

## WEEKLY MARKET OUTLOOK

### Moody's Analytics Research

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## Fed Will Cut Rates If 10-Year Yield Breaks Under 2.4%

### [Credit Markets Review and Outlook](#) by John Lonski

Fed Will Cut Rates If 10-Year Yield Breaks Under 2.4%

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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: January-February 2019's corporate bond issuance by U.S.-based companies advanced by 9.9% annually for investment-grade, but dipped by 0.9% for high-yield.

Credit Spreads

Investment Grade: We see year-end 2019's average investment grade bond spread above its recent 126 basis points. High Yield: Compared to a recent 424 bp, the high-yield spread may approximate 495 bp by year-end 2019.

Defaults

US HY default rate: Moody's Investors Service forecasts that the U.S.' trailing 12-month high-yield default rate will fall from February 2019's 2.7% to 1.7% by February 2020.

Issuance

For 2018's US\$-denominated corporate bonds, IG bond issuance sank by 15.4% to \$1.276 trillion, while high-yield bond issuance plummeted by 38.8% to \$277 billion for high-yield bond issuance's worst calendar year since 2011's 274 billion. In 2019, US\$-denominated corporate bond issuance is expected to rise by 3.5% for IG to \$1.321 trillion, while high-yield supply grows by 11.1% to \$308 billion. A significant drop by 2019's high-yield bond offerings would suggest the presence of a recession.

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### [Ratings Round-Up](#)

U.S. Downgrades Outnumber Upgrades

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Credit spreads, CDS movers, issuance.

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### [Moody's Capital Markets Research](#) *recent publications*

Links to commentaries on: Riskier outlook, high-yield, defaults, confidence vs. skepticism fed pause, stabilization, growth and leverage, buybacks, volatility, monetary policy, yields, profits, corporate borrowing, U.S. investors, base metals prices, trade war.

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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.

## Fed Will Cut Rates If 10-Year Yield Breaks Under 2.4%

The Treasury bond market was stunned by the drop in the Federal Open Market Committee's "dot chart" projection for year-end 2019 fed funds' midpoint from the 2.875% of December 2018's projection to 2.375% as of March 2019's projection. Moreover, the FOMC formally announced that the passive reduction of its bond holdings would end in September 2019.

In response, the probability of a December 2019 Fed rate cut rose to 39% on March 21. At the same time, the 10-year Treasury yield fell to 2.52% for its lowest reading since early January 2018.

Despite a less restrictive monetary policy, earnings-sensitive securities may have difficulty climbing higher until the market is convinced that an extended contraction by profits does not impend. A rejuvenation of core business sales would lessen the risks now surrounding the earnings outlook.

January 2019's core sales, which exclude sales of identifiable energy products, sank by 0.4% monthly for U.S. manufacturers, but rose by 0.4% for retailers. For now, core business sales are expected to grow by 3.2% year over year during 2019's first quarter, slower than the yearly increases of 3.4% for 2018's final quarter and the much livelier 5.5% and 5.6% readings for 2018's third and second quarters.

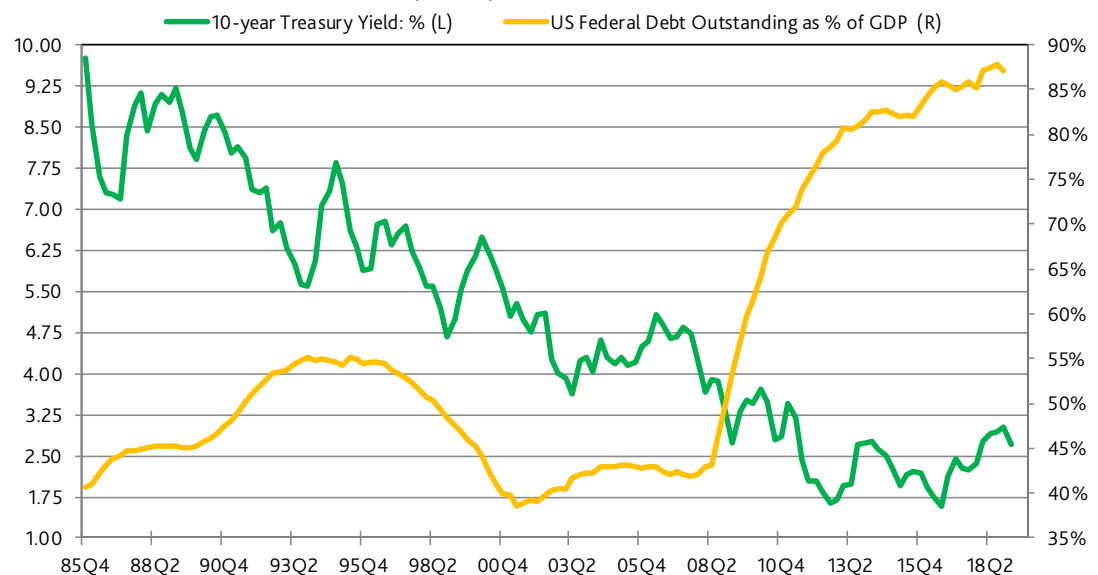
The FactSet consensus now expects S&P 500 earnings per share to fall by 3.6% annually in 2019's first quarter as the year-over-year growth of S&P 500 revenues decelerates from calendar-year 2018's 8.8% to a projected 4.9% in 2019's first quarter. Not since 2016's second quarter have S&P 500 earnings per share declined from the year earlier pace.

## Treasury Yield Shows a Paradoxical Inverse Correlation with Federal Debt-to-GDP Ratio

As derived from the Federal Reserve's "Financial Accounts of the United States," fourth-quarter 2018's \$17.865 trillion of outstanding U.S. government debt approximated 87.1% of yearlong 2018's nominal GDP. Despite how this ratio is up considerably from the 42.0% of 2007's final quarter, a recent 10-year U.S. Treasury yield of 2.55% is well under its 4.10% average of December 2007.

**Figure 1: Treasury Bond Yields Do Not Always Move in the Direction Taken by the Ratio of Federal Debt to GDP**

*sources: Federal Reserve, Moody's Analytics*



## Credit Markets Review and Outlook

All else the same, a higher ratio of federal debt to GDP implies higher Treasury bond yields than otherwise. However, all else is never the same. The ratio of federal debt to GDP is one of many variables that determine Treasury bond yields.

Intuitively, the 10-year Treasury yield is expected to show a positive correlation with the ratio of federal debt to GDP. Here, theory is seemingly upended, and instead the 10-year Treasury yield shows an inverse and significant correlation of -0.67 with the ratio of U.S. government debt to GDP for a sample that starts with 1985's final quarter.

Over time, many forecasters have been fooled by the 10-year Treasury yield's tendency to fall as the ratio of federal debt to GDP climbs higher. Nevertheless, it would be a mistake of the highest order to claim that an increase in the ratio of U.S. government debt to GDP will reduce Treasury bond yields.

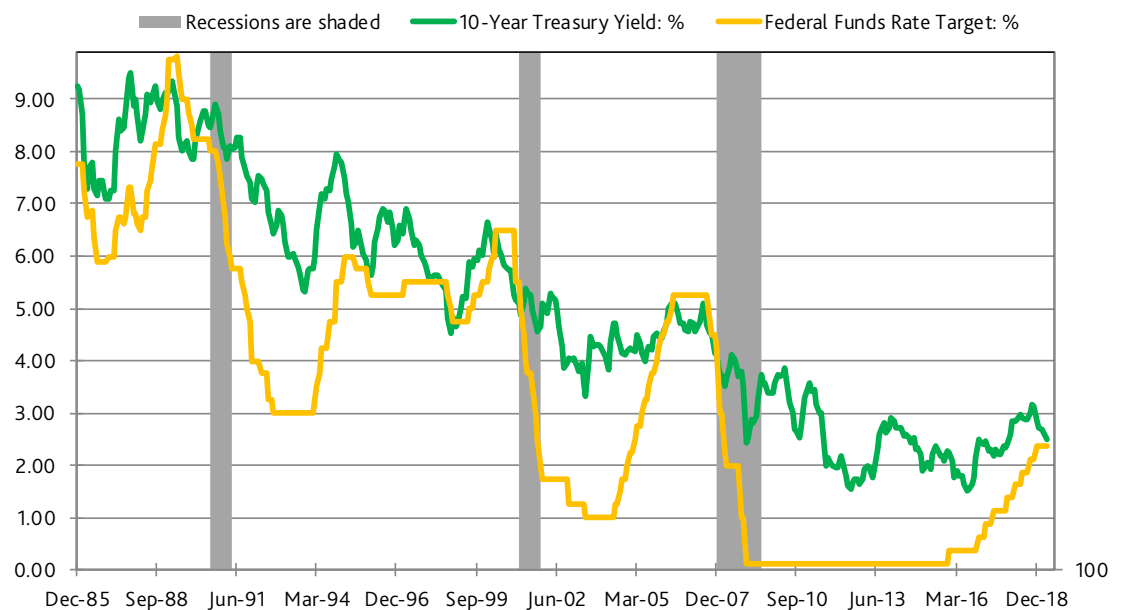
### Treasury Yield's Strong Correlation with Fed Funds Comes with an Important Exception

In line with expectations, the 10-year Treasury yield generates relatively strong positive correlations of 0.90 with the federal funds rate and 0.79 with the annual rate of core PCE price index inflation. Of course, the reality of inverted yield curves reminds us that the 10-year Treasury yield does not always move in the direction taken by the federal funds rate. In fact, since fed funds was last hiked on December 19, 2018 to 2.375%, the 10-year Treasury yield has subsequently declined from December 18's 2.82% to a recent 2.52%.

An even deeper slide by Treasury bond yields will increase the likelihood of a Fed rate cut. If the monthly addition to payrolls does not improve sufficiently compared to its pre-recession-like 20,000 jobs gain of February, a lowering of fed funds midpoint to 2.125% could occur as early as the June 19 meeting of the FOMC.

**Figure 2: Ongoing Slide by 10-Year Treasury Yield Senses the Approach of a Fed Rate Cut**

*sources: Federal Reserve, NBER, Moody's Analytics*



### Containment of Core Inflation Rules Out an Extended Stay by 10-Year Treasury Yield Above 3%

In part, bond yields compensate creditors for inflation risk. The Treasury bond yield's high correlation with the annual rate of core PCE price index inflation stems from how core inflation is a better proxy for the recurring or underlying rate of price inflation than is headline inflation.

January's core PCE price index was up by 0.2% monthly and by 1.9% from a year earlier. Because many businesses now attempt to hike product prices if only because that is what the beleaguered Phillips curve tells them to do, core PCE price index inflation should temporarily run on the high side. In view of how recent price hikes have resulted in lower unit sales, any run-up by core inflation should be short-lived.

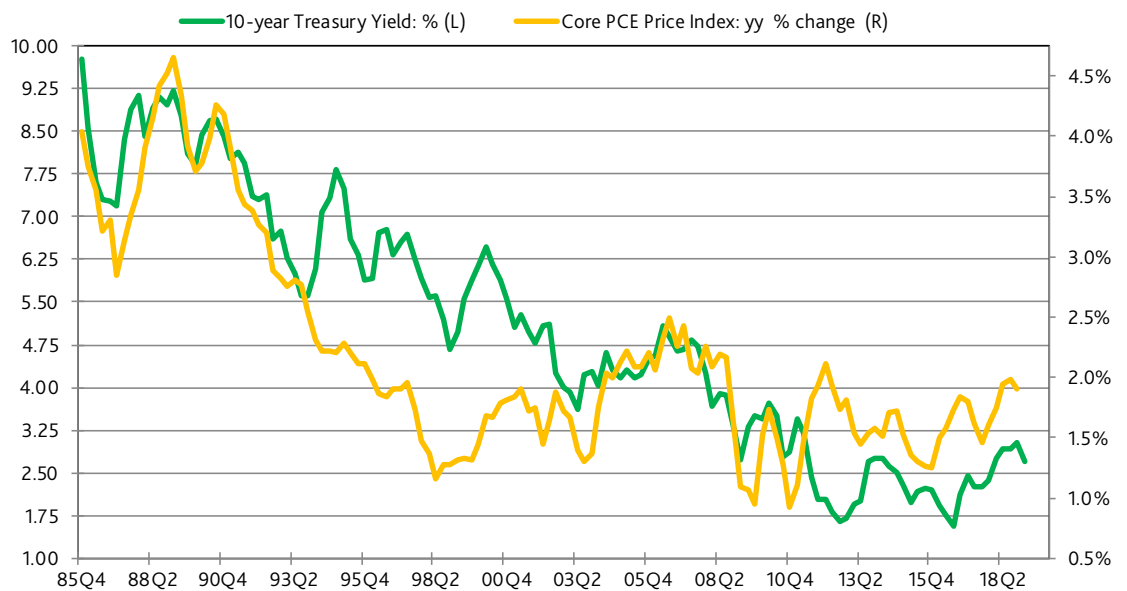
## Credit Markets Review and Outlook

Note that softness in unit sales translates into slower growth for first-quarter 2019's real consumer spending.

Soon, a number of businesses may discover they overestimated their pricing power mostly because of resistance from financially-stressed middle-class consumers. And, in response to unwanted inventories and an underutilization of production capacity, many of these businesses will rescind earlier price hikes. Accordingly, core PCE price index inflation may not soon enter into a climb that drives the 10-year Treasury yield above 3%.

**Figure 3: Perceived Containment of Core Inflation Will Prevent an Extended Climb by Treasury Bond Yields**

*sources: BLS, Federal Reserve, Moody's Analytics*



### Older Workforces Imply Slower Growth and Lower Treasury Bond Yields

When examining what correlates well with the 10-year Treasury yield, the biggest surprise has to be the yield's 0.92 correlation with the percent of household-survey employment that is less than 35 years of age. Though the sample used to calculate the correlation excludes observations prior to 1985's final quarter, when core PCE price index inflation raged during 1979-1982 and the 10-year Treasury yield was headed up to 1981's record calendar-year high of 13.91%, workers aged less than 35 years of age reached a record high 49.5% of employment in 1979.

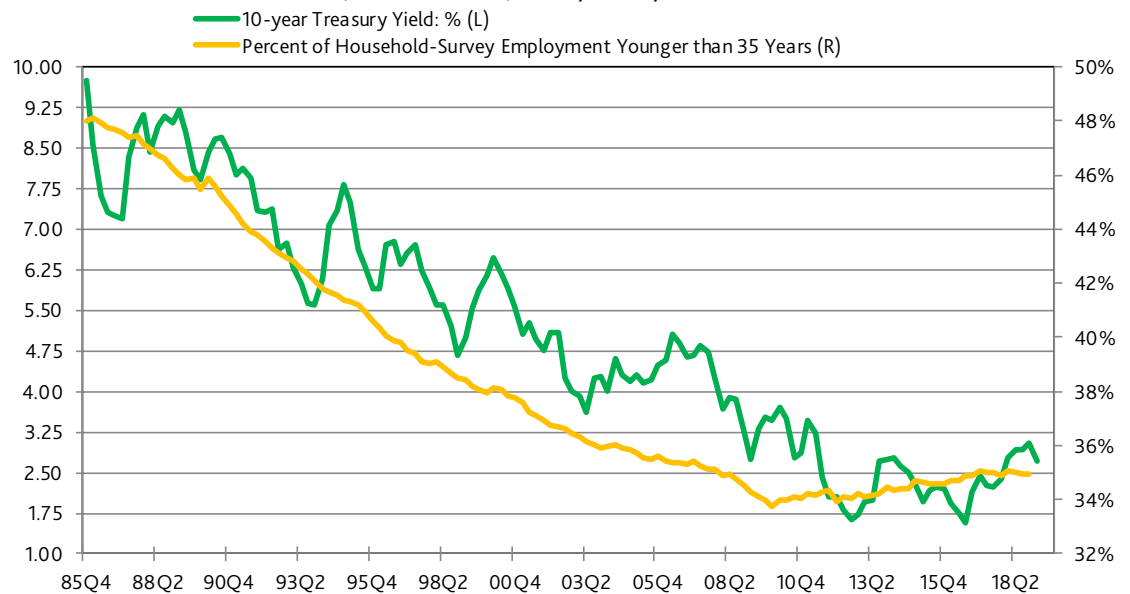
Younger workforces tend to be associated with faster growth for household expenditures, real GDP, and the core PCE price index. And this makes sense given that younger workers tend to be more actively engaged in household formation compared to older workers.

Moreover, though very young workers exhibit relatively rapid labor productivity growth, that is because their level of productivity is relatively low compared to workers belonging to the older age cohorts. In all likelihood, the relatively high productivity of workers aged at least 55 years is offset by their comparatively slow productivity growth.

## Credit Markets Review and Outlook

**Figure 4: Percent of Household-Survey Employment Younger than 35 Years of Age Shows Strong Correlation with 10-Year Treasury Yield**

*sources: Census Bureau, Federal Reserve, Moody's Analytics*



#### Expectation of Fed Rate Cut May Lower Short-Term Debt's Share of Corporate Debt

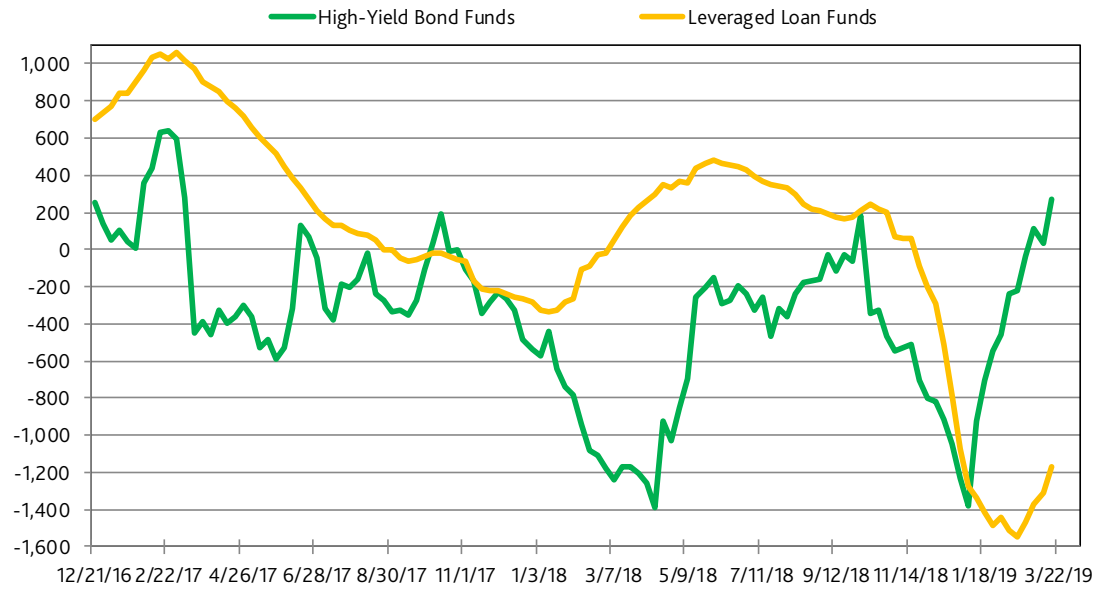
In anticipation of possibly lower short- and long-term benchmark interest rates, investor demand for variable-rate leveraged loans has shrunk. This far in 2019, AMG estimates that high-yield bond mutual funds averaged a net inflow of \$746 million per week, while leveraged loan funds averaged a net outflow of -\$758 million per week. By contrast for the comparably dated span of early 2018, high-yield bond mutual funds averaged a net outflow of -\$1,257 million per week, while leveraged loan funds averaged a net inflow of \$192 million per week.

Indeed, short-term debt's share of nonfinancial-corporate debt shows a very strong correlation of 0.91 with the federal funds rate. For a sample beginning with 1984's final quarter, the top and bottom of short-term debt's share of U.S. nonfinancial-corporate testify to the considerable influence of the federal funds rate.

For example, short-term debt, or the outstandings of loans plus commercial paper, peaked at 47.4% of nonfinancial-corporate debt in 1985's first quarter, or when the federal funds rate averaged a very high 8.50%. Years later, short-term debt bottomed at 24.9% of corporate debt in 2010's final quarter, or when many correctly anticipated a long stay by fed funds at a record low 0.125%. Finally, previous expectations of an extended climb by fed funds helped to lift short-term obligations up to 31.7% of corporate debt by 2018's final quarter. In view of current expectations of a flat-to-lower fed funds rate, short-term debt's share of total debt is likely to ease.

Credit Markets Review and Outlook

**Figure 5: Diminished Likelihood of Fed Rate Hikes Prompts Outflows from Leveraged Loan Funds**  
 moving 13-week averages in \$ millions  
 sources: Barclays Capital, AMG, Moody's Analytics



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

### THE U.S.

By Ryan Sweet, Moody's Analytics

### Ain't No Party Like a No Rate-Hike Party

If there were any doubts that the Federal Reserve's dovish shift was temporary, the Fed removed them at the conclusion of its March meeting. There was a significant shift in the expected path of interest rates.

The central tendency for the fed funds rate has no rate hikes this year, compared with two 25-basis point hikes that were included in the December Summary of Economic Projections. There is a strong consensus around no hikes, as 11 of 17 participants now have rates remaining unchanged this year, up from two participants in December. This revision aligns the Fed's and financial markets' views of the fed funds rate this year.

The central tendency for the fed funds rate in 2020 and 2021 is 50 basis points lower each year. There were no changes to the Fed's estimate of the long-run equilibrium fed funds rate, keeping it at 2.8%. However, the new rate projections show the fed funds rate will remain below its equilibrium rate through 2021. In December, the dot plot showed monetary policy being restrictive as soon as this year.

The dovish shift is attributed to the sudden slowing in the economy, deceleration in inflation, and the risks from abroad. Though a pause is justified, the Fed has likely backed itself into a corner. If the risks to the outlook from trade tensions, Brexit, and slowing in China begin to fade, it will be difficult for the Fed to strike a more balanced bias without unsettling financial markets. Also, the recent slowing in the U.S. economy is temporary. We identify three contributing factors to the weakness in the first quarter, including residual seasonality, the partial government shutdown, and a delay in tax refunds.

We have altered our subjective odds of the outcomes of the remaining FOMC meetings this year. We now put the odds of a hike in June at 10% (previously 25%), while we cut the odds of a rate increase in September to 20% (previously 35%). Our subjective odds of a hike in December are now 30% (previously 40%). A probabilistic forecasting approach, which is based on the subjective probabilities of a fed hike versus a cut, would put the fed funds rate at 2.5% at the end of this year, implying less than one rate hike. Our baseline forecast is for two 25-basis point rate hikes, but this may need to be adjusted. We avoid the elevator forecasting, where changes in their interest rate projections rise and fall with each tweak in Fed rhetoric. Therefore, any adjustment to the forecast will occur over time.

In a statement on balance sheet normalization principles and plans, the Fed anticipates ending the runoff this September. The FOMC intends to slow the reduction of its holdings of Treasury securities by reducing the cap on monthly redemptions from the current level of \$30 billion to \$15 billion beginning in May. Beginning in October, principal payments received from agency debt and agency mortgage-backed securities will be reinvested in Treasury securities subject to a maximum amount of \$20 billion per month; any principal payments in excess of that maximum will continue to be reinvested in agency MBS. Principal payments from agency debt and agency MBS below the \$20 billion maximum will initially be invested in Treasury securities across a range of maturities to roughly match the maturity composition of Treasury securities outstanding.

There were no big surprises from Fed Chair Jerome Powell during his post-meeting presser.

It was a pretty quiet week on the data front. U.S. factory goods orders were up 0.1% in January, weaker than our forecast for a 0.4% gain. The details were mixed as shipments were down 0.4% and inventories rose 0.5%. Within inventories, nondurables were up 0.7% and there was an upward revision to durable goods stockpiles. This suggests that the inventory build this quarter is coming on stronger than previously anticipated. Elsewhere, revisions to core capital goods orders and shipments were small. Separately, the Quarterly Services Survey points toward a downward revision to growth in consumer spending and

## The Week Ahead

intellectual property investment in the fourth quarter. All told, we have fourth quarter GDP growth tracking 2.1% at an annualized rate. First quarter GDP is still tracking 0.6% at an annualized rate.

Looking ahead to next week, among the key data are housing starts, consumer confidence, trade deficit, personal spending and the PCE deflators. We also get revisions to fourth quarter GDP.

We will publish our forecasts for next week's data on Monday on [Economy.com](http://Economy.com).

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## EUROPE

By Barbara Teixeira Araujo of Moody's Analytics in Prague

### Weakened May Presses Her Case on Brexit

We expect U.K. politics to again dominate the headlines in the busy week ahead, as next Friday is nothing less than the long-awaited but also long-feared Brexit day. The most recent development on the negotiations front is that the U.K. prime minister has asked the European Union for a short-term extension of Article 50 (until 30 June 2019) under the presumption that she will put her withdrawal deal to a third vote in coming weeks. But we don't think this justification is enough for the EU—since it would only make a no-deal Brexit more likely down the road—so we expect that EU will make any short-term extension dependent on the agreement being passed. That raises chances that the third vote will be held by the beginning of next week. We nonetheless remain of the view that the deal is likely to be rejected again, given that Theresa May weakened her position further by delivering a very controversial speech Thursday (where she blamed members of Parliament for all the mess).

It is also possible that another extraordinary EU Summit will be held next week, following a vote by the British lawmakers, to decide on next steps. If May's agreement gets defeated, we expect the EU to offer the U.K. a long-term extension conditional on the U.K. taking part on the European Parliament elections in late March. This won't please May, as she has repeatedly said she thinks it is unacceptable for the U.K. to again participate in the elections three years after it voted to leave. Chances are that May could resign in such case, and we are not ruling out general elections being called. In any case, we continue to think a no-deal Brexit is unlikely. All parties are likely to seek to avoid it at any cost.

On the data front, we will get final fourth quarter GDP estimates for several European economies. We expect that the U.K.'s headline will be confirmed at 0.2% q/q, marking a slowdown from the third stanza's 0.6% rate, and easing to 1.4% y/y from a 1.6% rise previously. The breakdown details are more likely than not to confirm that health of the U.K. economy is even more fragile than the growth headline suggests. In the spotlight will be that business investment is set to have declined sharply yet again in the three months to December—and for the fourth consecutive quarter—which bodes extremely poorly for the country's economic potential. Elsewhere, the contribution of net trade is also set to have disappointed, as the figures should confirm that exports grew slower than imports, leading net trade to subtract from growth. Even worse, most of the rise in exports is expected to be because of nonmonetary gold flows exports, which are GDP-neutral since they depress inventories.

Better news should come from household consumption, which is expected to have continued to bolster the economy. But the results there are nothing to write home about, since we were expecting further upside from the persistent good weather and the fact that real wages have picked up recently. The good news is that high-frequency data for the start of the year all point toward a gain in momentum in retail sales and consumer spending as a whole as households purchasing power is boosted by the fall in inflation and the acceleration in wage growth. Elsewhere regarding the fourth quarter numbers, the report should confirm that government spending soared and offset some of the weakness elsewhere. We caution nonetheless that this rate of increase is not expected to be sustained; the ONS already



## The Week Ahead

highlighted that most of the fourth quarter's rise was only due to a pickup in general public services and defense spending, which had been lower at the start of the year compared with previous years.

Looking into 2019, for as long as there is no deal on Brexit, firms will prefer to wait and see what happens. This points to another slowdown in the first quarter on the back of a further decline in business investment and yet another disappointment in the full-year rate. The good news is that if the U.K. and the EU manage to agree on a deal (and this is our base case), the U.K. economy has the scope to rebound sharply in the second half of the year.

|                   | Key indicators                                       | Units           | Moody's Analytics | Last  |
|-------------------|--|-----------------|-------------------|-------|
| Tues @ 7:45 a.m.  | France: GDP for Q4                                   | % change        | 0.3               | 0.3   |
| Wed @ 5:00 p.m.   | France: Job Seekers for February                     | mil, SA         | 3.39              | 3.41  |
| Thur @ 10:00 a.m. | Euro Zone: Business and Consumer Sentiment for March | index           | 106.0             | 106.1 |
| Fri @ 7:00 a.m.   | Germany: Retail Sales for February                   | % change        | -0.9              | 3.3   |
| Fri @ 7:45 a.m.   | France: Household Consumption Survey for February    | % change        | 0.3               | 1.2   |
| Fri @ 8:00 a.m.   | Spain: Retail Sales for February                     | % change        | 0.1               | 0.3   |
| Fri @ 8:30 a.m.   | Spain: GDP for Q4                                    | % change yr ago | 0.7               | 0.6   |
| Fri @ 9:00 a.m.   | Germany: Unemployment for March                      | %               | 5.0               | 5.0   |
| Fri @ 9:30 a.m.   | U.K.: GDP for Q4                                     | % change        | 0.2               | 0.6   |
| Fri @ 2:00 p.m.   | Russia: GDP for Q4                                   | % change yr ago | 2.6               | 1.5   |

## ASIA-PACIFIC

By Katrina Ell and the Asia-Pacific staff of Moody's Analytics in Sydney

## Tariffs, Lower Demand Hurting Japan's Industrial Production

Japan's February activity data are expected to confirm cooling conditions. We expect industrial production returned to growth in February with a 1.5% m/m rise, only partially reversing the 3.7% drop in January. Lower external demand for Japanese autos and a sharp decrease in electronic demand caused the drop in January. Although the trade war between the U.S. and China hasn't escalated in 2019, the effects of last year's tariffs are causing regional pain. This is especially the case for the manufacturing sectors such as autos, semiconductors, and other electrical machinery. We are unlikely to see a sustained rebound in production as external demand continues to wane.

Japan's retail sales decelerated in January to 0.6% y/y, and mild improvement to 1.1% is forecast for February. The underlying consumption trend has weakened. Spending on fuel kept overall retail spending robust last year, but the recent drop in commodity prices has caused fuel spending to decelerate sharply, and that has added to the overall slowdown in headline retail activity. Generally, lower fuel spending means increased discretionary spending, though spending across the major categories of general merchandise and machinery equipment remains relatively muted.

Japan's labour market remains a bright spot. We expect the unemployment rate held at 2.5% in February, with other metrics including the job-to-applicant ratio hovering near a record high. Given the emerging slowdown in broader economic conditions, employment growth will soften over 2019 and wage growth will likely fall short of the 2018 average pace of around 2.5%.

China's manufacturing sentiment is being closely watched for the impacts of local stimulus as well as the trade war. The official manufacturing PMI slipped to 49.2 in February, the weakest reading in three years. We look for an improvement to 49.8 in March, still below the neutral 50 where it has been since December. New orders picked up by 1 point to 50.6 in February, as new export orders deteriorated by 1.7 points to 45.2, a likely early sign of improving domestic demand.

## The Week Ahead

|                     | Key indicators                                  | Units           | Confidence | Risk | Moody's Analytics | Last |
|---------------------|---|-----------------|------------|------|-------------------|------|
| Wed @ 8:00 a.m.     | South Korea Consumer sentiment survey for March | Index           | 3          | ←    | 99.1              | 99.5 |
| Wed @ 12:00 p.m.    | New Zealand Monetary policy for March           | %               | 4          | ←    | 1.75              | 1.75 |
| Friday @ 10:00 a.m. | South Korea Retail sales for February           | % change        | 3          | ↓    | 0.3               | 0.2  |
| Fri @ 10:30 a.m.    | Japan Unemployment rate for February            | %               | 3          | ↑    | 2.5               | 2.5  |
| Fri @ 10:50 a.m.    | Japan Industrial production for February        | % change        | 3          | ↑    | 1.5               | -3.7 |
| Fri @ 10:50 a.m.    | Japan Retail sales for February                 | % change yr ago | 3          | ←    | 1.1               | 0.6  |
| Fri @ 6:30 p.m.     | Thailand Foreign trade for February             | US\$ bil        | 2          | ↑    | 1.80              | 0.06 |
| Sun @ 12:00 p.m.    | China Manufacturing PMI for March               | Index           | 3          | ←    | 49.8              | 49.2 |

## The Long View

### January-February 2019's corporate bond issuance by U.S.-based companies advanced by 9.9% annually for investment-grade, but dipped by 0.9% for high-yield.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group  
March 21, 2019

#### CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 126 basis points exceeded its 122-point mean of the two previous economic recoveries. This spread may be no wider than 140 bp by year-end 2019.

The recent high-yield bond spread of 424 bp is thinner than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 205 bp but is wider than what is suggested by the recent VIX of 13.3 points.

#### DEFAULTS

February 2019's U.S. high-yield default rate of 2.7% was less than the 3.8% of February 2018. Moody's Investors Service now expects the default rate will average 2.1% during 2019's fourth quarter.

#### US CORPORATE BOND ISSUANCE

Yearlong 2017's US\$-denominated bond issuance rose by 6.8% annually for IG, to \$1.508 trillion and soared by 33.0% to \$453 billion for high yield. Across broad rating categories, 2017's newly rated bank loan programs from high-yield issuers sank by 26.2% to \$72 billion for Baa, advanced by 50.6% to \$319 billion for Ba, soared by 56.0% to \$293 billion for programs graded single B, and increased by 28.1% to \$25.5 billion for new loans rated Caa.

Fourth-quarter 2017 revealed year-over-year advances for worldwide offerings of corporate bonds of 17.6% for IG and 77.5% for high-yield, wherein US\$-denominated offerings posted increases of 21.0% for IG and 56.7% for high yield.

First-quarter 2018's worldwide offerings of corporate bonds incurred year-over-year setbacks of 6.3% for IG and 18.6% for high-yield, wherein US\$-denominated offerings posted sank by 14.4% for IG and 20.8% for high yield.

Second-quarter 2018's worldwide offerings of corporate bonds eked out an annual increase of 2.8% for IG, but incurred an annual plunge of 20.4% for high-yield, wherein US\$-denominated offerings rose by 1.6% for IG and plummeted by 28.1% for high yield.

Third-quarter 2018's worldwide offerings of corporate bonds showed year-over-year setbacks of 6.0% for IG and 38.7% for high-yield, wherein US\$-denominated offerings plunged by 24.4% for IG and by 37.5% for high yield.

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.

During yearlong 2017, worldwide corporate bond offerings increased by 4.1% annually (to \$2.501 trillion) for IG and advanced by 41.5% for high yield (to \$603 billion).

For 2018, worldwide corporate bond offerings sank by 7.2% annually (to \$2.322 trillion) for IG and plummeted by 37.6% for high yield (to \$376 billion). The projected annual percent increases for 2019's worldwide corporate bond offerings are 2.8% for IG and 5.5% for high yield.

## The Long View

### US ECONOMIC OUTLOOK

As inferred from the CME Group's FedWatch Tool, the futures market recently assigned an implied probability of 0.0% to at least one Fed rate hike in 2019. 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 3% 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.

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### EUROPE

By Barbara Teixeira Araujo of Moody's Analytics  
March 21, 2019

#### UNITED KINGDOM

It couldn't have been worse timing for the Bank of England to hold its monetary policy meeting, as uncertainty over Brexit is stealing the spotlight and putting a dark cloud over the economy's outlook. As we write, EU leaders were gathered in Brussels for the European Council to discuss the U.K.'s request for an extension of Article 50. Things don't look pretty, but our view is that some solution will be found, as no one wants a no-deal Brexit.

Back to the BoE, its March monetary policy meeting was a snoozer, as expected. The MPC was unanimous in deciding to leave rates unchanged, while also reaffirming that it is in no rush to hike again in coming months, or at least until the Brexit saga is resolved. The bank's minutes again focused on the heightened Brexit-related uncertainties, and on how they are leading to increased volatility and weighing on economic prospects. We maintain that the bank won't dare kick the economy when it is down; Brexit waters are already difficult to navigate the way they are, so the bank should wait until more clarity emerges before moving again.

We also maintain, though, that at least one rate hike is warranted before the end this year, likely by November. If Prime Minister Theresa May's deal is passed over the next few days (as this seems a likely demand from the EU) and the EU grants a short-term, technical extension of Article 50, then the economy is expected bounce back in line with the fading uncertainty and the return of confidence. This would then allow the bank to move during the second quarter of the year. But if May's deal doesn't pass, Article 50 is likely to be extended by a longer period (around 12 to 20 months). Although this would mean that the uncertainty would not be over, we don't think the BoE would want to wait too long and risk CPI inflation from overshooting the 2% target further ahead. Evidence from wage growth clearly points to a buildup of underlying inflation pressures down the road—pay growth remained at 3.4% y/y in the three months to January, its highest in a decade—while labour market gains remain solid. Therefore, we think that the central bank would want to get ahead of the curve despite the fact that Brexit would not be resolved.

The bank again warned that the response to a disorderly Brexit—or a no-deal Brexit—is not automatic, meaning that rates could go either up or down depending on different factors. But we think it is highly implausible that the MPC would choose to beat down the economy in such a fragile moment.

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### ASIA PACIFIC

By Katrina Ell of Moody's Analytics  
March 21, 2019

#### AUSTRALIA

The Australian economy has had a great run. Last year marked the 27th year of recession-free growth, and it was solid. GDP growth came in around potential at 2.8%. Employment growth remained above trend, with the lion's share coming from full-time positions, putting downward pressure on underemployment. Exports were a bright spot amid relatively high prices for the important bulk commodities and increased capacity coming on line for liquefied natural gas. This helped to compensate for weakness in the rural sector, which suffered supply constraints from a drought that hit the eastern states particularly hard.

## The Long View

But conditions have cooled. Labour market tightening has slowed, meaning that only modest improvements in wage growth continue. Consumption has lost some steam, encouraged by the housing market's entrenched slowing. GDP growth is forecast to slow to 2.5% this year. Ultimately domestic demand is likely to be subdued in 2019. Ongoing strength in investment, particularly from the heavy public infrastructure program, is unlikely to offset the softness in consumption.

The government will likely announce fiscal stimulus around April, ahead of the federal elections scheduled to occur before 18 May. Both incumbent and opposition parties are expected to provide some form of stimulus measures this year, and additional fiscal stimulus will take pressure off the Reserve Bank of Australia to cut rates, given the stimulus is likely to be targeted at households.

### The labour market is important

Australia's labour market is in relatively good shape. The trend unemployment rate held at a low 5.1% in January. Trend employment growth was 2.4% y/y in January, still comfortably above the 2% average of the past 20 years. The healthy state of the labour market is demonstrated by the trend employment-to-population ratio hitting a 10-year high of 62.4% in January, with the 15- to 64-year-old ratio hitting a record high of 74.1%.

But there is still notable labour market slack. In particular, the trend underemployment rate held at 8.3%, which is relatively high by historical standards. While the underutilisation rate was 0.3 percentage point lower than a year earlier, the downward pressure has eased. There's a tight causal relationship between the underemployment rate and wage growth.

Evidence of slowing labour market tightening is also seen with the wage price index. WPI growth held at 2.3% y/y in the December quarter after being on a glacial upward trend in prior quarters. While we expect further gains in wage growth over 2019, they will be modest, and our baseline is for WPI growth to be around 2.5% y/y by the end of 2019. This is well short of the 3.5% growth rate that the central bank indicated was ideal and reflects the highly competitive environment and a lack of necessity in most industries, although there had been reports of skill shortages in some pockets.

### Rate hikes off the table, for now

The RBA has changed its tune in 2019. In recent years, the bank opted for a vague form of forward guidance, which suggested that the next interest rate move was likely to be up rather than down. However, following the weakness in consumption in the second half of 2018, the RBA has acknowledged that the odds of a rate hike or a rate cut are evenly balanced. The governor has stated that rate cuts could be on the cards if there is a sustained increase in the unemployment rate and a lack of further progress against the bank's inflation objective.

But according to the bank's own central scenario, it expects income to pick up, the unemployment rate to continue trending downward, and inflation to return gradually toward its target of 2% to 3%. This means the RBA is probably not banking on further rate cuts. It hopes, at least, that the current level of interest rates will be sufficient to provide support.

Although financial market pricing suggests additional rate cuts—25 basis points over 12 months—we place the odds of a rate cut at close to 35%, while our baseline scenario calls for rates to remain on hold until mid-2021. Our fairly high odds of an interest rate cut largely stem from uncertainty around consumption, which accounts for nearly 60% of GDP. The underlying trend in consumption has been weak, as consumers have dipped into savings absent decent wage growth over the past few years. Lower wage growth and lower savings were not concerning when asset values were rising sharply, with the housing market providing an additional boost to the economy in 2013-2017, especially to the construction, real estate and financial sectors. However, with the housing boom over, home values have contracted sharply across the eastern seaboard. This means less housing demand and, consequently, less consumption.

### The slowing housing market

National housing values fell by an average of 1.8% in 2018 and are forecast to fall a further 7.5% in 2019. Sydney has been a key driver of the slowdown given the impressive run up in values in the past five years. Sydney home values fell 5.5% in 2018, and a further 9.1% decline is forecast this year. But while national

## The Long View

home values have come down from their peak in 2017, they are still upward of 20% higher compared with the start of 2013.

Moody's Analytics forecasts that the trough in home values will likely occur by the third quarter of 2019. This means that consumer sentiment is unlikely to decline materially, and overall consumption will hold up and prevent a rise in the unemployment rate.

### Downside risks stemming from housing market

The downside risk is that the housing market declines sharply, more than anticipated, and the negative wealth effect becomes concerning across households, causing consumption to drop and the overall unemployment rate to rise. This could lead to a 25-basis point rate cut by the September quarter.

An important driver of the slowdown in Australia's housing market has been tighter credit availability, partly as a consequence of the regulator—the Australian Prudential Regulation Authority—tightening lending conditions, which has made it relatively more difficult to purchase a property, particularly for investors. The recently concluded Banking Royal Commission Into Misconduct in the Banking, Superannuation and Financial Services Industry could add to the already tightened lending conditions and further slow credit availability, particularly in the investor portion of the market. If this occurs, it could exacerbate the forecast correction in the property market and delay or weaken the forecast improvement in 2020.

## Ratings Round-Up

## Ratings Round-Up

## U.S. Downgrades Outnumber Upgrades

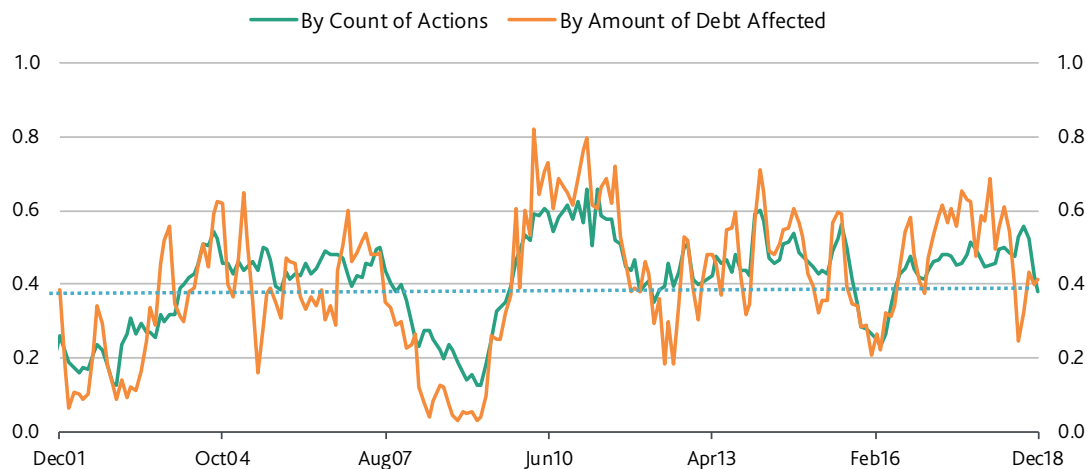
By Michael Ferlez

U.S. rating activity increased last week, though the overall trend remained weak. Downgrades outnumbered upgrades by a ratio of about two to one. Moreover, downgrades also accounted for the majority of affected debt. Downgrades were mostly concentrated among smaller, speculative-grade companies with minimal amounts of debt. The week's more notable downgrades included Endo Finance LLC and NCR Corporation, which were downgraded to Caa1 and B2 respectively. Meanwhile, upgrades were headlined by Continental Resources, Inc.'s. The U.S. oil firm saw its senior unsecured debt upgraded to Ba1 from Ba2, one-notch shy of investment-grade. The upgrade reflects the company's improving operating profile. The upgrade accounted for nearly \$5.8 billion, the most of any company last week.

European rating change activity was light last week, with only three total changes. The notable upgrade was to JSC Holding Company Metalloinvest. The Russian metal/mining company's senior unsecured debt was upgraded from Ba2 to Ba1, reflecting improved visibility into the company's shareholder distributions. The other upgrade was made to Swedish chemical manufacturer, Perstorp Holding AB, which saw its long-term corporate family rating upgraded from Caa1 to B2. On the downgrade side, Orient Express Bank was downgraded one-notch to Caa1.

FIGURE 1

## Rating Changes - US Corporate &amp; Financial Institutions: Favorable as % of Total Actions



\* Trailing 3-month average

Source: Moody's

## Ratings Round-Up

FIGURE 2

**Rating Key**

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



## Ratings Round-Up

FIGURE 3

## Rating Changes: Corporate &amp; Financial Institutions – US

| Date    | Company  | Sector     | Rating                       | Amount<br>(\$ Million) | Up/<br>Down | Old<br>LTD<br>Rating | New<br>LTD<br>Rating | New IG/<br>LGD SG |
|---------|--|------------|------------------------------|------------------------|-------------|----------------------|----------------------|-------------------|
| 3/13/19 | MONTAGE RESOURCES CORPORATION                            | Industrial | SrUnsec /LTCFR/PDR           | 471                    | U           | Caa1                 | B3                   | SG                |
| 3/14/19 | ENDO INTERNATIONAL PLC -ENDO FINANCE LLC                 | Industrial | SrUnsec /SrSec/BCF           | 4,985                  | D           | B3                   | Caa1                 | SG                |
| 3/14/19 | THE CHEFS' WAREHOUSE, INC.                               | Industrial | LTCFR/PDR                    |                        | U           | B2                   | B1                   | SG                |
| 3/14/19 | ARBOR PHARMACEUTICALS, LLC                               | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | B2                   | B3                   | SG                |
| 3/14/19 | CASA SYSTEMS, INC.                                       | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | B1                   | B2                   | SG                |
| 3/14/19 | TIVO CORPORATION   | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | Ba2                  | Ba3                  | SG                |
| 3/14/19 | CONSOL ENERGY INC.                                       | Industrial | SrSec                        | 600                    | U           | B3                   | B2                   | SG                |
| 3/15/19 | CARLSTAR GROUP LLC (THE)                                 | Industrial | SrSec /LTCFR/PDR             | 147                    | D           | Caa1                 | Caa2                 | SG                |
| 3/15/19 | ONE CALL CORPORATION                                     | Industrial | SrSec/SrUnsec /BCF/LTCFR/PDR | 810                    | D           | B2                   | B3                   | SG                |
| 3/15/19 | ASP EMERALD HOLDINGS, LLC                                | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | B1                   | B2                   | SG                |
| 3/18/19 | NCR CORPORATION  | Industrial | SrUnsec /LTCFR/PDR           | 4,400                  | D           | B1                   | B2                   | SG                |
| 3/18/19 | CONTINENTAL RESOURCES, INC.                              | Industrial | SrUnsec /LTCFR/PDR           | 5,800                  | U           | Ba2                  | Ba1                  | SG                |
| 3/18/19 | PHI, INC.  | Industrial | SrUnsec /LTCFR/PDR           | 500                    | D           | Caa2                 | Caa3                 | SG                |
| 3/18/19 | ASCENA RETAIL GROUP, INC.                                | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | Ba3                  | B1                   | SG                |
| 3/18/19 | INFOGROUP INC.   | Industrial | SrSec/BCF /LTCFR/PDR         |                        | D           | B1                   | B2                   | SG                |
| 3/19/19 | SS&C TECHNOLOGIES HOLDINGS, INC.-SS&C TECHNOLOGIES, INC. | Industrial | SrSec/BCF                    |                        | U           | Ba3                  | Ba2                  | SG                |

Source: Moody's

FIGURE 4

## Rating Changes: Corporate &amp; Financial Institutions – Europe

| Date    | Company                           | Sector     | Rating             | Amount<br>(\$ Million) | Up/<br>Down | Old<br>LTD<br>Rating | New<br>LTD<br>Rating | IG/SG | Country |
|---------|-----------------------------------|------------|--------------------|------------------------|-------------|----------------------|----------------------|-------|---------|
| 3/14/19 | JSC HOLDING COMPANY METALLOINVEST | Industrial | SrUnsec /LTCFR/PDR | 1,800                  | U           | Ba2                  | Ba1                  | SG    | RUSSIA  |
| 3/15/19 | ORIENT EXPRESS BANK               | Financial  | LTD                |                        | D           | B3                   | Caa1                 | SG    | RUSSIA  |
| 3/19/19 | PERSTORP HOLDING AB               | Industrial | LTCFR/PDR          |                        | U           | Caa1                 | B2                   | SG    | SWEDEN  |

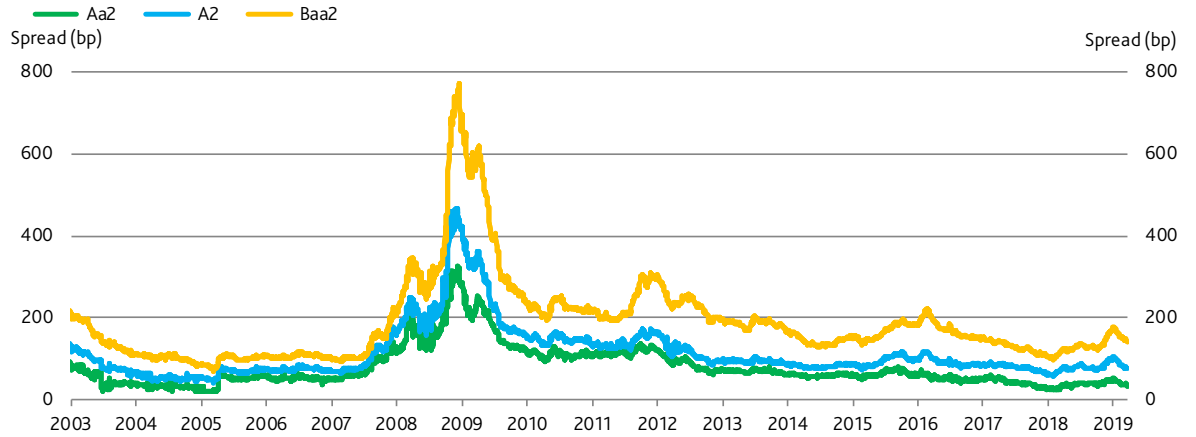
Source: Moody's

Market Data

Market Data

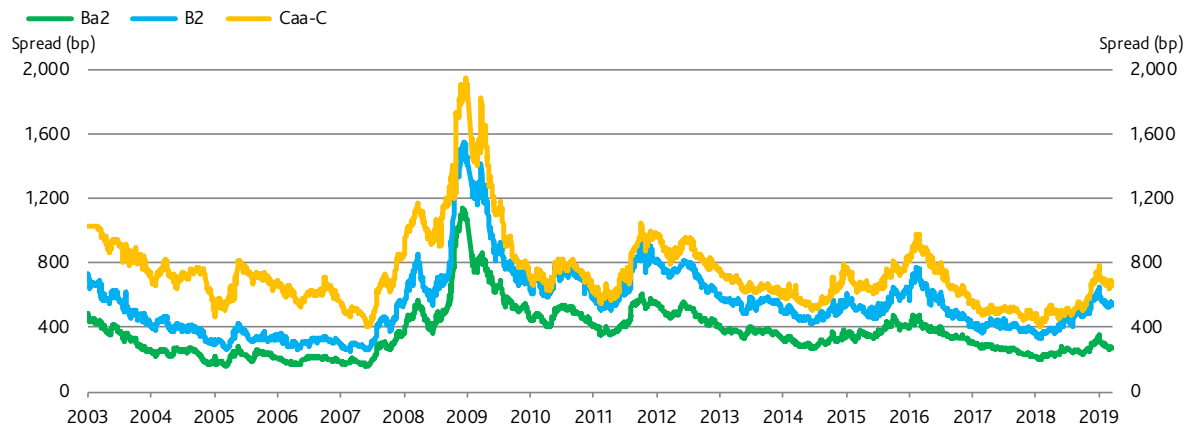
Spreads

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



Source: Moody's

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



Source: Moody's

## Market Data

## CDS Movers

Figure 3. CDS Movers - US (March 13, 2019 – March 20, 2019)

| CDS Implied Rating Rises                   |         | CDS Implied Ratings |                |  |
|--|---------|---------------------|----------------|--|
| Issuer                                     | Mar. 20 | Mar. 13             | Senior Ratings |  |
| PepsiCo, Inc.                              | Aa3     | A2                  | A1             |  |
| Ball Corporation                           | Baa1    | Baa3                | Ba1            |  |
| NIKE, Inc.                                 | Aa1     | Aa3                 | A1             |  |
| Toyota Motor Credit Corporation            | A1      | A2                  | Aa3            |  |
| John Deere Capital Corporation             | A2      | A3                  | A2             |  |
| Citibank, N.A.                             | Baa2    | Baa3                | A1             |  |
| Caterpillar Financial Services Corporation | A2      | A3                  | A3             |  |
| 3M Company                                 | Aa1     | Aa2                 | A1             |  |
| United Technologies Corporation            | A2      | A3                  | Baa1           |  |
| Merck & Co., Inc.                          | Aa2     | Aa3                 | A1             |  |

| CDS Implied Rating Declines          |         | CDS Implied Ratings |                |  |
|--------------------------------------|---------|---------------------|----------------|--|
| Issuer                               | Mar. 20 | Mar. 13             | Senior Ratings |  |
| AT&T Inc.                            | Ba1     | Baa3                | Baa2           |  |
| Microsoft Corporation                | Aa2     | Aa1                 | Aaa            |  |
| CVS Health                           | Baa3    | Baa2                | Baa2           |  |
| General Motors Company               | Ba2     | Ba1                 | Baa3           |  |
| United Parcel Service, Inc.          | Aa3     | Aa2                 | A1             |  |
| Viacom Inc.                          | Ba1     | Baa3                | Baa3           |  |
| Occidental Petroleum Corporation     | A3      | A2                  | A3             |  |
| United Rentals (North America), Inc. | B2      | B1                  | Ba3            |  |
| Colgate-Palmolive Company            | A1      | Aa3                 | Aa3            |  |
| CenterPoint Energy, Inc.             | Baa1    | A3                  | Baa1           |  |

| CDS Spread Increases                 |                | CDS Spreads |         |             |  |
|--------------------------------------|----------------|-------------|---------|-------------|--|
| Issuer                               | Senior Ratings | Mar. 20     | Mar. 13 | Spread Diff |  |
| Frontier Communications Corporation  | Caa1           | 2,280       | 2,190   | 90          |  |
| Realty Group LLC                     | B1             | 542         | 474     | 68          |  |
| Dish DBS Corporation                 | B1             | 592         | 539     | 53          |  |
| CenturyLink, Inc.                    | B2             | 392         | 348     | 44          |  |
| AK Steel Corporation                 | B3             | 806         | 763     | 43          |  |
| United States Steel Corporation      | B2             | 348         | 305     | 42          |  |
| McClatchy Company (The)              | Caa2           | 767         | 725     | 42          |  |
| American Axle & Manufacturing, Inc.  | B2             | 333         | 292     | 41          |  |
| Office Depot, Inc.                   | B3             | 448         | 408     | 40          |  |
| United Rentals (North America), Inc. | Ba3            | 209         | 173     | 36          |  |

| CDS Spread Decreases                      |                | CDS Spreads |         |             |  |
|---|----------------|-------------|---------|-------------|--|
| Issuer                                    | Senior Ratings | Mar. 20     | Mar. 13 | Spread Diff |  |
| K. Hovnanian Enterprises, Inc.            | Caa3           | 2,475       | 3,645   | -1,169      |  |
| Weatherford International, LLC (Delaware) | Caa3           | 1,635       | 1,741   | -106        |  |
| Lexmark International, Inc.               | Caa3           | 906         | 940     | -34         |  |
| Neiman Marcus Group LTD LLC               | Ca             | 2,150       | 2,178   | -28         |  |
| R.R. Donnelley & Sons Company             | B3             | 732         | 754     | -22         |  |
| Hertz Corporation (The)                   | B3             | 728         | 749     | -20         |  |
| Penney (J.C.) Corporation, Inc.           | Caa2           | 2,924       | 2,940   | -16         |  |
| Ball Corporation                          | Ba1            | 63          | 78      | -15         |  |
| Dean Foods Company                        | B3             | 1,654       | 1,669   | -14         |  |
| Unisys Corporation                        | B2             | 292         | 304     | -12         |  |

Source: Moody's, CMA

## Market Data

Figure 4. CDS Movers - Europe (March 13, 2019 – March 20, 2019)

| CDS Implied Rating Rises     |  | CDS Implied Ratings |         |                |
|------------------------------|--|---------------------|---------|----------------|
| Issuer                       |  | Mar. 20             | Mar. 13 | Senior Ratings |
| Italy, Government of         |  | Ba3                 | B2      | Baa3           |
| Nordea Bank AB               |  | Aa2                 | A1      | Aa3            |
| France, Government of        |  | Aa1                 | Aa2     | Aa2            |
| Spain, Government of         |  | A3                  | Baa1    | Baa1           |
| BNP Paribas                  |  | Aa3                 | A1      | Aa3            |
| Portugal, Government of      |  | Baa1                | Baa2    | Baa3           |
| Finland, Government of       |  | A3                  | Baa1    | Aa1            |
| Banco Santander S.A. (Spain) |  | A2                  | A3      | A2             |
| Danske Bank A/S              |  | A3                  | Baa1    | A2             |
| Alpha Bank AE                |  | Caa1                | Caa2    | Caa2           |

| CDS Implied Rating Declines                   |  | CDS Implied Ratings |         |                |
|---|--|---------------------|---------|----------------|
| Issuer  |  | Mar. 20             | Mar. 13 | Senior Ratings |
| Credit Agricole Corporate and Investment Bank |  | Aa3                 | Aa2     | A1             |
| Electricite de France                         |  | Baa1                | A3      | A3             |
| Bayerische Motoren Werke Aktiengesellschaft   |  | Baa1                | A3      | A1             |
| Deutsche Telekom AG                           |  | A1                  | Aa3     | A3             |
| Veolia Environnement S.A.                     |  | Aa3                 | Aa2     | Baa1           |
| Tesco Plc                                     |  | Ba1                 | Baa3    | Ba1            |
| BASF (SE)                                     |  | Aa2                 | Aa1     | A1             |
| Casino Guichard-Perrachon SA                  |  | Caa1                | B3      | Ba1            |
| Telia Company AB                              |  | A1                  | Aa3     | Baa1           |
| Bayer AG                                      |  | Baa3                | Baa2    | Baa1           |

| CDS Spread Increases             |                | CDS Spreads |         |             |
|----------------------------------|----------------|-------------|---------|-------------|
| Issuer                           | Senior Ratings | Mar. 20     | Mar. 13 | Spread Diff |
| CMA CGM S.A.                     | B3             | 710         | 634     | 76          |
| Casino Guichard-Perrachon SA     | Ba1            | 452         | 379     | 73          |
| Iceland Bondco plc               | Caa2           | 374         | 333     | 41          |
| Altice Finco S.A.                | Caa1           | 454         | 414     | 40          |
| Schaeffler Finance B.V.          | Baa3           | 114         | 80      | 35          |
| Sappi Papier Holding GmbH        | Ba2            | 291         | 259     | 32          |
| Bayer AG                         | Baa1           | 95          | 67      | 27          |
| Ineos Group Holdings S.A.        | B1             | 303         | 279     | 24          |
| Boparan Finance plc              | Caa1           | 1,197       | 1,176   | 22          |
| Jaguar Land Rover Automotive Plc | Ba3            | 611         | 591     | 20          |

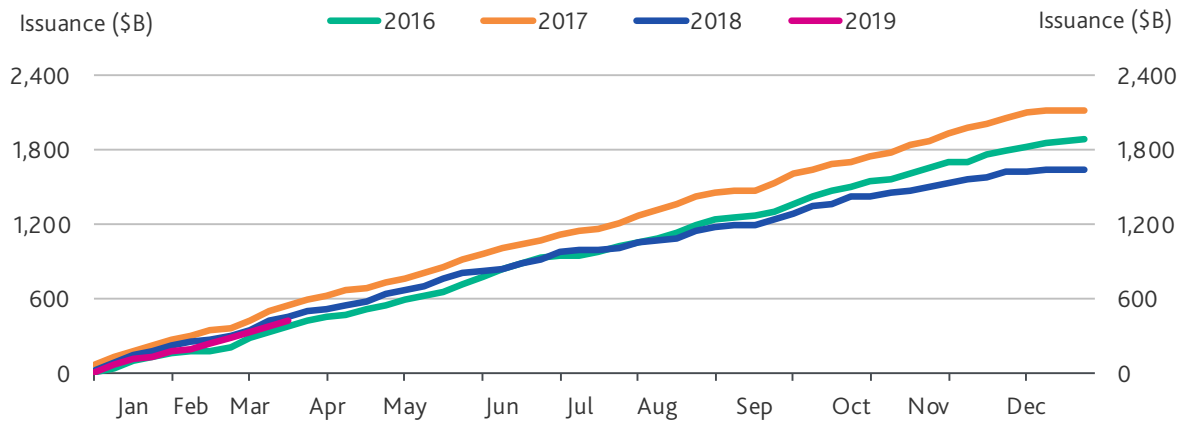
| CDS Spread Decreases                     |                | CDS Spreads |         |             |
|--|----------------|-------------|---------|-------------|
| Issuer                                   | Senior Ratings | Mar. 20     | Mar. 13 | Spread Diff |
| Galapagos Holding S.A.                   | Caa3           | 6,450       | 6,807   | -357        |
| Weatherford International Ltd. (Bermuda) | Caa3           | 1,790       | 1,941   | -151        |
| PizzaExpress Financing 1 plc             | Caa2           | 2,398       | 2,446   | -48         |
| Novo Banco, S.A.                         | Caa2           | 862         | 883     | -21         |
| Unione di Banche Italiane S.p.A.         | Baa3           | 219         | 233     | -14         |
| Banca Monte dei Paschi di Siena S.p.A.   | Caa1           | 414         | 427     | -13         |
| Eurobank Ergasias S.A.                   | Caa2           | 900         | 912     | -13         |
| Piraeus Bank S.A.                        | Caa2           | 894         | 906     | -13         |
| Alpha Bank AE                            | Caa2           | 673         | 681     | -9          |
| National Bank of Greece S.A.             | Caa2           | 698         | 706     | -8          |

Source: Moody's, CMA

Market Data

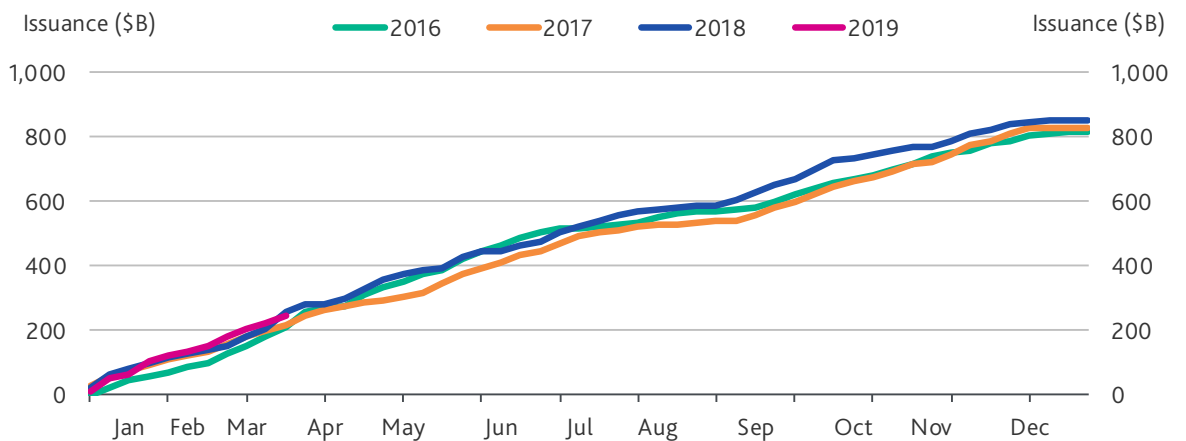
Issuance

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

## Market Data

Figure 7. Issuance: Corporate &amp; Financial Institutions

|              | USD Denominated  |               |               |
|--------------|------------------|---------------|---------------|
|              | Investment-Grade | High-Yield    | Total*        |
|              | Amount<br>\$B    | Amount<br>\$B | Amount<br>\$B |
| Weekly       | 31.301           | 12.710        | 45.232        |
| Year-to-Date | 321.614          | 90.351        | 427.939       |

|              | Euro Denominated |               |               |
|--------------|------------------|---------------|---------------|
|              | Investment-Grade | High-Yield    | Total*        |
|              | Amount<br>\$B    | Amount<br>\$B | Amount<br>\$B |
| Weekly       | 13.595           | 2.643         | 18.975        |
| Year-to-Date | 218.436          | 18.682        | 243.109       |

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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