MOODY'S

WEEKLY MARKET OUTLOOK

Moody's Analytics Research

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Baa-Rated Corporates Fared Better in 2019

Credit Markets Review and Outlook by John Lonski

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The Week Ahead

We preview economic reports and forecasts from the US, UK/Europe, and Asia/Pacific regions.

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The Long View

Full updated stories and key credit market metrics: To date in 2020, US\$denominated corporate bond issuance has increased year over year by 25% for investment-grade and 83% for high-yield.

Investment Grade: We see the year-end 2020's average
investment grade bond spread above its recent 111 basis
points. High Yield: Compared with a recent 386 bp, the high-
yield spread may approximate 445 bp by year-end 2020.
US HY default rate: Moody's Investors Service's Default
Report has the U.S.' trailing 12-month high-yield default rate
dipping from January 2020's actual 4.2% to a baseline
estimate of 3.8% for January 2021.
For 2019's offerings of US\$-denominated corporate bonds,
IG bond issuance rose by 2.6% to \$1.309 trillion, while high-
yield bond issuance surged by 55.8% to \$432 billion.

In 2020, US\$-denominated corporate bond issuance is

yield supply may grow by 6.6% to \$461 billion.

expected to rise by 5.2% for IG to \$1.377 trillion, while high-

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Ratings Round-Up

Amazon Sees Upgrade to \$24 Billion in Outstanding Debt

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Market Data

Credit spreads, CDS movers, issuance.

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Moody's Capital Markets Research recent publications

Links to commentaries on: Coronavirus, corporate credit, thin spreads, leverage, rate sensitivity, sentiment, VIX, fundamentals, next recession, liquidity and defaults, cheap money, fallen angels, Fed moves, yields, inversions, unmasking danger, divining markets, upside risks.

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Click <u>here</u> for *Moody's Credit Outlook*, our sister publication containing Moody's rating agency analysis of recent news events, summaries of recent rating changes, and summaries of recent research.

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Credit Markets Review and Outlook

Credit Markets Review and Outlook

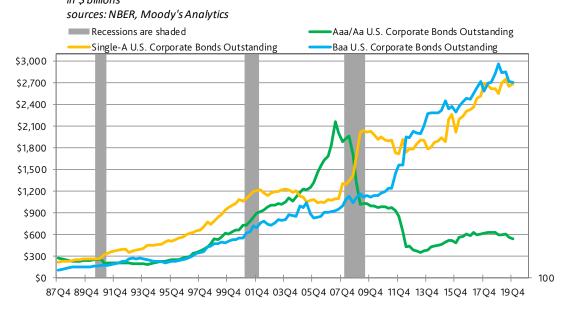
By John Lonski, Chief Economist, Moody's Capital Markets Research, Inc.

Baa-Rated Corporates Fared Better in 2019

At the end of 1999, the \$510 billion of Baa-rated bonds approximated 24% of the \$2.098 trillion of outstanding investment-grade bond obligations of U.S. corporations. By the end of 2019, or 20 years later, the \$2.702 trillion of Baa-rated bonds had climbed to 46% of the \$5.937 trillion of outstanding U.S. corporate bonds rated investment-grade.

By comparison, U.S. corporate bonds rated single-A rose from year-end 1999's \$981 billion to year-end 2019's \$2.585 trillion, as the single-A's share of outstanding U.S. investment-grade corporate bonds dipped from 47% to 45%. A drop by the outstandings of Aaa/Aa rated corporate bonds from the \$606 billion of year-end 1999 to the \$549 billion of year-end 2019 slashed the Aaa/Aa share of outstanding U.S. investment-grade corporate bonds from 1999's 29% to 2019's 9%.

Figure 1: Fourth-Quarter 2019's Year-to-Year Percent Changes for Outstanding U.S. Investment-Grade Corporate Bonds Were -8.6% for Aaa/Aa, 5.4% for Single-A, and -8.7% for Baa in \$ billions



For a worldwide sample covering 1983 through 2019 that includes industrial companies, financial institutions and public utilities, but excludes asset-backed securities and mortgage-backed securities debt, the average one-year default rates conformed to expectations. The average one-year default rates rose from 0.00% for Aaa-rated issuers, to 0.02% for Aa, 0.06% for single-A, and 0.17% for Baa. When examining a credit's default experience over a five-year span, the average cumulative five-year default rates were 0.06% for Aaa, 0.31% for Aa, 0.79% for single-A, and 1.45% for Baa. Nevertheless, the default experience of Baa-rated issuers compares favorably with the highest, broad speculative-grade rating of Ba, whose average default rate rises from 0.85% after one year to 7.92% after five years.

Large Number of Baa-Grade Issuers Warns of More Fallen Angel Downgrades

Today's large amount of outstanding Baa-grade corporate debt represents a potential surge in fallenangel downgrades from investment- to speculative-grade. A huge wave of fallen-angel downgrades risks a widening by high-yield bond spreads that is great enough to diminish systemic liquidity and, thereby, increase the frequency of high-yield defaults. By itself, a greater than expected incidence of defaults could block a remedial narrowing of high-yield credit spreads.

The now unprecedented prominence of Baa-grade issuers among U.S. investment-grade credit warns policymakers to be ever vigilant regarding the adequacy of systemic financial liquidity. As a result,

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Credit Markets Review and Outlook

benchmark U.S. interest rates are probably lower than otherwise. Until Treasury bond yields climb sharply higher in response to upwardly revised inflation expectations market and/or expectations of substantial dollar exchange rate depreciation, Fed policy is likely to lean toward accommodation. Relatively high systemic leverage ordinarily lends a downward bias to benchmark interest rates.

A Global Look at the Incidence of Fallen-Angel Downgrades

As derived from a worldwide sample beginning with 1970 and ending in 2019, in any one year, an average 4.4% of Baa-rated issuers have their rating lowered to speculative-grade, or high yield. After five years have passed, 11.1% of Baa issuers, on average, had their rating lowered to high-yield.

Nonetheless, credit ratings can also be increased. During 1970-2019, 4.2% of Baa-grade issuers, on average, were upgraded after one year. After five years, 13.1% of Baa issuers had been upgraded, on average.

Thus, for any year, the 4.4% of Baa-rated issuers incurring a fallen-angel downgrade eclipsed the 4.2% receiving an upgrade. However, after five-years the 13.1% of Baa-grade issuers that had been upgraded to single-A or higher topped the 11.1% whose rating had been lowered to speculative-grade.

Baa3-Rated Outstandings Are Down From 2018's Record High

Not all Baa-rated issuers are of the same credit quality. In order to differentiate the higher quality from riskier Baa credits, Baa consists of three notches that are in order of descending credit quality (or rising default risk)—Baa1, Baa2 and Baa3. The Baa3 ratings notch is the bottom rung of the investment-grade ratings ladder. Ratings less than Baa3 are speculative-grade.

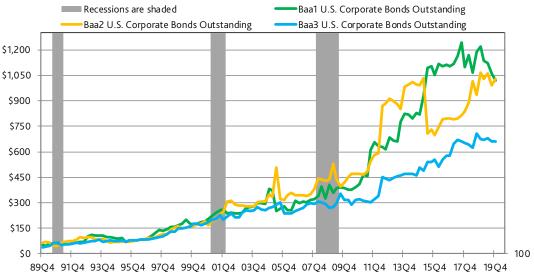
The dollar amount of outstanding Baa1-rated U.S. corporate bonds has increased from the \$171 billion of year-end 1999 (or 8.2% of outstanding U.S. investment-grade corporate bonds) to year-end 2019's \$1.017 trillion (or 17.1% of outstanding investment-grade U.S. corporates). The outstandings of Baa2-grade corporate bonds increased from year-end 1999's \$162 billion (or 7.7% of outstanding investment-grade bonds) to year-end 2019's \$1.027 trillion (or 17.3% of outstanding investment-grade corporates). Finally, the Baa3-grade outstandings rose from 1999's \$178 billion (or 8.4% of investment-grade corporates) to 2019's \$658 billion (or 11.1% of U.S. investment-grade corporate bonds).

As of 2019's final quarter, the outstanding Baa-rated bonds of U.S. companies were down from 2018's final quarter by a deep 16.6% for Baa1, 3.5% for Baa2, and 2.4% for Baa3. In terms of record-high amounts of outstanding bonds, Baa1 peaked in 2017's third quarter at \$1.244 trillion, Baa2 crested in 2018's final quarter at \$1.065 trillion, and Baa3 topped off in 2018's third quarter at \$705 billion.

Figure 2: Fourth-Quarter 2019's Year-to-Year Percent Declines for Outstanding Corporate Bonds
Were -16.6% for Baa1, -3.5% for Baa2, and -2.4% for Baa3
in \$ billions
sources: NBER, Moody's Analytics

Recessions are shaded

Recessions are shaded



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Baa3 Default Rates Still Compare Favorably with Ba1

The respective one- and cumulative five-year default rates derived from a worldwide sample covering 1983-2019 are 0.12% and 1.04% for Baa1 issuers, 0.16% and 1.31% for Baa2, and 0.22% and 2.08% for Baa3. For purposes of comparison, the respective one- and cumulative five-year default rates for Ba1 rated issuers, or the least risky high-yield ratings notch, are 0.42% and 4.83%.

For all investment-grade issuers, the worldwide default history of 1983-2019 produced an average one-year default rate of 0.09% and an average cumulative five-year default rate of 0.90%.

For all speculative-grade issuers, the worldwide default history of 1983-2019 generated an average one-year default rate of 4.08% and an average cumulative five-year default rate of 18.90%.

Incidence of Fallen Angel Downgrades Is Far Greater for Baa3 than for Baa2

For a worldwide sample starting with 1983 and ending in 2019, on average, only 1.57% of Baa1 issuers were lowered to spec-grade after one-year. Thereafter, the average annual percent of issuers incurring a fallen-angel downgrade rises sharply to 3.11% for Baa2 and 9.28% for Baa3.

Not to be overlooked is the relative frequency of credit rating upgrades. According to the same 1983-2019 worldwide sample of issuers, the average annual percent of issuers having a higher credit rating after one year was 8.71% for Baa1, 9.47% for Baa2, and 11.64% for Baa3. As inferred from this example, Baa credit ratings become more volatile as the ratings notch moves lower.

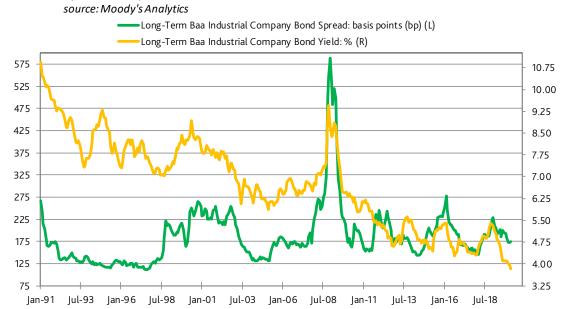
U.S. Baa-Grade Industrials Showed More Upgrades Than Downgrades in 2019

The number of credit-rating downgrades affecting U.S.-domiciled Baa-rated industrial companies fell from calendar-year 2018's 20 to 2019's 15 and the number of Baa-industrial upgrades rose from 2018's 25 to 2019's 25.

In turn, the downgrade per upgrade ratio of the Baa-grade industrial companies fell from 2018's already upbeat 0.91:1 to 2019's 0.60:1. By contrast, the U.S. high-yield downgrade per upgrade ratio soared higher from 2018's 1.06:1 to 2019's 1.95:1 as the number of high-yield downgrades expanded by 43% and the number of upgrades contracted by 22%.

The improved distribution of credit rating changes helps to explain the pronounced narrowing by Moody's Analytics' long-term Baa industrial company bond yield spread from December 2018's 225 basis points to December 2019's 173 bp. After averaging 172 bp for January 2020, the long-term Baa industrial spread was recently at 175 bp.

Figure 3: Lowest Long-term Baa Industrial Company Bond Yield since 1956 Joined by Trend-Like Spread Over Treasuries



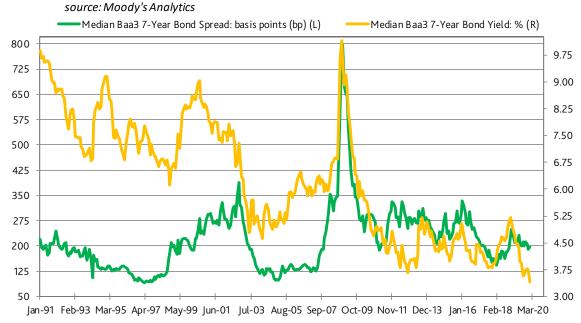
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In addition, the median yield spread over Treasuries for a seven-year Baa3 corporate bond index plunged from year-end 2018's 250 bp to the 190 bp of year-end 2019. At the end of January 2020, the seven-year Baa3 spread equaled 198 bp. As derived from a sample that begins in January 1991, the Baa3 spread's median is 206 bp. For the same span of January 1991 through December 2019, the median long-term Baa industrial company bond yield spread is 174 bp.

Thus, both the recent long-term Baa industrial spread and the seven-year Baa3 spread are close to their respective long-term medians. By contrast, the recent 386 bp composite high-yield bond spread was well under its January 1991 to December 2019 median of 467 bp. Thus, the high-yield bond market appears to be underpricing default risk to a greater degree than is the market for Baa corporate bonds.

Figure 4: Record Low for Median 7-Year Baa3 Corporate Bond Yield Joined by Trend-Like Spread Over Treasuries



The Week Ahead

The Week Ahead – U.S., Europe, Asia-Pacific

THE U.S.

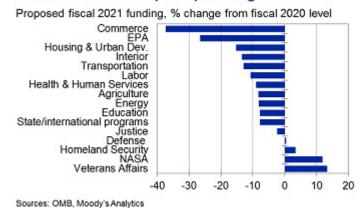
By Bernard Yaros of Moody's Analytics

Trump's Fiscal 2021 Budget: Big Proposals, Little Chance

The regular appropriations process for fiscal 2021 is officially underway. President Trump fired the opening salvo Monday with the release of his proposed \$4.8 trillion federal budget. U.S. presidential budget proposals are usually wish lists of an administration's fiscal priorities that are dead on arrival in Congress. This budget blueprint is no different.

Trump's fiscal 2021 budget doubles down on his administration's long-standing fiscal priorities: higher funding for Defense, Homeland Security and Veterans Affairs at the expense of domestic nondefense programs. It would slash nondefense funding by 5% to \$590 billion, which is tens of billions of dollars lower than the level Congress and the White House agreed to in a two-year budget deal last summer. Commerce, Housing and Urban Development, and Interior would face the steepest cuts among the federal government's 15 executive departments. Meanwhile, Veterans Affairs, Homeland Security and Defense would receive higher funding.

Overview of Trump's Spending Priorities



Increases to Pentagon spending, coupled with nondefense program cuts, are anathema to Democrats, which makes the president's budget proposal as aspirational as its predecessors. The annual appropriations process is a highly bipartisan exercise. For any of the policy proposals in this proposed budget to become law, Democrats must be on board. Not only do they control the House, but even a Republican-controlled Senate requires Democratic support to pass spending bills.

The budget also proposes a net \$4.6 trillion in savings over the next decade, including \$2 trillion from mandatory spending programs. It would wring out \$124 billion in savings from changes to student loan programs and Pell Grants, \$135 billion from overhauling Medicare prescription-drug pricing, and a near \$370 billion from federal welfare and disability programs.

Many of the president's proposals such as lower safety-net spending and the \$2 billion for building the wall along the southwest border would be nonstarters with Democrats, but there are areas of common ground from drug-pricing reform to the proposed \$190 billion in infrastructure investments. Nevertheless, bipartisan fiscal action in an election year is unlikely.

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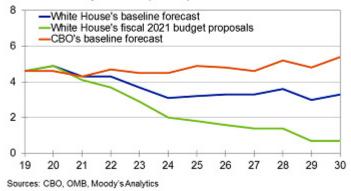
The Week Ahead

Wishful thinking

The president's budget projects that if his laundry list of proposed savings is enacted, the federal deficit will fall from an estimated 4.6% of GDP in fiscal 2020 to just 0.7% of GDP in fiscal 2030. This is a highly improbable scenario given the realities of partisan gridlock in 2020 and beyond. Yet even his baseline forecast presents a rosy scenario for the federal budget. According to the White House's baseline projections, the deficit would gradually fall to 3.3% of GDP in fiscal 2030. This stands in stark contrast to the nonpartisan Congressional Budget Office's own baseline forecast that the deficit will rise to 5.4% of GDP in 10 years.

Deficits as Far as the Eye Can See

U.S. federal budget deficit by fiscal yr, % of GDP, under...



A good chunk of the difference between the two stems from the White House's overly optimistic view of economic growth. The president's budget assumes U.S. real GDP growth averages 2.9% per annum over the next decade. With the labor force set to grow slower than in previous periods, which will constrain potential GDP, the CBO is forecasting an annual average growth rate of only 1.7%. Even the Moody's Analytics consensus forecast, which is based on a variety of surveys of baseline forecasts of the U.S. economy, puts average annual growth at not much more than 2%.

An Overoptimistic View of U.S. Growth

U.S. real GDP by calendar yr, % change yr ago -White House's fiscal 2021 budget proposal CBO 3.5 Moody's Analytics Jan 2020 "consensus" forecast 3.0 2.5 2.0 1.5 1.0 19 20 21 25 26 28 29 22 27 Sources: CBO, OMB, Moody's Analytics

Trump's budget proposal doesn't change the legislative calculus in this high-stakes election year. Between now and the October 1 deadline to avert a partial government shutdown, lawmakers will be busy on the campaign trail. Therefore, Moody's Analytics expects that Congress will punt on a full fiscal

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The Week Ahead

2021 budget until after Election Day. The most likely scenario is that Congress passes stopgap funding in September to keep the government open through late November or the first half of December.

Even though Trump's election-year budget is full of policy proposals that have little to no chance of becoming law, it is useful for gleaning insight into Trump's re-election campaign and a potential second term. Trump's fiscal 2021 budget will most likely form the basis of his policy platform during his re-election bid, and the differences in policy between the president and any of his potential Democratic rivals are about as stark as they've ever been in a presidential contest, which could impact the behavior of consumers and businesses.

Insight on spending priorities

In addition, Trump's latest budget would reflect his administration's spending priorities in a potential second term. In a second term, he likely would push for increased funding for Veterans Affairs, Homeland Security, and NASA and would even attempt to renew bipartisan talks on drug-pricing reform and infrastructure. While Trump would continue to push for higher defense expenditures, military spending would probably not experience as much of a buildup as we have witnessed in his first term. His fiscal 2021 budget requests the smallest percentage increase in base funding for Defense, compared with his prior three budget proposals. If that were the case, then the Trump-era stimulus from military spending would be largely limited to his first term.

In the next months, Moody's Analytics will compile the economic policy proposals of Trump and his leading Democratic rivals to run them through our U.S. macroeconomic model and assess their implications for the economy in the next presidential term.

Next week

The economic calendar is a little less busy. We get data on producer prices, housing starts, jobless claims and existing-home sales.

EUROPE

By Barbara Teixeira Araujo of Moody's Analytics

Time to Gauge U.K. Momentum

The U.K. will steal the spotlight in the coming week as the first economic hard data for January are released. Our hopes lie on the British economy recovering some momentum since passage of the Brexit deal. Business and consumers sat on their hands all throughout 2019 as uncertainty peaked given the country faced not one but two Brexit deadlines. There likely is a lot of pent-up demand in the British economy, and indeed anecdotal evidence all point to consumers and firms catching up during January and February with spending they had postponed. Confidence surveys already available corroborate this story—they show a broad-based recovery in sentiment and optimism regarding the coming year. But we still don't know if this improvement is going to translate fully into the real economy. Surveys are extremely sensitive to news, positive or negative, in times of heightened political uncertainty. Surveys could easily be overestimating the rebound in momentum.

All eyes will be on the U.K. retail sales report Thursday. We are penciling in an above-consensus 0.7% m/m rise in sales, which should fully reverse December's 0.6% decline. The January leading data for the retail sector have been mixed—we were especially disappointed to see that the European Commission's retail trade sentiment gauge fell to -21.8 in January from -15.6 in December. But our view is that December was a one-off bad month for the retail sector, warranting some mean reversion in January. A big possibility is also that methodological issues related to Black Friday could have created unusual noise in the figures. Accordingly, we expect that sales rose across all subsectors of retail trade in January. Nonfood sales have the scope to have increased the most—especially for clothing and household items, which plummeted in December. Food sales are similarly expected to have corrected from a horrible decline in December, while we think internet sales increased further as well, since

The Week Ahead

December's rise was not enough to offset weakness in the previous months. What's more, pump prices declined sharply over the month and should have given a strong support to fuel sales. January's mild weather should support our view that the month was good for retailers. Temperatures read as much as 2°C above their seasonal norms over the month and should have brought people to the high street to open their purse strings. Weather developments and retail sales are closely correlated.

January U.K. CPI inflation data is also scheduled for release. We are expecting a strong rebound in headline inflation to 1.6% y/y from 1.3%. We expect this to come on the back of higher core as well as noncore inflation pressures. In noncore inflation, the main boost likely came from a further increase in motor fuels inflation on base effects in oil prices—oil prices plunged into deflation by summer last year before returning to positive territory in December. Given that Brent prices fell sharply in February owing to coronavirus-related uncertainty, we think that motor fuels inflation is likely to stabilize in February before easing again from March—unless Brent prices soar once the outbreak is contained and defeated. Elsewhere within noncore inflation, we expect that food inflation rebounded in January from a one-off decline in December, while we expect that electricity inflation remained steady as Ofgem's cap on electricity bills remains in place.

Regarding core inflation, we expect that both core goods and services inflation rose in January. Services inflation was depressed in December by volatility in the travel-related services subsectors, itself due to the timing of the Christmas holidays. Notably, we want to stress that there is no reason to think that the trend in services inflation is to the downside. The labour market remains tight and wages are growing at a rate above 3% y/y; they should continue to do so in the near future. Meanwhile, core goods inflation likely rose due to a correction in clothing inflation—which was depressed in December because of Black Friday-related volatility—and to a sharp rebound in recreational goods inflation, notably in computer prices.

All in, core inflation should rebound in January and continue on an upward trend thereafter, especially since we expect the recovery in activity to ensure that the labour market remains tight. By contrast, noncore inflation pressures are expected to ease considerably, as electricity prices will fall into deflation from April (Ofgem will lower its cap on electricity and gas bills) and motor fuels inflation will be depressed by base effects in oil prices. In addition, the stronger pound is likely to depress imported inflation in coming months, notably that of food products. Will the Bank of England choose to ignore those noncore developments and focus on underlying inflation pressures? A lot will depend on the hard data for the coming months. If they show a significant rebound in activity, the BoE may afford to do so. Otherwise, we think a rate cut in May is possible. Risks are balanced. On the upside, the new Chancellor is expected to provide even more fiscal stimulus this year than his predecessor, lowering the need for a cut. On the downside, the coronavirus could have an even larger adverse impact on growth than initially forecast. That would put the economy on shaky ground and raise the need for monetary stimulus.

	Key indicators	Units	Moody's Analytics	Last
Mon @ 1:00 p.m.	Russia: Industrial Production for January	% change yr ago	2.7	2.1
Tues @ 9:30 a.m.	U.K.: Unemployment for December	%	3.8	3.8
Wed @ 9:30 a.m.	U.K.: Consumer Price Index for January	% change yr ago	1.6	1.3
Thur @ 7:45 a.m.	France: Consumer Price Index for January	% change yr ago	1.6	1.6
Thur @ 9:30 a.m.	U.K.: Retail Sales for January	% change yr ago	0.7	-0.6
Thur @ 2:00 p.m.	Russia: Retail Sales for January	% change yr ago	2.2	1.9
Thur @ 2:00 p.m.	Russia: Unemployment for January	%	4.7	4.6
Fri @ 10:00 a.m.	Italy: Consumer Price Index for January	% change yr ago	0.5	0.5
Fri @ 11:00 a.m.	Euro Zone: Consumer Price Index for January	% change yr ago	1.4	1.3

The Week Ahead

ASIA-PACIFIC

By Katrina Ell of Moody's Analytics

Japan's GDP Likely Contracted and Thailand's Cooled in Fourth Quarter

The preliminary estimate of Japan's December quarter national accounts is due. We look for GDP to have contracted by 0.3% q/q, following the upwardly revised 0.4% expansion in the September quarter. Private consumption is expected to be a hefty drag on growth. The consumption tax on 1 October derailed household spending early in the quarter and there was only modest improvement over the remainder of the quarter. Exports will remain weak, continuing the trend seen throughout 2019; in the September quarter exports contracted by 0.6% q/q. The September quarter enjoyed a better-than-expected lift due to a jump in capital expenditure, a situation that was not replicated in the December quarter. December quarter GDP growth is estimated at 1.3% on an annual basis, slower than the 1.9% growth in the third quarter. This would bring full-year GDP growth to 1.2% in 2019, from 0.3% in 2018.

Thailand's GDP growth likely cooled to 2.3% y/y in the December quarter, following from 2.4% in the third stanza. This will bring full-year GDP growth to 2.4%, markedly weaker than the 4.1% expansion in 2018. Thailand's economy looks to have endured a disappointing finish to 2019 and this helped encourage the Bank of Thailand off the sidelines in February to deliver a surprise interest rate cut. Another driver for the surprise rate reduction was the outbreak of the coronavirus and the significant implications it is expected to have on the already-weakened Thai economy. This includes weaker consumption and services due to a sharp drop-off in arrivals from mainland China. Supply chain disruptions are becoming more evident due to the aggressive restrictions on transportation within China and farther abroad to contain the spread of the virus. Anecdotes already show that with many factories in China closed as a result of the virus, supply chain partners elsewhere are not able to maintain manufacturing output.

Bank Indonesia is expected to keep the policy rate steady at 5% in February, where it has been since October. BI has been clear that it maintains an easing bias; further reductions are likely in 2020 if the optimistic growth projections look further at risk, an elevated possibility given reluctance from lenders to pass on prior policy reductions. Subdued inflation gives the central bank the breathing space to cut further, as does the well-performing rupiah. That being said, the current account deficit remains a source of vulnerability and will ensure that BI takes a cautious approach to further reductions in 2020.

	Key indicators	Units	Confidence	Risk	Moody's Analytics	Last
Mon @ 10:50 a.m.	Japan GDP for Q4 preliminary estimate	% change	3		-0.3	0.4
Mon @ 3:00 p.m.	Indonesia Foreign trade for January	US\$ bil	2	#	-0.90	-0.03
Mon @ Unknown	Singapore Nonoil domestic exports for January	% change yr ago	3	•	-8.0	2.4
Mon @ Unknown	Thailand GDP for Q4	% change yr ago	3	(=	2.3	2.4
Mon @ Unknown	India Foreign trade for January	US\$ bil	2	(-12.5	-11.3
Wed @ 10:50 a.m.	Japan Foreign trade for January	bil	3	-	-73.0	-102.5
Wed @ 10:50 a.m.	Japan Core machinery orders for December	% change	2		-7.3	18.0
Thurs @ 11:30 a.m.	Australia Unemployment rate for January	%	3	(=	5.2	5.1
Thurs @ Unknown	Indonesia Monetary policy for February	%	4	(=	5.0	5.0
Fri @ 10:30 a.m.	Japan Core CPI for January	% change yr ago	3	(0.7	0.7

The Long View

The Long View

To date in 2020, US\$-denominated corporate bond issuance has increased year over year by 25% for investment-grade and 83% for high-yield.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group February 13, 2020

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 111 basis points was less than its 122-point mean of the two previous economic recoveries. This spread may be no wider than 120 bp by year-end 2020.

The recent high-yield bond spread of 386 bp is thinner than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 176 bp and the recent VIX of 14.3 points.

DEFAULTS

January 2020's U.S. high-yield default rate of 4.2% was up from January 2019's 2.6% and may average 3.8% during 2020's final quarter according to Moody's Investors Service.

US CORPORATE BOND ISSUANCE

Fourth-quarter 2018's worldwide offerings of corporate bonds incurred annual setbacks of 23.4% for IG and 75.5% for high-yield, wherein US\$-denominated offerings plunged by 26.1% for IG and by 74.1% for high yield.

First-quarter 2019's worldwide offerings of corporate bonds revealed annual setbacks of 0.5% for IG and 3.6% for high-yield, wherein US\$-denominated offerings fell by 3.0% for IG and grew by 7.1% for high yield.

Second-quarter 2019's worldwide offerings of corporate bonds revealed an annual setback of 2.5% for IG and an annual advance of 17.6% for high-yield, wherein US\$-denominated offerings sank by 12.4% for IG and surged by 30.3% for high yield.

Third-quarter 2019's worldwide offerings of corporate bonds revealed annual advances of 15.2% for IG and 56.8% for high-yield, wherein US\$-denominated offerings soared higher by 36.8% for IG and 81.3% for high yield.

Fourth-quarter 2019's worldwide offerings of corporate bonds revealed annual advances of 15.3% for IG and 329% for high-yield, wherein US\$-denominated offerings dipped by 0.8% for IG and surged higher by 330% for high yield.

For 2019, worldwide corporate bond offerings grew by 5.4% annually (to \$2.447 trillion) for IG and advanced by 49.2% for high yield (to \$561 billion). The projected annual percent increases for 2020's worldwide corporate bond offerings are 3.9% for IG and 6.9% for high yield.

US ECONOMIC OUTLOOK

In view of the underutilization of the world's productive resources, low inflation should help to rein in Treasury bond yields. As long as the global economy operates below trend, the 10-year Treasury yield may not remain above 2.00% for long. A fundamentally excessive climb by Treasury bond yields and a pronounced slowing by expenditures in dynamic emerging market countries are among the biggest threats to the adequacy of economic growth and credit spreads.

The Long View

EUROPE

By Barbara Teixeira Araujo of Moody's Analytics February 13, 2020

UNITED KINGDOM

The unexpected reshuffle in the U.K.'s government Cabinet stole the spotlight on Thursday, with the resignation of Chancellor Sajid Javid taking center stage. We see Javid's move as the culmination of a series of clashes between him and Prime Minister Boris Johnson related to the Chancellor's apparent aversion to a significant increase in fiscal stimulus, which was the bedrock of Johnson's election campaign.

The government announced that Secretary to the Treasury Rishi Sunak will replace Javid as Chancellor effective today. Sunak's parliament voting records suggest he is an ardent Brexiteer—he was an early supporter of Johnson and voted for Theresa May's Brexit deal three times—which favours cuts to corporation and capital gains taxes, and investment in infrastructure. His views are clearly more aligned with Johnson's than were those of his predecessor, which could make the prime minister's job a bit easier. Our view is that, under Sunak, fiscal policy in 2020 will become even more expansionary than previously expected, which on the upside is good news for the economy. Markets seem to agree; the pound jumped after the announcement of his nomination, especially as higher fiscal spending could reduce the need for a Bank of England rate cut later in the year.

We currently don't have a cut in our forecast, but we think that May's BoE meeting is still one to watch for. All will depend on the hard data for the first quarter, and all hopes lie on a sharp rebound in activity following the passing of the Brexit deal. We expect that the fading of uncertainty allowed businesses and households to catch up with the spending they had postponed last year as they faced the risk of a no-deal Brexit two times. The leading data confirm our view that confidence and growth recovered in January. We caution, however, that surveys can be extraordinarily volatile in times of heightened uncertainty, which means they could be overestimating the rebound.

Disruptions caused by the coronavirus pose a serious downside risk to our forecast of 0.3% q/q GDP growth in the first quarter. It is still early days, but all evidence suggests that U.K. manufacturing exports and its tourism and hospitality industries were dealt a heavy blow by the containment measures put in place in China.

EURO ZONE

Although the advance country data released last week had already warned of a grim euro zone industrial production headline for December, the results were horrible all the same. Factory production fell at its sharpest pace since February 2016, pushing the sector's yearly trend to its joint-lowest in more than 10 years. Adding to the woes was that November's rise was revised down to show no growth, which resulted in abysmal results for the fourth quarter. Production fell by a sharp 1.4% q/q in the three months to December, building on declines of 0.8% in the second and third quarters. December thus marked a bad ending to the year; industrial production plummeted by 1.7% in 2019, fully reversing 2018's 0.9% increase.

Some national statistical offices have hinted that the timing of bridge days in December may have been behind the poor performance across the different manufacturing industries, resulting in fewer productive hours compared with December 2018. But the truth is that nobody knows for sure why the decline in production was so sharp and so widespread in December, so the only thing we can do is blame it on seasonality and hope for some mean-reversion in January. This is supported by our view that the yearly trend in production is not as bad as December's figures suggest.

The good news is that leading indicators indicate that the worst of the downturn in the euro zone's manufacturing is already behind us. They point to some stabilization in output in the first quarter, but we caution that these signs are only tentative. The disruptions caused by the coronavirus are something to watch for; even if they are limited, they have the scope to cause a lot of trouble for the euro zone's already-struggling factories and export sector. Auto factories are particularly exposed, as anecdotal evidence shows that there have been shortages of components due to factory shutdowns in China.

We are thus keeping our expectations low. We don't forecast another decline in production this year, but risks are tilted severely to the downside, especially if U.S. President Donald Trump decides to double down on his trade war with China later in the year. Also decisive to our outlook is how strong the rebound in China is in the second quarter and how global central banks will react to this external shock.

The Long View

ASIA PACIFIC

By Katrina Ell of Moody's Analytics February 13, 2020

CHINA

Because of the coronavirus, this month we revised down our baseline forecast for China's GDP growth in 2020 from 6.1% to 5.4%. The most pronounced adverse impact occurs in the March quarter, with GDP growth forecast to hit 3.8%, 2 percentage points lower than the prior baseline forecast in January. The expected tailwind that the signing of the Phase One trade agreement on 15 January brought by lowering the odds of further escalation of the trade war has been overwhelmed by the rising economic costs of the virus.

The downward revision captures a number of different channels of impact. First, the virus containment efforts have been aggressive. This caused a significant adverse shock to household consumption during the peak Lunar New Year celebrations, including cancellations of planned local travel and the closing of public events and attractions.

The need to contain the deadly virus is a bigger priority than maintaining economic activity. For instance, big cities, including Shanghai and Beijing, have been largely closed and workers have been told to stay home, hurting worker productivity. Transport restrictions extending beyond Hubei province have increasingly disrupted supply chains; some key transport links are closed. This will have rising implications for exports, particularly of manufactured goods, which tend to operate via the just-in-time model, reflecting how global supply chains have become heavily integrated and inventories are kept to a minimum to maximise efficiency.

Hubei province, the epicenter of the outbreak in China, has two new functioning hospitals, and 11 public venues have been turned into makeshift wards, an example of how containment and management of the virus has overridden everyday life.

The Chinese government has unveiled a number of measures to ease the adverse impact of the virus, but these measures will not absorb the economic toll. The People's Bank of China injected CNY1.2 trillion into the financial system via reverse repo operations, reportedly the largest single-day injection on record to "ensure sufficient liquidity supply." Estimates are that CNY1.05 trillion (US\$151 billion) worth of reverse repos also matured, meaning that CNY150 billion on net was injected. In addition, banks will be provided with CNY300 billion to lend to firms impacted by the virus, including foreign firms. The PBoC has signaled that further stimulus could be made available.

Impact on broader Asia

Our global macroeconomic model shows that China's weaker GDP profile in 2020 translates to weaker global growth. This is unsurprising given that China's share of global GDP stands at around 15%, higher than the 5% it accounted for during the 2002-2003 outbreak of severe acute respiratory syndrome, or SARS.

Delving into the regional implications, our baseline GDP forecast for the ASEAN region subsequently fell to 4.56% for 2020 from 4.7% in our January update.

The channels of impact for the weaker growth profile in the ASEAN region are worth exploring. Southeast Asia's economic growth engine is closely tied to China, with China being the largest trading partner for most countries in Southeast Asia. It is also an important stimulant for regional and global growth, so expectations of a significant hit to domestic demand there will have spillovers globally.

In addition, there has been an immediate hit to the ASEAN region from the disruption to consumption and tourism during China's peak tourism season. China has imposed restrictions on mainland travel, while most countries throughout the Asia-Pacific region have restricted entry to mainlanders to some extent. This is problematic for many countries where arrivals from the mainland are a large, if not the largest, source of overseas arrivals.

More difficult to capture is the impact on supply chains in Asia and farther abroad from disruption to China's transportation and manufacturing given that a large proportion of inputs into Chinese manufactured goods are sourced from elsewhere and vice versa.

Ratings Round-Up

Amazon Sees Upgrade to \$24 Billion in Outstanding Debt

Michael Ferlez

U.S. rating change activity declined, but the quality significantly improved last week. Upgrades accounted for 53% of total rating changes, up from 38% in the prior week. Moody's Investors Service upgraded Amazon's senior unsecured credit rating to A2, from A3. Moody's upgraded the U.S. e-commerce giant to reflect the firm's strong liquidity and free cash flow prospects as well as the strength of Amazon Web Services. The upgrade affected \$24 billion in outstanding debt. U.S. rating change activity over the past two weeks has been somewhat uncharacteristic of recent trends with two major investment-grade firms, Boeing and Amazon, receiving rating changes.

European rating activity was largely negative, with downgrades accounting for four of the five rating changes. The most notable downgrade was made to Dwr Cymru Cyfyngedig (Welsh Water), which saw its senior secured credit rating downgraded one-notch, to A3. The downgrade by Moody's Investors Service reflects Welsh Water's exposure to a significant cut in allowed wholesale returns, a reduction in expenditure allowances relative to the firm's request, and challenging performance targets. The downgrade affected \$2.5 billion in outstanding debt. The rest of the European rating changes were concentrated in smaller, speculative-grade companies.

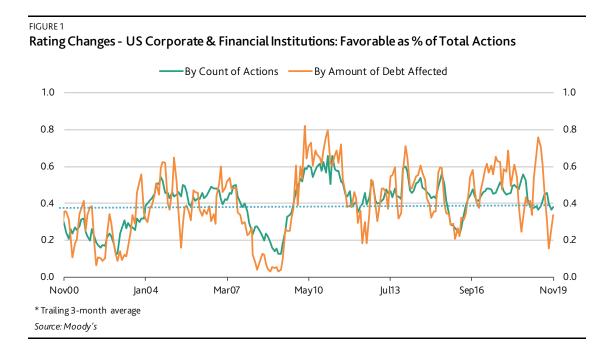


FIGURE 2 Rating Ke	W		
BCF	Bank Credit Facility Rating	MM	Money-Market
CFR	Corporate Family Rating	MTN	MTN Program Rating
СР	Commercial Paper Rating	Notes	Notes
FSR	Bank Financial Strength Rating	PDR	Probability of Default Rating
IFS	Insurance Financial Strength Rating	PS	Preferred Stock Rating
IR	Issuer Rating	SGLR	Speculative-Grade Liquidity Rating
JrSub	Junior Subordinated Rating	SLTD	Short- and Long-Term Deposit Rating
LGD	Loss Given Default Rating	SrSec	Senior Secured Rating
LTCF	Long-Term Corporate Family Rating	SrUnsec	Senior Unsecured Rating
LTD	Long-Term Deposit Rating	SrSub	Senior Subordinated
LTIR	Long-Term Issuer Rating	STD	Short-Term Deposit Rating

FIGURE 3
Rating Changes: Corporate & Financial Institutions – US

Date Company Sector Rating Amount (S million) Down Rating R	Nating	Changes: Corporate & Finai	icial ii isti	tuuois-03							
2/6/20 TALLGRASS ENERGY PARTNERS, LP Industrial /srSec/BCF 2,000 D Ba3 B1 SC 2/6/20 TALLGRASS ENERGY PARTNERS, LP Industrial LTCFR/PDR 2,000 U B1 Ba3 SG 2/7/20 TIBCO SOFTWARE INC. Industrial SrSec/BCF D B1 B2 SG 2/7/20 BLUE RIBBON, LLC Industrial SrSec/BCF D B2 B3 SG 2/7/20 KNEL HOLDINGS, LTD.	Date	Company	Sector	Rating			LTD	LTD	STD	STD	IG/SG
2/7/20 TIBCO SOFTWARE INC. Industrial SrSec/BCF D B1 B2 SG 2/7/20 BLUE RIBBON, LLC Industrial //LTCFR/PDR D B2 B3 SC 2/7/20 KNEL HOLDINGS, LTD. -NELLSON NUTRACEUTICAL, LLC Industrial LTCFR/PDR D B2 B3 SG 2/10/20 LIBERTY PROPERTY TRUST-LIBERTY PROPERTY LIMITED PARTINERSHIP Industrial SrUnsec 2,300 U Baa1 A3 SG 2/10/20 AMAZON.COM, INC. Industrial SrUnsec/CP 24,250 U A3 A2 P-2 P-1 IG 2/10/20 CENTENE CORPORATION- WELLCARE HEALTH PLANS, INC. Financial /Sub/IFSR/PS U Ba2 Ba1 SG 2/10/20 ACL I CORPORATION WELLCARE HEALTH PLANS, INC. Industrial /LTCFR/PDR SrSec/BCF U Ba2 Ba1 SG 2/10/20 CCC INFORMATION SERVICES INC. Industrial SrSec/BCF U B2 B3 SG 2/10/20 PAK ACCESS, LLC Industrial	2/6/20	TALLGRASS ENERGY PARTNERS, LP	Industrial		2,000	D	Ba3	B1			SG
2/7/20 BLUE RIBBON, LLC Industrial SrSec/BCF / LTCFR/PDR D B2 B3 SG 2/7/20 KNEL HOLDINGS, LTD. NELLSON NUTRACEUTICAL, LLC Industrial LTCFR/PDR D B2 B3 SG 2/7/20 LIBERTY PROPERTY TRUST-LIBERTY PROPERTY TRUST-LIBERTY PROPERTY LIMITED PARTNERSHIP Industrial SrUnsec 2,300 U Baa1 A3 LG 2/10/20 AMAZON.COM, INC. Industrial SrUnsec/CP 24,250 U A3 A2 P-2 P-1 IG 2/10/20 CENTENE CORPORATION FUNCATION SERVICES INC. Financial SrSec/BCF SrSec/BCF U Ba2 Ba1 SS SG 2/10/20 CCC INFORMATION SERVICES INC. Industrial SrSec/BCF SERVICES INC. D B2 B3 SG 2/10/20 YAK ACCESS, LLC Industrial SrSec/BCF U B2 B1 SS 2/10/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial SrSec/BCF U B2 B1 SS 2/10/20 CRACKLE	2/6/20	TALLGRASS ENERGY PARTNERS, LP	Industrial	LTCFR/PDR	2,000	U	B1	Ba3			SG
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-NELLSON NUTRACEUTICAL, LLC Industrial LICFR/PDR	2/7/20	BLUE RIBBON, LLC	Industrial			D	B2	В3			SG
2/10/20 AMAZON.COM, INC. Industrial SrUnsec/CP 24,250 U A3 A2 P-2 P-1 IG 2/10/20 CENTENE CORPORATION- WELLCARE HEALTH PLANS, INC. Financial SrUnsec/CP 24,250 U Ba2 Ba1 SG 2/10/20 CCC INFORMATION SERVICES INC. 2/10/20 (REORG)-CCC INFORMATION SERVICES INC. 2/10/20 (REORG)-CCC INFORMATION SERVICES INC. 2/10/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial SrSec/BCF /LTCFR/PDR U B2 B1 SG 2/10/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF /LTCFR/PDR U B2 B1 SG 2/10/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG 2/11/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG 2/11/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG 2/11/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG	2/7/20		Industrial	LTCFR/PDR		D	B2	В3			SG
2/10/20 CENTENE CORPORATION-WELLCARE HEALTH PLANS, INC. Financial SrUnsec / Sub/IFSR/PS U Ba2 Ba1 SG ACL I CORPORATION - COMMERCIAL BARGE LINE COMPANY D Caa3 C SG CCG INFORMATION SERVICES INC. 2/10/20 (REORG)-CCC INFORMATION Industrial SrSec/BCF D B2 B3 SG ERVICES INC. Industrial SrSec/BCF U B2 B1 SG 2/10/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial SrSec/BCF U B2 B1 SG 2/10/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG ERVICES INC. Industrial SrSec/BCF U B3 B2 B1 SG ERSEC/BCF U B3 B2 B1 SG SrSec/BCF U B3 B2 B1 SG ERSEC/BCF U B3 B2 B1 SG	2/10/20		Industrial	SrUnsec	2,300	U	Baa1	А3			IG
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2/10/20 (REORG)-CCC INFORMATION Industrial SrSec/BCF D B2 B3 SG 2/10/20 YAK ACCESS, LLC Industrial SrSec/BCF U B2 B1 SG 2/10/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial SrSec/BCF U B2 B1 SG 2/11/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG	2/10/20	-COMMERCIAL BARGE LINE	Industrial			D	Caa3	С			SG
2/10/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial SrSec/BCF U B2 B1 SG 2/11/20 CRACKLE INTERMEDIATE CORP. Industrial SrSec/BCF U B3 B2 SG	2/10/20	(REORG)-CCC INFORMATION	Industrial	SrSec/BCF		D	B2	В3			SG
2/11/20 PIXELLE SPECIALTY SOLUTIONS LLC Industrial /LTCFR/PDR U B2 B1 SG 2/11/20 CRACKLE INTERMEDIATE CORPWIREPATH LLC Industrial SrSec/BCF U B3 B2 SG	2/10/20	YAK ACCESS, LLC	Industrial	SrSec/BCF		U	B2	B1			SG
-WIREPATH LLC Industrial SrSec/BCF U B3 B2 SG	2/10/20	PIXELLE SPECIALTY SOLUTIONS LLC	Industrial			U	B2	В1			SG
Source: Moody's	2/11/20		Industrial	SrSec/BCF		U	В3	В2			SG
	Source: Mo	oody's									

FIGURE 4 Rating Ch	nanges: Corporate &	Financial I	nstitutions -	- Europe					
Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
2/5/20	KONGSBERG AUTOMOTIVE ASA	Industrial	SrSec /LTCFR/PDR	302	D	Ba3	B1	SG	NORWAY
2/5/20	ALPHA AB BIDCO B.V.	Industrial	SrSec/BCF		D	B2	В3	SG	NETHERLANDS
2/6/20	APOLLO 5 GMBH	Industrial	LTCFR/PDR		U	Caa1	В3	SG	GERMANY
2/7/20	DWR CYMRU (HOLDINGS) LIMITED -DWR CYMRU (FINANCING) UK PLC	Utility	SrSec/LTCFR	2,508	D	A2	A3	IG	UNITED KINGDOM
2/11/20	AMIGO HOLDINGS LIMITED-AMIGO LUXEMBOURG S.A.	Financial	SrSec/LTCFR	378	D	В1	B2	SG	LUXEMBOURG
Source: Mo	ody's								

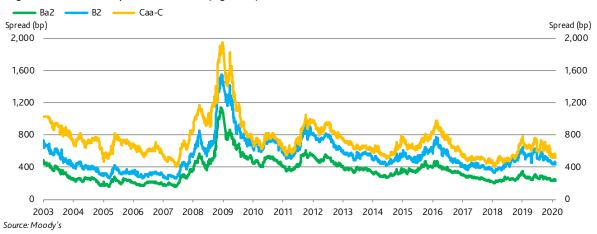
Market Data

Spreads

Figure 1: 5-Year Median Spreads-Global Data (High Grade)



Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS Movers

Figure 3. CDS Movers - US (February 6, 2020 – February 12, 2020)

CDS Implied Rating Rises	CDS Impli	_	
Issuer	Feb. 12	Feb. 5	Senior Ratings
Sprint Communications, Inc.	Baa3	Caa1	В3
Unisys Corporation	Ba3	В3	B2
Talen Energy Supply, LLC	Caa2	Ca	В3
Goldman Sachs Group, Inc. (The)	A3	Baa1	A3
American Express Credit Corporation	Aa2	Aa3	A2
Bristol-Myers Squibb Company	Aa1	Aa2	A2
Capital One Bank (USA), N.A.	Aa1	Aa2	Baa1
Bank of America, N.A.	Aa3	A1	Aa2
Halliburton Company	Baa2	Baa3	Baa1
Ball Corporation	A2	A3	Ba1

CDS Implied Rating Declines	CDS Impli		
Issuer	Feb. 12	Feb. 5	Senior Ratings
Diamond Offshore Drilling, Inc.	С	Caa2	В3
Toyota Motor Credit Corporation	Aa3	Aa2	Aa3
Ford Motor Credit Company LLC	B2	B1	Ba1
Verizon Communications Inc.	A3	A2	Baa1
Microsoft Corporation	A2	A1	Aaa
3M Company	A1	Aa3	A1
PepsiCo, Inc.	A3	A2	A1
Chevron Corporation	A2	A1	Aa2
Simon Property Group, L.P.	Baa2	Baa1	A2
Eli Lilly and Company	Aa3	Aa2	A2

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Feb. 12	Feb. 5	Spread Diff
Frontier Communications Corporation	Caa3	7,144	6,670	474
Diamond Offshore Drilling, Inc.	В3	848	734	114
Neiman Marcus Group LTD LLC	Ca	4,324	4,237	87
McClatchy Company (The)	С	1,614	1,555	59
Chesapeake Energy Corporation	Caa3	2,888	2,872	15
K. Hovnanian Enterprises, Inc.	Caa3	1,069	1,059	10
Goodyear Tire & Rubber Company (The)	B1	176	167	9
Iron Mountain Incorporated	Ba3	61	54	7
BorgWarner Inc.	Baa1	74	67	7
Cablevision Systems Corporation	В3	377	371	6

CDS Spread Decreases	CDS Spreads			
Issuer	Senior Ratings	Feb. 12	Feb. 5	Spread Diff
Sprint Communications, Inc.	В3	72	380	-309
Unisys Corporation	B2	133	319	-186
Penney (J.C.) Corporation, Inc.	Caa3	2,981	3,076	-94
R.R. Donnelley & Sons Company	B3	579	650	-71
Dish DBS Corporation	B1	267	334	-67
Talen Energy Supply, LLC	B3	722	769	-47
Realogy Group LLC	B3	387	433	-46
Pitney Bowes Inc.	Ba3	484	528	-44
Univision Communications Inc.	Caa2	237	263	-26
Hertz Corporation (The)	B3	271	296	-26

Source: Moody's, CMA

Figure 4. CDS Movers - Europe (February 6, 2020 – February 12, 2020)

CDS Implied Rating Rises	CDS Impli		
Issuer	Feb. 12	Feb. 5	Senior Ratings
Nationwide Building Society	A2	Baa1	Aa3
France, Government of	Aaa	Aa1	Aa2
Portugal, Government of	Aa3	A1	Baa3
NatWest Markets Plc	Baa1	Baa2	Baa2
Credit Agricole Corporate and Investment Bank	Aa1	Aa2	Aa3
Orange	Aa2	Aa3	Baa1
Electricite de France	A1	A2	А3
Standard Chartered PLC	A3	Baa1	A2
E.ON SE	Aa2	Aa3	Baa2
Telia Company AB	Aa1	Aa2	Baa1

CDS Implied Rating Declines	CDS Impli	_	
Issuer	Feb. 12	Feb. 5	Senior Ratings
Stonegate Pub Company Financing plc	B2	Ba1	Caa1
Banco Bilbao Vizcaya Argentaria, S.A.	A2	A1	A3
Unione di Banche Italiane S.p.A.	Ba2	Ba1	Baa3
Piraeus Bank S.A.	С	Ca	Caa2
Atlantia S.p.A.	B2	B1	Ba2
Compagnie de Saint-Gobain SA	A2	A1	Baa2
Iceland, Government of	Ba1	Baa3	A2
Ziggo Bond Company B.V.	Ba3	Ba2	В3
Adecco Group AG	A1	Aa3	Baa1
Ziggo Secured Finance B.V.	Ba3	Ba2	Caa1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Feb. 12	Feb. 5	Spread Diff
CMA CGM S.A.	Caa1	1,259	1,094	165
Stonegate Pub Company Financing plc	Caa1	195	85	110
PizzaExpress Financing 1 plc	Ca	4,719	4,694	25
Boparan Finance plc	Caa1	1,433	1,412	21
Jaguar Land Rover Automotive Plc	B1	431	411	20
Vue International Bidco plc	Caa2	250	241	9
Ziggo Bond Company B.V.	B3	131	125	7
Ziggo Secured Finance B.V.	Caa1	130	124	6
Banco BPI S.A.	Ba1	114	110	4
Virgin Media Finance PLC	B2	124	121	3

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Feb. 12	Feb. 5	Spread Diff
TUI AG	Ba3	239	305	-67
Novafives S.A.S.	Caa2	733	772	-38
ArcelorMittal	Baa3	124	149	-25
METRO Finance B.V.	Ba1	92	110	-18
Stena AB	B3	352	369	-18
Casino Guichard-Perrachon SA	B3	608	624	-16
Nokia Oyj	Ba2	75	87	-12
Selecta Group B.V.	Caa1	301	314	-12
Nationwide Building Society	Aa3	37	48	-11
SES S.A.	Baa2	65	76	-11

Source: Moody's, CMA

CAPITAL MARKETS RESEARCH

Market Data

Issuance

Figure 5. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated

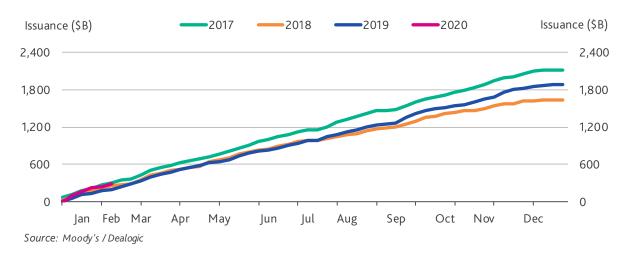


Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated

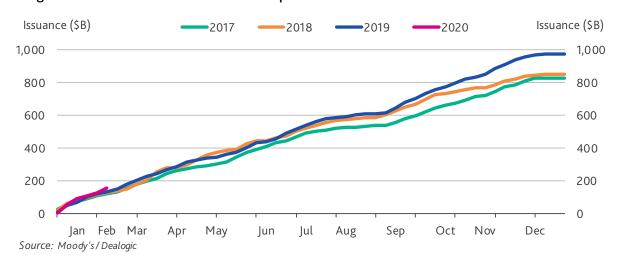


Figure 7. Issuance: Corporate & Financial Institutions

	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	23.364	15.128	43.381
Year-to-Date	178.696	89.956	283.732

		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	23.870	4.945	31.133
Year-to-Date	128.961	24.828	159.333

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

Moody's Capital Markets Research recent publications

Richly Priced Stocks Fall Short of 1999-2000's Gross Overvaluation (Capital Markets Research)

Coronavirus May Be a Black Swan Like No Other (Capital Markets Research)

How Corporate Credit Might Burst an Equity Bubble (Capital Markets Research)

Positive Earnings Outlook Requires Flat to Lower Interest Rates (Capital Markets Research)

Overvalued Equities Increase Corporate Credit's Downside Risk (Capital Markets Research)

High-Yield Rating Changes Say High-Yield Bond Spread Is Too Thin (Capital Markets Research)

Return of Christmas Past Does Not Impend (Capital Markets Research)

Next Plunge by Profits to Drive Leverage Up to 2009 High (Capital Markets Research)

Corporate Bond Issuance Reflects Business Activity's Heightened Sensitivity to Rates (Capital Markets Research)

Equities Advanced for 95% of the Yearly Declines by High-Yield Bond Spread (Capital Markets Research)

Improved Market Sentiment Is Mostly Speculative (Capital Markets Research)

Loans Impart an Upward Bias to High-Yield Downgrade per Upgrade Ratio (Capital Markets Research)

VIX, EDF and National Activity Index Go Far at Explaining the High-Yield Spread (Capital Markets Research)

Worsened Fundamentals Lift Downgrades Well Above Upgrades (Capital Markets Research)

Next Recession May Lower 10-year Treasury Yield to Range of 0.5% to 1% (Capital Markets Research)

Abundant Liquidity Suppresses Defaults (Capital Markets Research)

Cheap Money in Action (Capital Markets Research)

Bond Implied Ratings Hint of More Fallen-Angel Downgrades (Capital Markets Research)

Leading Credit-Risk Indicator Signals A Rising Default Rate (Capital Markets Research)

Upon Further review, Aggregate Financial Metrics Worsen (Capital Markets Research)

Faster Loan Growth Would Bode Poorly for Corporate Credit Quality (Capital Markets Research)

Likelihood of a 1.88% Fed Funds Rate by End of July Soars (Capital Markets Research)

Market Implied Ratings Differ on the Likely Direction of Baa3 Ratings (Capital Markets Research)

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