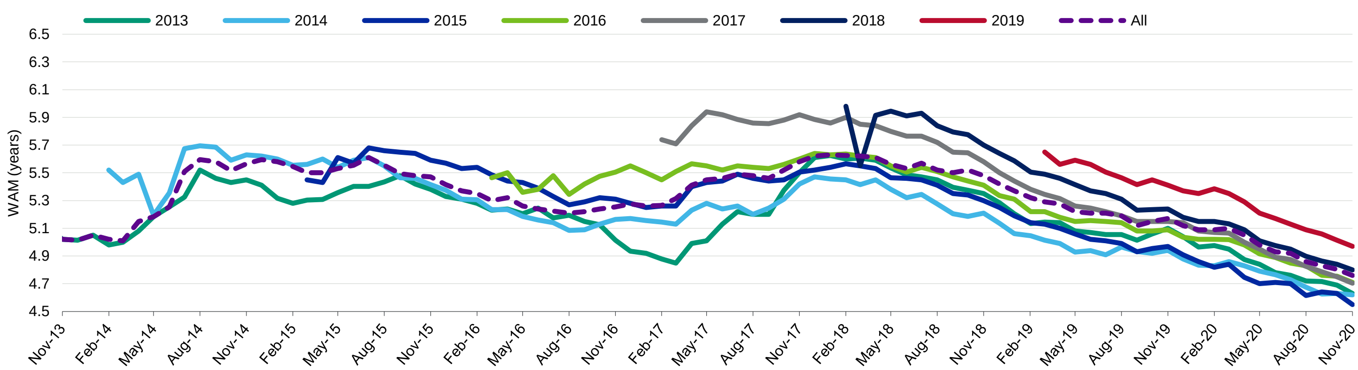
Source: Moody's Investors Service

Exhibit 7
Median cash holdings
Among European BSL CLO 2.0s we rate, by vintage



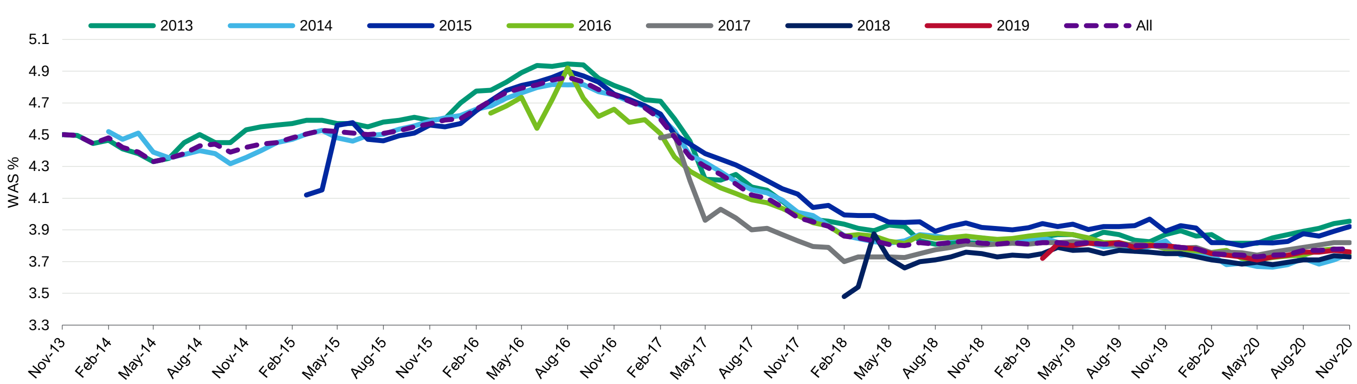
Source: Moody's Investors Service

Exhibit 8
Median collateral weighted average maturity
Among European BSL CLO 2.0s we rate, by vintage



Source: Moody's Investors Service

Exhibit 9
Median collateral weighted average spread
Among European BSL CLO 2.0s we rate, by vintage

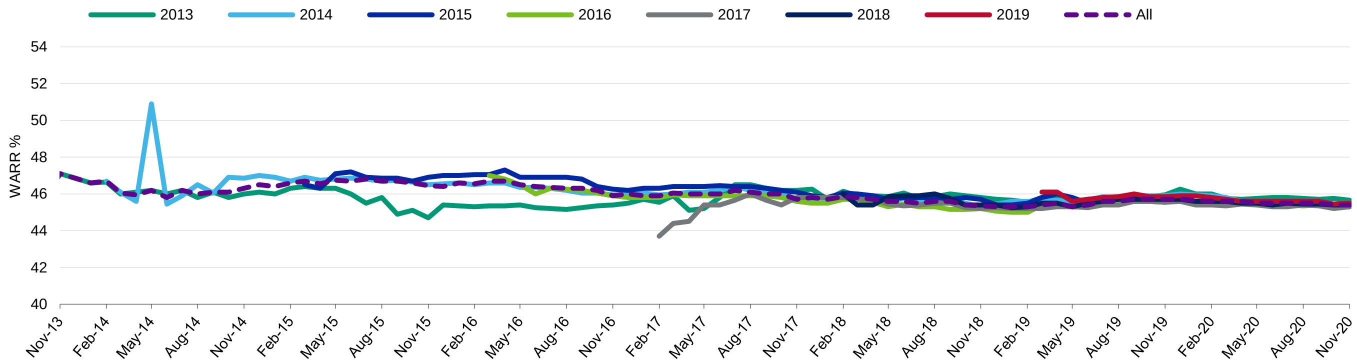


Source: Moody's Investors Service

Exhibit 10

Median collateral weighted average recovery rate

Among European BSL CLO 2.0s we rate, by vintage

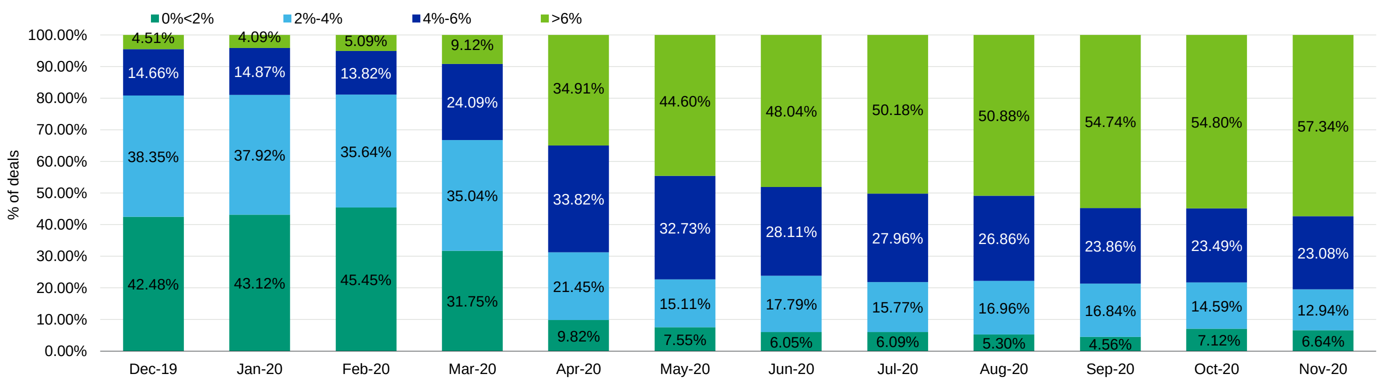


Source: Moody's Investors Service

Exhibit 11

Caa bucket - distribution in European CLO 2.0s over time*

% of European CLO 2.0s we rate



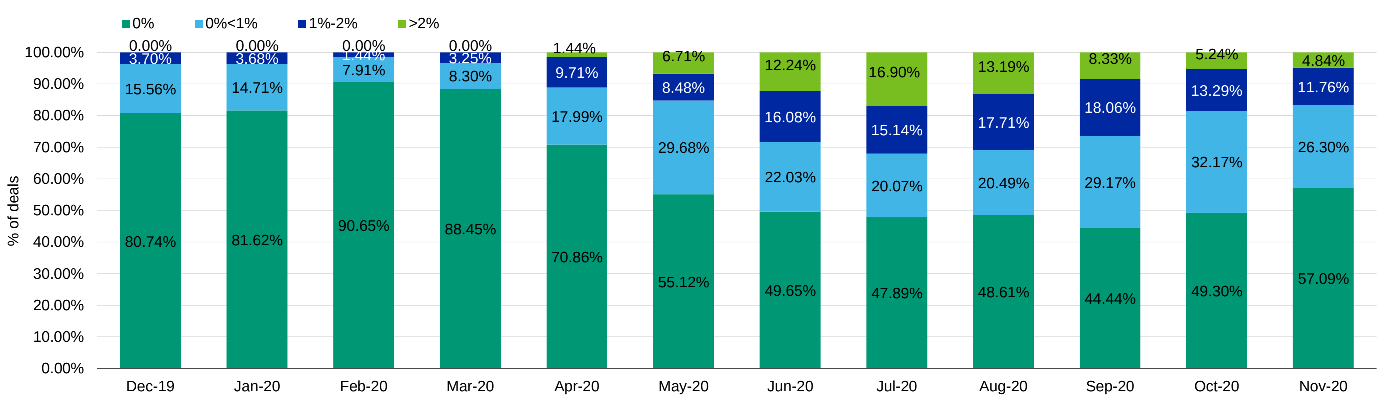
*Based on trustee reported data

Source: Moody's Investors Service

Exhibit 12

Defaulted holdings distribution in European CLO 2.0s over time*

% of European CLO 2.0s we rate



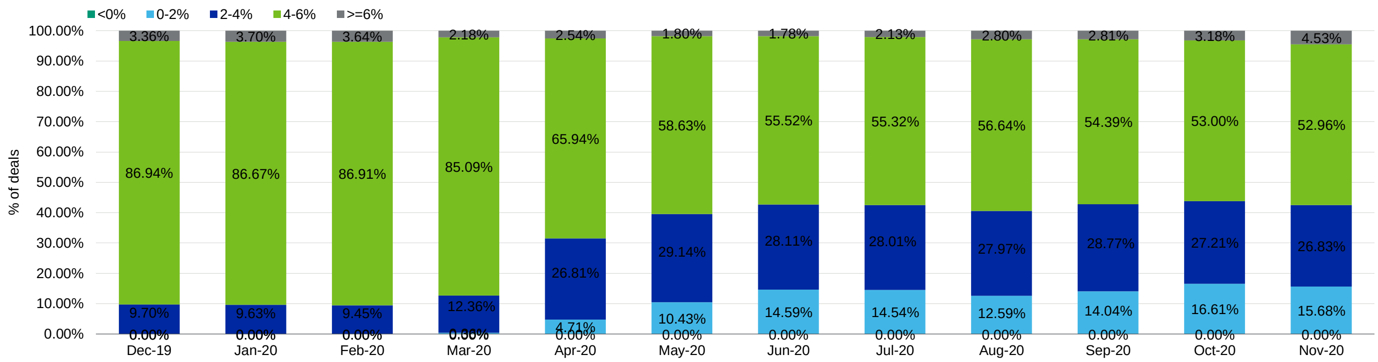
*Based on trustee reports

Source: Moody's Investors Service

Exhibit 13

Junior OC cushion distribution in European CLO 2.0s over time*

% of European CLO 2.0s we rate



*Based on trustee reports.

Source: Moody's Investors Service

Endnotes

1 (1) Monthly changes are based on deals that have provided trustee reports as of January 1, 2021 for the month of November and that include such information. "Monthly change" compares November 2020 and October 2020 medians for deals that have reported data for both months, as a result, numbers may differ from the charts below, for which all available deals were used. (2) WARF assumptions in our rating analysis may differ from the WARF levels shown in this table. (3) The vintage cohorts are based on original closing dates that fall within the applicable calendar years, and are not reclassified after resets of refinancings. Each vintage cohort data is reported only after the number of deals reporting performance metrics reach five or more. Deals remain in their respective cohorts unless they are terminated or unless we no longer rate them. (4) The reinvesting, amortising and all CLO 2.0 cohorts include all deals we rate with performance metrics from 2011 onward.

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CLOs – Global: December 2020 Rating Surveillance Update: Methodology update drives mostly positive rating actions

Originally published on 19 January 2021

US broadly syndicated loan CLOs

In December, we placed on review for possible upgrade the ratings on 188 tranches from 114 US broadly syndicated loan (BSL) collateralized loan obligation (CLOs). While our reviews of these ratings are still ongoing, those reviews we concluded in December resulted in upgrades of our ratings on 45 tranches from 18 US CLOs, all CLO 2.0 deals totaling $1.3 billion in original principal balance. The upgrades ranged from one to four notches, with an average magnitude of 1.4 notches. We did not downgrade the ratings on any US CLOs in December.

The rating upgrades were primarily a result of applying our revised CLO rating assumptions.[1] The primary changes to the modeling assumptions include the analytical treatment of corporate obligors whose ratings are on review downgrade or assigned a negative outlook. Specifically, we now lower the obligor's default probability rating by one notch if the obligor's rating is on review for possible downgrade, and we make no adjustments if the obligor's rating has a negative outlook.

CLO notes previously rated Aa2 (sf) and A2 (sf) accounted for most of the upgrades, including 10 Aa2 (sf) rated tranches we upgraded to Aa1 (sf) and nine A2 (sf) rated tranches we upgraded to A1 (sf).

In addition, we confirmed the ratings on four tranches from three US CLOs with a total original principal balance of $140.8 million. These confirmations were concentrated in notes rated A3 (sf) and Ba1 (sf).

We withdrew the ratings on 33 tranches in 27 transactions with a total original principal balance of $2.6 billion. The ratings on 24 tranches in 24 transactions were withdrawn because the notes were paid in full. Our withdrawals on nine tranches in three transactions were the result of refinancings.

US SME CLOs

In December, we withdrew the ratings on four tranches in one small and medium-sized enterprise (SME) CLO deal, with a total original principal balance of $283.5 million, as a result of an optional redemption.

We did not upgrade or downgrade the ratings on any SME CLO tranches in December.

European BSL CLOs

In December, we upgraded the ratings on 45 tranches in 16 CLOs, totaling €986.1 million in original balance. The rating upgrades were primarily the result of the methodology update.

We withdrew the ratings on one tranche each in Avoca CLO XIX Designated Activity Company, BlueMountain Fuji EUR CLO IV DAC, Bosphorus CLO IV Designated Activity Company, Dryden 48 Euro CLO 2016 Designated Activity Company, Jubilee CLO 2018-XX B.V., Laurelin 2016-1 Designated Activity Company and Penta CLO 4 Designated Activity Company as a result of the notes being paid down in full. The total original balance of these withdrawn tranches was €13 million.

We did not downgrade the ratings of any European CLOs in December.

Exhibit 1
US broadly syndicated CLOs rating transitions, December 2020

	Ratings as of 12/31/2020																						
Raings as of 11/30/2020	Aaa (sf)	Aa1 (sf)	Aa2 (sf)	Aa3 (sf)	A1 (sf)	A2 (sf)	A3 (sf)	Baa1 (sf)	Baa2 (sf)	Baa3 (sf)	Ba1 (sf)	Ba2 (sf)	Ba3 (sf)	B1 (sf)	B2 (sf)	B3 (sf)	Caa1 (sf)	Caa2 (sf)	Caa3 (sf)	Ca (sf)	C (sf)	WR	Total
Aaa (sf)	1,423																					25	1,448
Aa1 (sf)	3	97																				1	101
Aa2 (sf)	4	10	633																			2	649
Aa3 (sf)				29																		1	30
A1 (sf)		1		1	31																		33
A2 (sf)		2	1	3	9	596																1	612
A3 (sf)							50															1	51
Baa1 (sf)						1		16															17
Baa2 (sf)								1	27														28
Baa3 (sf)								2	7	542												1	552
Ba1 (sf)											85												85
Ba2 (sf)												19											19
Ba3 (sf)													523									1	524
B1 (sf)														145									145
B2 (sf)															15								15
B3 (sf)																89							89
Caa1 (sf)																	56						56
Caa2 (sf)																		56					56
Caa3 (sf)																			30				30
Ca (sf)																				15			15
C (sf)																							0
	1,430	110	634	33	40	597	50	19	34	542	85	19	523	145	15	89	56	56	30	15	0	33	4,555

WR: Withdrawn rating
Note: These transition tables cover instruments the structured finance group rates and could include instruments that do not fall under the definition of a structured finance instrument. We exclude any rating changes from provisional ratings to definitive ratings.
Source: Moody's Investors Service

Exhibit 2
US SME CLO rating transitions, December 2020

	Ratings as of 12/31/2020																						
Raings as of 11/30/2020	Aaa (sf)	Aa1 (sf)	Aa2 (sf)	Aa3 (sf)	A1 (sf)	A2 (sf)	A3 (sf)	Baa1 (sf)	Baa2 (sf)	Baa3 (sf)	Ba1 (sf)	Ba2 (sf)	Ba3 (sf)	B1 (sf)	B2 (sf)	B3 (sf)	Caa1 (sf)	Caa2 (sf)	Caa3 (sf)	Ca (sf)	C (sf)	WR	Total
Aaa (sf)	78																					3	81
Aa1 (sf)		2																					2
Aa2 (sf)			29																				29
Aa3 (sf)				3																			3
A1 (sf)					1																	1	2
A2 (sf)						16																	16
A3 (sf)							14																14
Baa1 (sf)																							0
Baa2 (sf)									7														7
Baa3 (sf)										24													24
Ba1 (sf)											2												2
Ba2 (sf)												2											2
Ba3 (sf)													15										15
B1 (sf)														1									1
B2 (sf)																							0
B3 (sf)																							0
Caa1 (sf)																	2						2
Caa2 (sf)																							0
Caa3 (sf)																			1				1
Ca (sf)																							0
C (sf)																							0
	78	2	29	3	1	16	14	0	7	24	2	2	15	1	0	0	2	0	1	0	0	4	201

WR: Withdrawn rating
Note: These transition tables cover instruments the structured finance group rates and could include instruments that do not fall under the definition of a structured finance instrument. We exclude any rating changes from provisional ratings to definitive ratings.
Source: Moody's Investors Service

Exhibit 3

European broadly syndicated CLOs rating transitions, December 2020

	Ratings as of 12/31/2020																						
Raings as of 11/30/2020	Aaa (sf)	Aa1 (sf)	Aa2 (sf)	Aa3 (sf)	A1 (sf)	A2 (sf)	A3 (sf)	Baa1 (sf)	Baa2 (sf)	Baa3 (sf)	Ba1 (sf)	Ba2 (sf)	Ba3 (sf)	B1 (sf)	B2 (sf)	B3 (sf)	Caa1 (sf)	Caa2 (sf)	Caa3 (sf)	Ca (sf)	C (sf)	WR	Total
Aaa (sf)	498																					7	505
Aa1 (sf)	6	22																					28
Aa2 (sf)			523																				523
Aa3 (sf)	1			2																			3
A1 (sf)			3		9																		12
A2 (sf)				1		336																	337
A3 (sf)						6	8																14
Baa1 (sf)					1	1	2	10															14
Baa2 (sf)									154														154
Baa3 (sf)									9	131													140
Ba1 (sf)										2	6												8
Ba2 (sf)											3	213											216
Ba3 (sf)												4	78										82
B1 (sf)													1	30									31
B2 (sf)														2	175								177
B3 (sf)															3	79							82
Caa1 (sf)																	4						4
Caa2 (sf)																							0
Caa3 (sf)																							0
Ca (sf)																							0
C (sf)																							0
	505	22	526	3	10	343	10	10	163	133	9	217	79	32	178	79	4	0	0	0	0	7	2,330

WR: Withdrawn rating

Note: These transition tables cover instruments the structured finance group rates and could include instruments that do not fall under the definition of a structured finance instrument. We exclude any rating changes from provisional ratings to definitive ratings.

Source: Moody's Investors Service

Endnotes

1 See Moody's Global Approach to Rating Collateralized Loan Obligations, 7 December 2020.

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Events

Moody's Global CLO Outlook Webinar

We held a webinar to discuss our 2021 outlooks for the US and European CLO markets on 12 January. In case you missed it, here is the replay of the event.

Meet with Moody's analysts

Moody's analysts are available to connect with you one-on-one to answer your questions, discuss our research and receive candid feedback from you. Please contact our Outreach Leaders: in the US, Peter W. Hallenbeck at +1.212.553.4193, peter.hallenbeck@moodys.com and Sam Spackman at +1.212.553.2151, sam.spackman@moodys.com, or in Europe, George Zittis at +44.20.7772.8627, george.zittis@moodys.com and Mizuho Tanaka at +44.20.7772.8686, mizuho.tanaka@moodys.com, to arrange a virtual meeting. We look forward to hearing from you!

Additional reports published this month

- Non-Financial Corporations - Global Industry Sector Outlooks: ISO balance is tenuous while uneven economic recovery flashes caution, 28 January 2021
- Cyber Risk – Global: 2021 Outlook – Cyber vulnerabilities in software supply chains, rising cost of ransomware will be key risks, 26 January 2021
- Macroeconomics – US: US inflation may rise temporarily, with sustained price pressures a long way off, 21 January 2021
- Moody's B3 Negative and Lower Corporate Ratings List: 2020 brought list's record worst with defaults at decade high; tally ends year still elevated, 21 January 2021
- Government Policy – US: Biden's proposed virus relief package would mitigate rising economic risks, 15 January 2021
- Government Policy – US: Democrats' Senate wins will boost Biden's ability to push policy agenda, but only to a limited extent, 7 January 2021
- Nonfinancial Companies — Global Industry Sector Outlooks: Global ISO roster turns mildly positive as 2021 begins, but uncertainty runs high, 4 January 2021
- *See below for additional January publications

Recurring publications

CLOs

- CLO Interest
- CLO Sector Update (US and EMEA)
- Market Pulse (US and EMEA)
- Surveillance Update (US and EMEA)
- Moody's Global CLO and Structured Credit Research
- An Introduction to Moody's Credit Risk Analysis of CLOs

Corporates

- *SGL Monitor — US: Spec-grade liquidity continues to rebound, 27 January 2021
- *Default Trends – Global: December 2020 Default Report (Excel supplement), 11 January 2021
- *Corporate Finance Group - Global: Ratings Review Summary (December 2020), 8 January 2021
- Rating Transitions - Global: The Performance of Moody's Corporate Debt Ratings - 2020 Q3 (Excel Supplement) (quarterly report), 20 November 2020
- US Corporate Default Monitor – Third Quarter : Despite plummeting 46%, defaults are still surpassing pre-pandemic level (quarterly report), 28 October 2020
- Guide to Moody's Default Research: October 2020 Update, 29 October 2020
- Cross-Sector: Compendium of 2019 Corporate Defaults, 13 May 2020
- *Default Trends – Global: Annual default study: Following a sharp rise in 2020, corporate defaults will drop in 2021, 28 January 2021

Structured finance reports

» *Structured Finance: December 2020 structured rating transitions (Excel supplement) (monthly report), 20 January 2021

» *Structured Finance: The performance of Moody's structured finance ratings - Q4 2020 (Excel supplement) (quarterly report), 25 January 2021

» Structured finance rating transitions – 2009-2020 H1 (Excel supplement), 30 September 2020

» Structured finance rating transitions: 1993-2020 H1 - Excel supplement (Additional Excel supplement), 30 September 2020

» Structured Finance – Global: Structured finance short-term rating transitions and defaults: 1983-2019 (Excel supplement) (bi-annual report), 27 April 2020

» Structured Finance: The transition performance of Moody's structured finance ratings: 2009-2019 (annual report), 4 March 2020

» Structured Finance: The transition performance of Moody's EMEA structured finance ratings: 2009-2019 (annual report), 4 March 2020

» Structured Finance: The transition performance of Moody's Japan structured finance ratings: 2009-2019 (annual report), 4 March 2020

» Structured Finance: The transition performance of Moody's Asia-Pacific (ex-Japan) structured finance ratings: 2009-2019 (annual report), 4 March 2020

» Structured Finance: Impairment and loss rates of global CLOs: 1993-2019 (annual report), (Excel supplement) 28 May 2020

Methodologies

» CLO Global Methodology (updated 7 December 2020)

» Cross-Sector Methodology: General Principles for Assessing Environmental, Social and Governance Risks Methodology (updated 14 December 2020)

» Cross-Sector Methodology: Moody's Approach to Assessing Counterparty Risks in Structured Finance

» List of all rating methodologies (Excel)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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