

## WEEKLY MARKET OUTLOOK

### Moody's Analytics Research

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## Fast Declining EDF Favors Thinner High-Yield Bond Spread

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

Fast Declining EDF Favors Thinner High-Yield Bond Spread

» FULL STORY PAGE 2

### [The Week Ahead](#)

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

» FULL STORY PAGE 7

### [The Long View](#)

Full updated stories and key credit market metrics: Caa-rated debt has comprised 28% of February-to-date's heavy issuance of high-yield bonds.

Credit Spreads	<u>Investment Grade</u> : Year-end 2021's average investment grade bond spread may slightly exceed its recent 102 basis points. <u>High Yield</u> : A composite high-yield spread may top its recent 360 bp by year-end 2021.
Defaults	<u>US HY default rate</u> : According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped from December 2019's 4.3% to December 2020's 8.4% and may average 7.9% for 2021's second quarter.
Issuance	<u>For 2019's</u> offerings of US\$-denominated corporate bonds, IG bond issuance rose 2.6% to \$1.309 trillion, while high-yield bond issuance surged by 58% to \$440 billion. <u>In 2020</u> , US\$-denominated corporate bond issuance soared 54% for IG to a record \$2.012 trillion, while high-yield advanced 30% to a record-high \$570 billion. <u>For 2021</u> , US\$-denominated corporate bond offerings may decline 24% (to \$1.528 trillion) for IG and drop 7% (to \$529 billion) for high-yield, where both forecasts top their respective annual averages for the five years ended 2020 of \$1.494 trillion for IG and \$410 billion for high-yield.

» FULL STORY PAGE 11

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

European Change Activity Weakens

» FULL STORY PAGE 14

### [Market Data](#)

Credit spreads, CDS movers, issuance.

» FULL STORY PAGE 17

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

Links to commentaries on: Rising prices, stimulus, core profits, yield spreads, virus, Congress, misery, issuance boom, default rate, volatility, credit quality, bond yields, record savings rates, demographic change, high tech, complacency, Fed intervention, speculation, risk, credit stress, optimism, corporate credit, leverage, VIX.

» FULL STORY PAGE 22

## Credit Markets Review and Outlook

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

### Fast Declining EDF Favors Thinner High-Yield Bond Spread

Moody's Analytics' average expected default frequency metric of U.S./Canadian high-yield issuers, or high-yield EDF, recently sank to 2.36% for its lowest reading since the 2.35% of early October 2018. Just prior to October 2018, the high-yield EDF metric's month-long average formed a now nearly 6.5-year low of 2.25% in September 2018, when the Bloomberg/Barclays high-yield bond spread averaged 325 basis points. In conjunction with the latest drop by the high-yield EDF, the Bloomberg/Barclays high-yield bond spread recently approached 325 basis points.

In terms of month-long averages, the post Great Recession low for the high-yield bond spread is the 320 bp of January 2018. However, that trough was well above previous bottoms. Prior to the Great Recession, the high-yield bond spread averaged less than 300 bp in each month beginning in December 2006 and ending with June 2007, wherein the spread bottomed at May 2007's 247 bp. During May and June of 2007, the high-yield EDF's month-long average set a record low of 1.6%.

Once COVID-19 risks are sufficiently reduced, business prospects should improve by enough to drive the high-yield EDF under 2.25%. In turn, the high-yield bond spread might approach 300 bp.

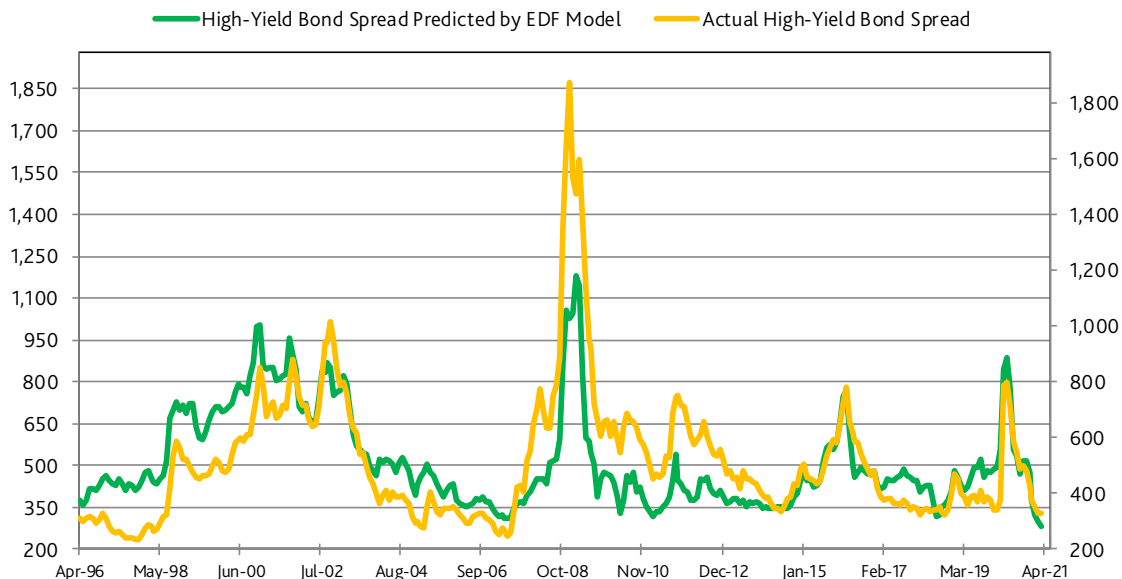
The statistical record shows that the high-yield bond spread will be lower (i) the lower is the average high-yield EDF metric and (ii) the lower is the change in the EDF metric during the past three months. The latter explanatory variable recognizes that the market's interpretation of the high-yield EDF depends on its direction of change. For example, a 3% average high-yield EDF metric that has risen by a percentage point over the last three months is likely to be viewed far differently than a 3% high-yield EDF that has dropped by a percentage point over the last three months.

As inferred from a simple ordinary least squares regression, the recent 2.36% high-yield EDF and its historically deep 2.99 percentage point decline of the last three months favor a 280 bp midpoint for the high-yield bond spread. However, it should be noted that the depth of the decline by the high-yield EDF over the last three months has reduced the high-yield bond spread's expected midpoint by 85 bp. Had the high-yield EDF instead been unchanged from its reading of three months back, the high-yield bond spread's expected midpoint would have been 365 bp.

Credit Markets Review and Outlook

**Figure 1: Predicted High-Yield Bond Spread Is Now Under Actual High-Yield Bond Spread**  
*month-long averages in basis points*

*sources: Bloomberg/Barclays, Moody's Analytics*



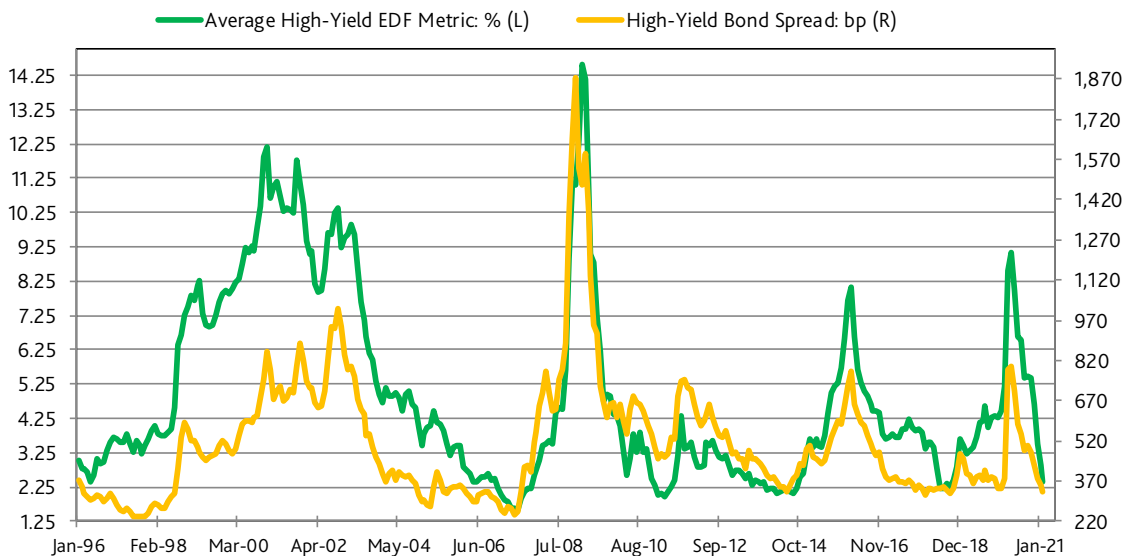
**Corporate Bond Market Believes Treasury Bonds Will Remain Relatively Low**

The quickness with which corporate bond yield spreads have recently narrowed partly reflects a good deal of confidence in the durability of now atypically low U.S. Treasury bond yields. February 10's dovish comments by Federal Reserve chairman Jerome Powell reinforced expectations of an extended stay by a 10-year Treasury yield of less than 1.5%.

It may be worth remembering that corporate bond yield spreads were slow to narrow following the Great Recession partly because investors harbored doubts regarding the longevity of the then multi-decade lows of benchmark Treasury bond yields.

**Figure 2: High-Yield Bond Spread Was Much Wider When High-Yield EDF First Sank Under 2.4% Following the Great Recession**  
*month-long averages*

*sources: Bloomberg/Barclays, Moody's Analytics*



## Credit Markets Review and Outlook

Nevertheless, the declining trend of the then relatively low average high-yield EDF metric instead favored much thinner high-yield bond spreads. December 2010 through July 2011's averages of 2.21% for the high-yield EDF metric and of -0.36 percentage points for its three-month change generated a 346 bp average for the predicted high-yield bond spread. By contrast, the actual high-yield bond spread averaged 494 bp for a wide 148 bp premium over the spread predicted by the EDF model.

At that time, investors fretted over what would happen to December 2010 through July 2011's 3.27% average of the 10-year Treasury bond yield once the Federal Reserve inevitably hiked fed funds from what was viewed as an unsustainably low 0.125%. Investors could not help but note how the accompanying 30-year Treasury bond yield averaged a much higher 4.42%, where the latter might be within a likely range for the 10-year Treasury yield once monetary policy was normalized.

We now know that fears over an extended stay by a 10-year Treasury yield at 3% or higher were overblown. As it turned out, the Fed started a bond buying program in 2012 that lowered the 10-year Treasury yield's month-long average to July 2012's 1.50%. Thereafter, the 10-year Treasury yield's monthly average would climb no higher than October 2018's 3.16%, or when fed funds' midpoint was 2.13%. By the time fed funds was hiked to 2.38% in December 2018, the 10-year Treasury yield had eased to 2.84%. The declining trend of the 10-year Treasury yield correctly predicted the unsustainability of the 2.38% fed funds rate.

### Why Treasury Bond Yields Will Not Soon Enter a Secular Climb

Barring a dramatic rise by inflation expectations, the midpoint of the federal funds rate is unlikely to average at least 2.5% over a 12-month span. In contrast to the Federal Open Market Committee's median estimate of a long-term federal funds rate of 2.5%, the Congressional Budget Office recently projected a 1.4% average for the three-month Treasury bill rate of 2025-2030, which implies an accompanying average for the federal funds rate that is no greater than 1.5%.

The CBO's accompanying forecast of a 0.2% average for the 3-month Treasury bill rate during 2020-2024 appears to leave room for just one fed funds rate hike from its current 0.125% by the end of 2024.

Moreover, as inferred from the CBO's projection of a 1.3% average for 2000-2024's 10-year Treasury yield, the benchmark Treasury yield is expected to average 1.41% during March 2021 through December 2024. However, the latter seems too low if, as expected, the 10-year Treasury yield resides in a range of 1.5% to 2.00% during 2022-2024.

At the other extreme, the CBO's January 2021 forecast of a 2.8% average for the 10-year Treasury yield during 2025-2030 seems too high in the context of what is likely to be a mature economic recovery, a 1.4% average for the 3-month Treasury bill rate and comparatively slow real economic growth. The combination of a slow underlying rate of economic growth and the likely containment of inflation expectations suggest the 10-year Treasury yield's 2025-2030 average might be closer to 2.25%.

As inferred from CBO projections, U.S. real GDP will rise by only 2.0% annually, on average, through 2031. Growth is expected to be constrained by the estimated 0.4% average annual growth rate for America's potential labor force through 2031.

Given expectations of record-slow labor force growth, a 2% average annual rate of real GDP growth through 2031 requires labor productivity growth of 1.6% annually, on average. Unlike projections of demographic change (such as labor force growth), forecasts of labor productivity growth are highly uncertain.

For example, the predicted 1.6% labor productivity growth over the next 10 years is significantly faster than labor productivity's average annualized rates of growth—1.1% over the past 10 years and 1.2% over the last 25 years. Nevertheless, labor productivity advanced by a scintillating 3.0% annualized, on average, during the 10-years-ended 2005, when real GDP expanded by 3.4% annualized. Today, few if any dare to predict a 3% average annual rate of economic growth through 2021.

### Russell 2000's Lift-Off Aids High-Yield Credits

The high-yield EDF will be lower (i) the higher is the market value of a firm's business assets relative to its debt and (ii) the less volatile is the market value of a firm's business assets. Thus, the latest slide by the high-

## Credit Markets Review and Outlook

yield EDF partly stems from a now long-lived equity market rally. Of special importance to high-yield credits is how the Russell 2000 index of smaller company share prices has led the overall U.S. equity market by a wide margin since the end of 2020's third quarter. High-yield issuers tend to be smaller than the S&P 500's member companies.

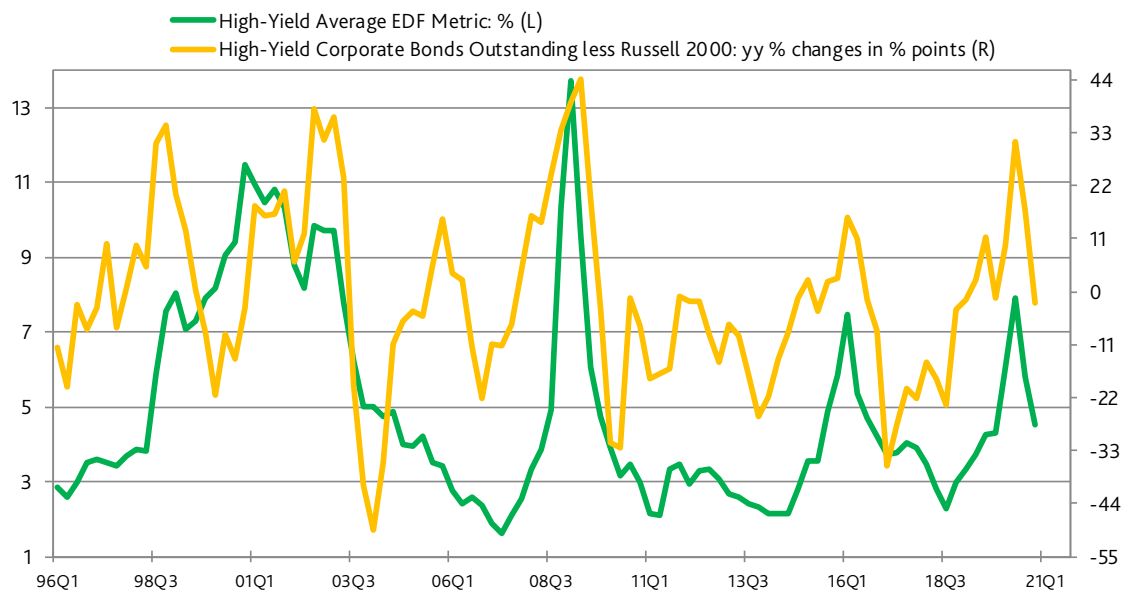
Recently, the 15.3% 2021-to-date advance by the Russell 2000 outpaced comparably measured gains of 5.6% for the overall U.S. equity market and 8.6% for the NASDAQ. Since the end of September 2020, the Russell 2000's 51.0% surge sped past the accompanying increases of 20.8% for the U.S. equity market and 25.4% for the NASDAQ.

The late 1990s showed just how important the components of an equity market rally are to high-yield bonds. Despite the 20.4% average annualized advance by the market value of U.S. common stock during the two-years-ended 1999, the high-yield EDF metric still soared from December 1997's 3.9% to December 1999's 7.9%. One of the primary reasons for the climb by the high-yield default risk metric amid an equity market rally was because of how the much slower 5.5% average annual increase by the Russell 2000 stock price index lagged far behind the accompanying 15.4% average annual increase for the outstandings of U.S. high-yield bond debt. In addition, the Value Line geometric price index that focuses on the median percent change of unweighted share prices actually fell by 4% annualized during the two-years-ended 1999.

In terms of calendar-quarter observations, the high-yield EDF generates a meaningful correlation of 0.58 with the difference between the year-over-year growth rates of high-yield corporate bonds outstanding and the Russell 2000 stock price index. For the same sample that begins with 1996's first quarter, the high-yield EDF shows a correlation of 0.75 with a composite high-yield bond spread.

**Figure 3: Market-Wide High-Yield EDFs Tend to Be Lower the Faster the Russell 2000 Grows  
Vis-a-vis High-Yield Bond Debt**

*sources: Dow Jones, Moody's Analytics*

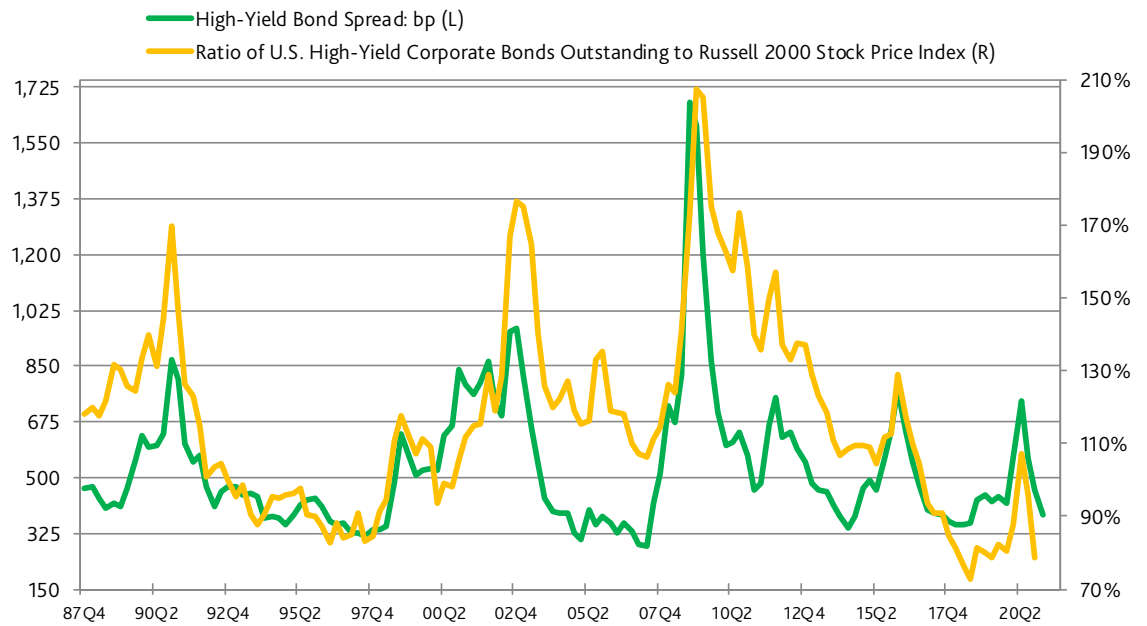


Moreover, the ratio of high-yield corporate bonds outstanding to the Russell 2000 reveals a correlation of 0.69 with the composite high-yield bond spread.

## Credit Markets Review and Outlook

**Figure 4: Rallies by Russell 2000 Often Are Joined by a Thinner High-Yield Bond Spread**

sources: Dow Jones, Moody's Analytics



In general, the yearly percent change of the Russell 2000 yields far more influence over both the high-yield EDF and the composite high-yield bond spread than does the yearly percent change of the outstanding amount of high-yield bond debt.

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

### THE U.S.

By Mark Zandi, Chief Economist, Moody's Analytics

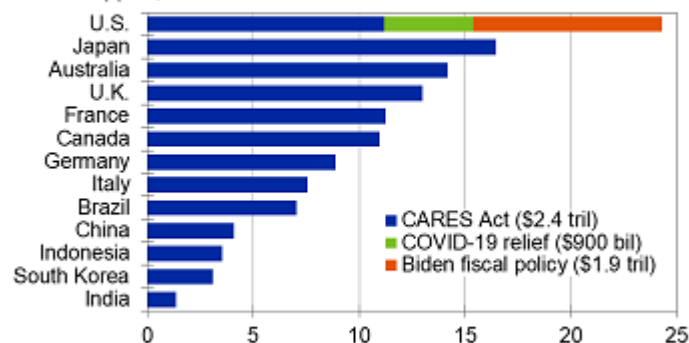
### Biden Goes Big

Nearly a year after the pandemic began, it continues to do significant economic damage. Employment eked out a small gain in January after declining in December, and given significant historical revisions to the employment numbers, employment remains nearly 10 million below its pre-pandemic peak. Employment is falling again in the pandemic-stricken leisure and hospitality, retail, and healthcare industries, but it remains soft across nearly all industries. Unemployment fell sharply last month to 6.3%, but this reflects a pullback in the labor force, which remains 2 percentage points smaller than its pre-pandemic peak. Without the massive monetary and fiscal support provided since the pandemic hit, the economy would likely now be suffering a double-dip recession.

More fiscal support is on the way. President Biden and the Democratic-controlled Congress are quickly moving on a fiscal relief package similar to the president's proposed \$1.9 trillion [American Rescue Plan](#). Lawmakers are using the reconciliation budget process to allow passage of the plan with a simple majority in the Senate without support from Republicans. Passage will require full support from the 50 Democratic Senators to get the necessary majority vote, so centrist Democrats may demand that some parts of the plan be slimmed down. But, it will remain a hefty package. If so, the total amount of discretionary deficit-financed fiscal support provided to the economy during the pandemic will come to well over \$5 trillion, equal to almost 25% of the nation's pre-pandemic GDP. This compares with the fiscal support of no more than 10% of GDP that has been provided by other countries during the pandemic. Total U.S. fiscal support provided during the financial crisis, including the 2009 [American Recovery and Reinvestment Act](#), amounted to substantially less than 10% of the nation's pre-crisis GDP.

### Biden Goes Big

Fiscal support, % of 2019 GDP



Source: Moody's Analytics

The scale of the fiscal response is [raising concerns](#) that it is too large. Though the pandemic is an enormous blow to the economy, some critics say an additional \$1.9 trillion in deficit-financed support is not necessary given the support already provided and prospects that the pandemic will begin to wind down as vaccinations ramp up. Some argue the package may be too big, pushing the economy past full employment and bringing on undesirably high inflation and interest rates. There is also a concern that if lawmakers ante up so much for pandemic relief, they won't be able to muster the political will for additional fiscal support needed to address the nation's long-term problems including income and

## The Week Ahead

wealth inequality and the eroding public infrastructure. These are reasonable worries, but they are overstated. To address these concerns, lawmakers should consider making some changes to the \$1.9 trillion package, including scaling back parts of it. But, as they say, they should go big.

### Closing the gap

Most obviously, the economy is a long way from full employment, so a worrisome acceleration in inflation is also far off. Adding the unemployed plus workers counted by the Bureau of Labor Statistics as employed but not working due to the pandemic (a statistical problem acknowledged by the BLS) plus those who left the workforce due to the pandemic comes to over 16 million people—10% of the workforce. And this doesn't count employed workers who have suffered lost hours or pay cuts. Another way of measuring this is through the output gap—the difference between actual and potential GDP as a percent of potential GDP. Assuming the economy was operating at its potential just prior to the pandemic, which was the subject of contentious debate at the time, since inflation was still undesirably below the Federal Reserve's 2% target, and assuming the economy's nominal potential growth is 4% (2% real potential growth plus 2% inflation), then the current output gap is more than 5%. To close this output gap any time soon requires deficit-financed fiscal support closer to twice that percentage, since the so-called multipliers on this support in the pandemic (the increase in GDP resulting from an \$1 increase in fiscal support) are estimated at near 60 cents. This suggests that President Biden's \$1.9 trillion package, which equals 8.5% of potential GDP, is the appropriate size (8.5% times 0.6 equals 5%).

To be sure, this calculation involves lots of estimates and there is overwhelming uncertainty given that much depends on how the pandemic and vaccinations play out, but this would argue for even more fiscal support. In the fog of a crisis, it is prudent for policymakers to err on the side of potentially providing too much support rather than too little. It is critical that households and businesses know that the government has their back. Without this comfort, everyone is more skittish and prone to panic, a state that exacerbates the economic and social costs of the crisis.

The Federal Reserve has all but played its monetary policy hand, which also argues for fiscal policymakers to provide even more support. With short-term interest rates pinned to the zero lower bound, and the Fed purchasing \$120 billion in Treasury and mortgage-backed securities each month to keep long-term rates down, the central bank isn't left with much to achieve its objective of full employment and 2% inflation. And given the change in its [monetary policy framework](#) at the end of last year, the Fed is targeting inflation above 2% for a long while to make up for inflation being stuck below 2% for most of the time since the financial crisis. Indeed, to achieve its objectives under the new framework, the Fed needs fiscal policymakers to step up with substantially more help.

### The appropriate time

Moreover, with the Fed committed to keeping interest rates low for a long time, the reasonable concern that the economic benefit of deficit-financed fiscal support will get washed out by higher interest rates doesn't apply. This was a legitimate critique of the Trump tax cuts in 2018 as long-term rates rose with the increase in the deficit. The 10-year Treasury had risen to well over 3% by the end of that year, before Trump's trade wars undermined the economy and interest rates fell back. Ten-year Treasury yields have only recently risen to just over 1%, and that's after largely discounting the likelihood of a big fiscal package from President Biden. With the economy struggling against the raging pandemic and far from full employment, inflation well below the Fed's target, and interest rates about as low as they have ever been, there have been few more appropriate times in our economic history for policymakers to pursue aggressively expansionary fiscal policy.

Devastation wrought by the pandemic on the finances of less-skilled, low-income households and minority groups is supercharging the need for a large fiscal package. The overall unemployment rate is just over 3 percentage points higher today than prior to the pandemic, but it is up 4 percentage points for those with less than a high-school degree and Black Americans and up 5 percentage points for Hispanics. These are the same demographic groups that had few financial resources prior to the

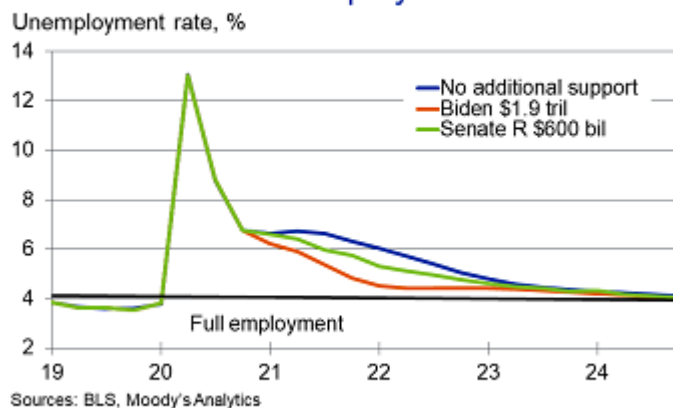


## The Week Ahead

pandemic and have struggled under skewed income and wealth distribution for two generations. Moreover, they are more likely to have lost their jobs permanently due to the pandemic, since so many had worked in the now-fundamentally changed leisure & hospitality and retail industries. These households need financial support from the government to navigate through the remainder of the pandemic and to get back to work on the other side.

This does suggest some changes to further target Biden's \$1.9 trillion package at those most in need. Most obvious is to reduce the income threshold for another round of stimulus checks. The President is asking for \$425 billion to provide \$1,400 checks to those making less than \$75,000 a year and phasing out after \$100,000 in annual income. This price tag could be significantly reduced if the income thresholds were lowered to focus on low-income Americans. The president may also want to consider scaling back the \$600 billion in aid he is seeking for hard-pressed state and local governments. We estimate a meaningfully [smaller budget shortfall](#) for those governments through fiscal year 2022 than the president is asking for. Freeing up these funds should make it politically easier for the president to come back to Congress later this year with another fiscal package, this one more along the lines of his [Build Back Better agenda](#) to address the nation's longer-term needs, including infrastructure, climate change and racial equity. While the president is sure to use the reconciliation process again to get this done, it will require full Democratic support in the Senate, which will be more straightforward to get from centrist Democrats holding the key swing votes and who will surely be more focused on the nation's fiscal situation when the pandemic is behind us.

### Fast Track to Full Employment



These suggestions and political considerations notwithstanding, Biden and Congress should go big. Getting through the pandemic and reaching full employment as fast as possible is critical, and his plan does it.

#### Next Week

January retail sales will be released Wednesday. During the week we also expect numbers on industrial production, business inventories, the latest Philadelphia Fed survey, and New York's Empire State manufacturing survey. Minutes from the Federal Reserve's latest Federal Open Market Committee meeting are due. January producer prices and import-export prices will add to our view of inflation pressures. Housing indicators will include the market index from the National Association of Home Builders along with new residential construction and existing-home sales.

## Asia-Pacific

By Shahana Mukherjee of Moody's Analytics

### Weak Domestic Spending Likely Moderated Japan's GDP

We expect Japan's economy to have grown by 1% in quarterly terms in the December quarter, following a 5.3% rebound in the prior quarter. This is expected to translate into a yearly contraction of 3% and result in a full-year contraction of -5.3%.

Japan's economy rebounded strongly in the September quarter, anchored by a turnaround in private consumption as well as an improved trade position. Since then, however, while the external position has not been sizeably disturbed by the COVID-19 resurgence in Western economies, domestic spending has remained underwhelming. Domestic spending has been challenged by strained employment conditions and the persistent threat of an increase in local virus transmission, which has kept households cautious. We expect the softness in domestic demand to have largely moderated the December quarter revival, though a quarterly gain should still accrue from a relatively resilient exports' position.

Thailand's GDP is likely to have grown by 2.3% in quarterly terms in the December quarter, following a 6.5% rebound in the prior quarter. This is expected to translate into a yearly decline of 4% in the final quarter, bringing full-year GDP contraction to 6.1% in 2020. The tourism-reliant economy suffered a significant setback due to the hit from international restrictions caused by the pandemic, although tourism has gradually restarted since December. Domestic spending bounced back in the September quarter, aided by a series of stimulus measures. However, the deep strain on the external sector persisted through December, and this is expected to have weighed heavily on the pace of revival in the final quarter.

Australia's unemployment rate is likely to have settled at 6.5% in January, from 6.6% in December. Domestic conditions have steadily been on the mend, buoyed by substantial fiscal and monetary support. The official unemployment rate dropped 0.2 percentage point in December when 50,000 jobs were added to the market as states such as Victoria rolled back stringent pandemic-related restrictions. We expect the revival in domestic spending and a gradual resumption in intra-state travel to have strengthened the labour market correction in January.

Japan's consumer prices are likely to have remained unchanged at -1% in yearly terms in January. Core prices, excluding the effect of volatile items such as food, alcohol and fuel, are expected to have remained weak, at -0.5%. The intense third wave of COVID-19 led to the reimposition of the state of emergency across several prefectures, which likely kept confidence subdued, and thus spending, especially on discretionary items, weak over this period, inhibiting any meaningful gains in consumer prices since December.

	Key indicators	Units	Moody's Analytics Confidence	Risk	Last
Mon @ 10:50 a.m.	Japan GDP for Q4	% change yr ago	1	3	↑ 5.3
Mon @ 1:30 p.m.	Thailand GDP for Q4	% change yr ago	-4	3	↑ -6.4
Mon @ 3:00 p.m.	Indonesia Foreign Trade for January	US\$ bil	1.7	3	↓ 2.1
Mon @ 11:20 p.m.	India Foreign Trade for January	US\$ bil	-14.5	3	↑ -15.4
Wed @ 10:50 a.m.	Japan Foreign Trade for January	¥ bil	520	3	↑ 477
Wed @ 10:50 a.m.	Japan Machinery Orders for December	% change	-2.5	2	↓ 1.5
Wed @ 11:30 a.m.	Singapore Nonoil Exports for January	% change yr ago	5.2	3	↑ 6.8
Thu @ 11:30 a.m.	Australia Employment for January	%	6.5	3	↓ 6.6
Thu @ 6:30 p.m.	Indonesia Monetary Policy for January	%	3.75	4	← 3.75
Fri @ 10:50 a.m.	Japan CPI for January	% change yr ago	-1	3	↓ -1

## The Long View

### Caa-rated debt has comprised 28% of February-to-date's heavy issuance of high-yield bonds.

By John Lonski, Chief Capital Markets Economist, Moody's Capital Markets Research  
February 11, 2021

#### CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 102 basis points was less than its 116 basis-point median of the 30 years ended 2019. This spread may be no wider than 110 bp by year-end 2021.

The recent composite high-yield bond spread of 360 bp approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread of 145 bp but is much narrower than what might be inferred from the recent VIX of 21.7 points. The latter has been historically associated with a 575-bp midpoint for a composite high-yield bond spread.

#### DEFAULTS

December 2020's U.S. high-yield default rate of 8.4% was up from December 2019's 4.3%. The recent average high-yield EDF metric of 2.36% portend a less-than-4% default rate by 2021's final quarter.

#### US CORPORATE BOND ISSUANCE

Fourth-quarter 2019's worldwide offerings of corporate bonds revealed annual advances of 9% for IG and 330% for high-yield, wherein US\$-denominated offerings dipped by 0.8% for IG and surged higher by 331% for high yield.

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 14% for IG and 19% for high-yield, wherein US\$-denominated offerings increased 45% for IG and grew 12% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 32% for high-yield, wherein US\$-denominated offerings increased 142% for IG and grew 45% for high yield.

Third-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 6% for IG and an annual advance of 44% for high-yield, wherein US\$-denominated offerings increased 12% for IG and soared upward 56% for high yield.

Fourth-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 3% for IG and an annual advance of 8% for high-yield, wherein US\$-denominated offerings increased 16% for IG and 11% for high yield.

For 2019, worldwide corporate bond offerings grew 5.8% annually (to \$2.456 trillion) for IG and advanced 51.6% for high yield (to \$570 billion). The annual percent increases for 2020's worldwide corporate bond offerings are 19.7% (to \$2.940 trillion) for IG and 23.9% (to \$706 billion) for high yield. The expected annual declines for 2021's worldwide rated corporate bond issuance are 16% for investment-grade and 3% for high-yield.

#### US ECONOMIC OUTLOOK

Unacceptably high unemployment and other low rates of resource utilization will rein in Treasury bond yields. As long as the global economy operates below trend, 1.25% will serve as the upper bound for the 10-year Treasury yield. Until COVID-19 risks fade substantially, wider credit spreads are possible. For now, the corporate credit market has priced in the widespread distribution of a COVID-19 vaccine by mid-2021.

## The Long View

### Europe

By Ross Cioffi of Moody's Analytics  
February 11, 2021

#### GERMANY

Germany's Federal Statistical Office reported that business insolvencies were down 26% y/y in November, but to be blunt, insolvency figures have not had much meaning this past year. Policies in Germany, and elsewhere in Europe, have been directed at preventing bankruptcies. In Germany, for example, the government suspended the obligation for overindebted firms to file for insolvency until 31 December 2020. The obligation to file has been suspended again for firms that are still waiting on transfers from the government. The delay was accompanied by the ongoing short-time work scheme, which has the federal government paying a share of the wages that employees miss by having their hours cut. This allows firms to cut hours instead of laying off workers. Such measures to reduce the burden of operating costs have also helped firms avoid insolvency.

The rationale behind these policies is that many firms facing insolvency are not fundamentally unsound, uncompetitive or obsolete. It is the massive external shock of the pandemic that has forced insolvency upon them. Such policies are not meant as a sort of necromancy, but they will inevitably lead to the creation of some zombie firms; that is, firms that without support are unable to survive. Once this support ends, we expect a wave of insolvencies to follow. This is why we still suspect that unemployment hasn't yet peaked in Germany. By the time stimulus policies wind down, however, we hope that demand will have recovered enough to keep those firms in business that without the pandemic would otherwise succeed, and to support the quick reabsorption of workers who lost their jobs.

Headline consumer prices in Germany rose by 1% y/y in January, the first uptick since June. Meanwhile, core inflation edged up to 1.4% y/y from 0.4%. Regarding the headline component, Brent crude prices have supported energy price dynamics softening the year-on-year declines in heating oil and motor fuel prices. Furthermore, prices for natural gas and electricity exceeded January 2020 levels. As we progress through 2021, we expect to see sustained growth in household energy and fuel prices, which will put upward pressure on Germany's headline inflation rate.

#### Dutch inflation heats up

In the Netherlands, inflation picked up to 1.6% y/y in January from 1% in December. A 1.2-percentage point rise in the inflation rate for housing drove the acceleration, but softer declines in energy and transport prices helped buoy the headline figure. Core inflation, which excludes food and energy prices, reached a six-month high of 1.7% y/y. The same caveats apply here as elsewhere in the euro zone, however. Although the updated methodology hasn't been published yet, we suspect some of the stronger inflation will be traceable to re-weighting for 2021, namely less weight on pandemic-stricken goods and services like airfares.

#### Draghi on his way to premiership

After a second round of negotiations, it has become clear that Mario Draghi will garner enough support from the Italian parliament to form a government that will take Italy through to the end of the pandemic. The only party that will remain out of the majority will be the far-right Brothers of Italy party. Draghi has made clear that he will focus the government on all things pandemic related. However, in a country in desperate need of structural reform, there is little Draghi can do without the need to implement touchy reforms. The previous government fell on the lack of consensus and political will to pursue such reforms. There are reforms explicitly required by the European Commission, such as a reform of the civil law system, which continually ranks as one of the slowest in Europe, and those implicitly needed to enact the green and digital investments that the recovery plan aims at. One of the appeals of a technocratic government is to push through such necessary reforms, so we are hopeful that in Draghi's tenure, Italy will have more success in doing so.

#### Riksbank on hold

Sweden's Riksbank's one-week repurchase rate was unchanged at 0% at Wednesday's monetary policy meeting. Furthermore, the total envelope value of its asset purchase program remains at SEK700 billion. The most recent estimate from December reported that at 0.5% y/y, CPI inflation remains far below the Riksbank's 2% target as the pandemic continues to suppress demand. However, according to the two- and five-year SEK zero coupon inflation swap rates, market expectations have already recovered. But as long as the pandemic generates such deep uncertainty and weakness in the economy, the Riksbank will maintain its more dovish approach.

## The Long View

## Asia Pacific

By Denise Cheek and Shahana Mukherjee of Moody's Analytics  
February 11, 2021

### MALAYSIA

Malaysia's December quarter performance disappointed, as GDP fell by a stronger than expected 3.4% in yearly terms, largely reversing the gains from the strong third quarter rebound, when restrictions were briefly lifted. This brought the full-year GDP contraction to 5.6% in 2020, the worst since the 1998 Asian financial crisis. Although this reading is comparable with the contractions seen in most Southeast Asian countries thus far, the renewed health crisis has dragged the Malaysian economy down from its pole position in the previous quarter.

On the production side, manufacturing supported growth, largely benefitting from the robust external demand for electrical products. This sector is expected to lead the recovery into 2021, although a surge of new COVID-19 cases in the region might temper the marginal gains. Services, which make up almost 60% of the economy, continued to slump from the dearth of tourism. Domestic travel initially picked up after restrictions were lifted in June, but increased lockdown measures in the last three months of the year have put downward pressure on food and accommodation, as well as on wholesale and retail trade. While mining continued to decline, the fall in oil prices from 2020 has started to taper off. Optimism surrounding vaccine rollouts and supply cuts by OPEC have buoyed oil prices to near pre-pandemic levels, and we expect mining to gradually pick up in 2021.

On the expenditure side, the fall in private consumption expectedly deepened in the December quarter. Household spending accounts for more than half of the country's GDP, and while robust fiscal measures have cushioned some of the downturn, domestic spending will likely pick up only when the health crisis substantially eases. Spending has so far leaned towards essential goods, while restrictions on dining out and recreational activity have weighed on other activities.

Malaysia's performance in 2020 was mixed. While it suffered from the COVID-19 pandemic like the rest of the region, the economy suffered an additional hit from low oil prices since the country is a net oil exporter. Its lockdown in the second quarter was one of the harshest in the region, but swift policy actions led to a strong turnaround in the third quarter. The country's economic trajectory in 2021 will critically depend on how effectively it manages the domestic health crisis through vaccine rollouts, its policy support to counter the demand deficit, and the global economic recovery from the pandemic.

## Ratings Round-Up

## Ratings Round-Up

## European Change Activity Weakens

By Michael Ferlez

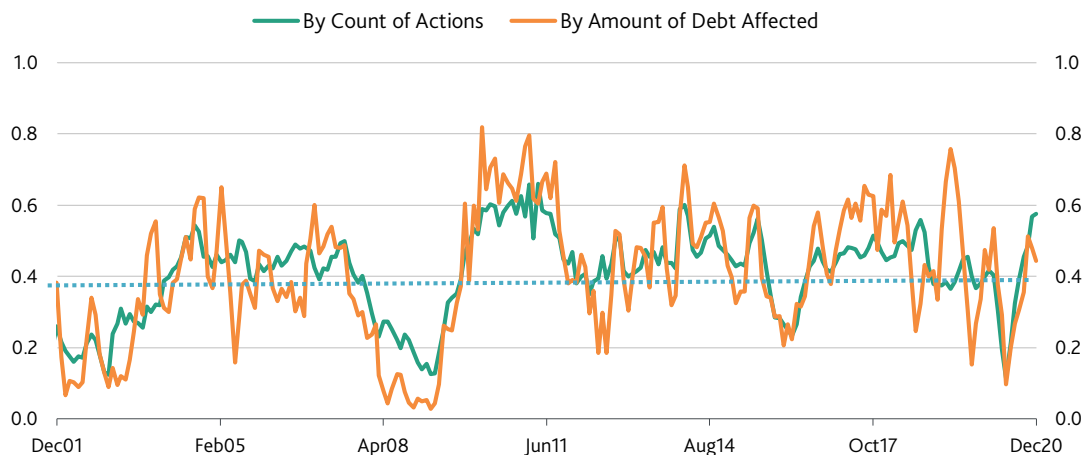
February 11, 2021

The positive trend in U.S. rating change activity continued in the latest period. For the week ended February 9, upgrades accounted for over two-thirds of total changes and affected debt. Rating change activity were largely confined to speculative-grade companies and changes were split across a diverse set of industries. The largest upgrade in terms of affected debt was Prestige Brands Inc, which saw its senior secured notes upgraded to Ba2 and its existing senior unsecured notes upgraded to B2. In their rating action, Moody's Investors Service cited Prestige's stable operating performance and noted its expectation for Prestige to continue to generate meaningful cash flows and for the company's financial leverage to improve. Meanwhile, U.S. downgrades were headlined by TPC Group Inc., which saw its existing senior secured notes due 2024 downgrade to Caa2 from Caa1. In its rating action, Moody's Investors Service cited the subordination of the existing senior secured debt to new super priority notes for the downgrade.

European rating change activity weakened last week, with downgrades accounting for three of the four rating changes but only 7% of affected debt. Speculative-grade companies accounted for all three downgrades of the four rating changes. The United Kingdom accounted for two changes, with Germany and Norway each recording one. The most notable change was made to Aker BP ASA, which saw the ratings on its senior unsecured notes due in 2024, 2025, 2026, 2030 and 2031 upgraded to Baa3 from Ba1. Concurrent with the upgrade, Moody's Investors Service also withdrew Aker BP's corporate family rating of Ba1 and probability of default rating of Ba1-PD per its practice for corporates with investment-grade ratings.

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

FIGURE 3

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

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG
2/3/21	ASHTON WOODS USA, LLC	Industrial	SrUnsec/LTCFR/PDR	755	U	Caa1	B2	SG
2/3/21	IRIDIUM COMMUNICATIONS INC. -IRIDIUM SATELLITE LLC	Industrial	SrSec/BCF /LTCFR/PDR		U	B1	Ba3	SG
2/4/21	CHEVRON CORPORATION-NOBLE ENERGY, INC.	Industrial	SrUnsec	84	U	Baa3	Aa2	IG
2/4/21	PAREXEL INTERNATIONAL HOLDING LIMITED -PAREXEL INTERNATIONAL CORPORATION	Industrial	SrSec/BCF		D	B1	B2	SG
2/5/21	TPC GROUP INC.	Industrial	SrSec	930	D	Caa1	Caa2	SG
2/5/21	AECOM	Industrial	SrSec/BCF		U	Ba1	Baa3	SG
2/5/21	GIGAMON INC.	Industrial	SrSec/BCF /LTCFR/PDR		U	B3	B2	SG
2/5/21	FC COMPASSUS, LLC	Industrial	SrSec/BCF		D	B1	B2	SG
2/8/21	GRAFTECH INTERNATIONAL LTD. -GRAFTECH FINANCE, INC.	Industrial	SrSec/BCF /LTCFR/PDR	500	U	B1	Ba3	SG
2/8/21	BRISTOW GROUP INC.	Industrial	LTCFR/PDR		U	B2	B1	SG
2/8/21	CALCEUS ACQUISITION, INC.	Industrial	SrSec/BCF /LTCFR/PDR		D	B2	B3	SG
2/8/21	PENNYMAC FINANCIAL SERVICES INC.	Financial	SrUnsec/LTIR	650	U	B2	B1	SG
2/8/21	FORM TECHNOLOGIES LLC	Industrial	LTCFR/PDR		U	Caa2	B3	SG
2/8/21	ENTERPRISE DEVELOPMENT AUTHORITY (THE)	Industrial	LTCFR/PDR		U	Caa1	B3	SG
2/9/21	PRESTIGE CONSUMER HEALTHCARE, INC. -PRESTIGE BRANDS, INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR/PDR	1,000	U	B3	B2	SG
2/9/21	PC NEXTCO HOLDINGS, LLC -PARTY CITY HOLDINGS INC.	Industrial	SrSec/BCF	162	U	Caa2	Caa1	SG
2/9/21	PERATON CORP.	Industrial	LTCFR/PDR		U	B3	B2	SG

Source: Moody's

## Ratings Round-Up

FIGURE 4

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

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG	Country
2/4/21	AKER BP ASA	Industrial	SrUnsec	4,000	U	Ba1	Baa3	SG	NORWAY
2/4/21	FERROGLOBE PLC	Industrial	PDR		D	Caa1	Ca	SG	UNITED KINGDOM
2/5/21	RAFFINERIE HEIDE GMBH	Industrial	SrSec/LTCFR/PDR	301	D	Caa1	Caa2	SG	GERMANY
2/5/21	AMIGO HOLDINGS PLC -AMIGO LOANS GROUP LTD	Financial	LTCFR		D	B3	Caa1	SG	UNITED KINGDOM

Source: Moody's

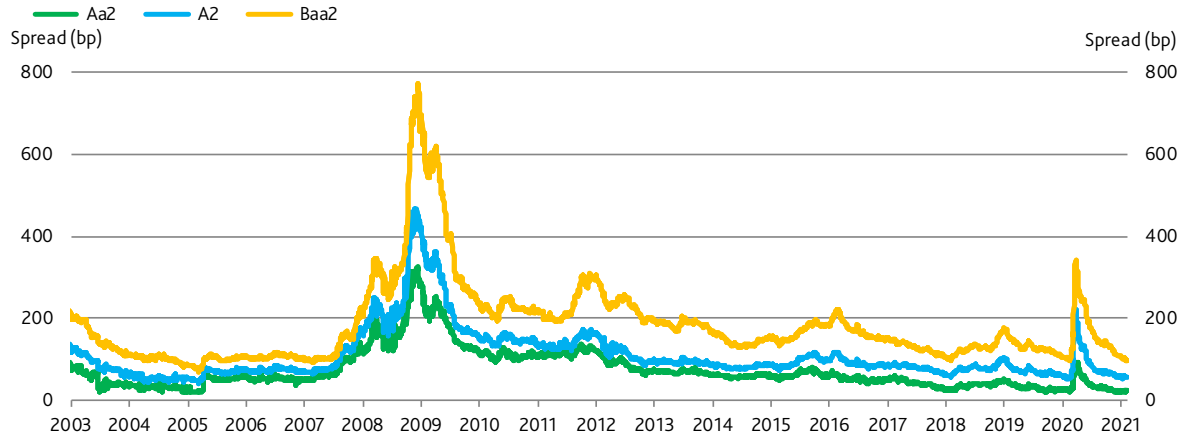


Market Data

Market Data

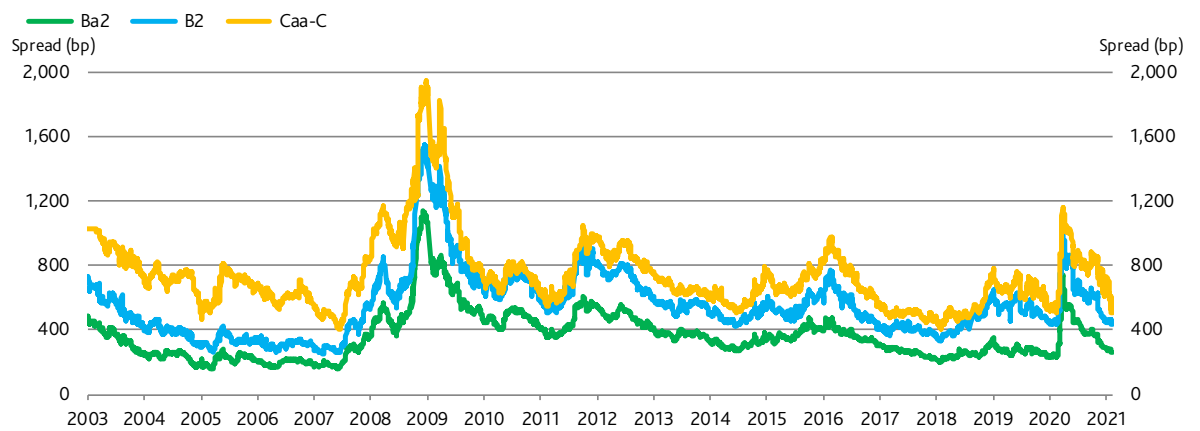
Spreads

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 (February 3, 2021 – February 10, 2021)

CDS Implied Rating Rises		CDS Implied Ratings		
Issuer	Feb. 10	Feb. 3	Senior Ratings	
American Express Credit Corporation	Aa2	A1	A2	
Burlington Resources LLC	Aa3	A2	A3	
Ford Motor Credit Company LLC	Ba2	Ba3	Ba2	
International Business Machines Corporation	A2	A3	A2	
Occidental Petroleum Corporation	B3	Caa1	Ba2	
NextEra Energy Capital Holdings, Inc.	Baa1	Baa2	Baa1	
Sempra Energy	A2	A3	Baa2	
Southwest Airlines Co.	Baa3	Ba1	Baa1	
Pioneer Natural Resources Company	Baa2	Baa3	Baa2	
Eastman Chemical Company	Baa1	Baa2	Baa3	

CDS Implied Rating Declines		CDS Implied Ratings		
Issuer	Feb. 10	Feb. 3	Senior Ratings	
International Paper Company	A2	Aa3	Baa2	
Entergy Corporation	Aa3	Aa1	Baa2	
Verizon Communications Inc.	Baa2	Baa1	Baa1	
John Deere Capital Corporation	Baa2	Baa1	A2	
Exxon Mobil Corporation	A2	A1	Aa1	
Merck & Co., Inc.	Aa3	Aa2	A1	
Union Pacific Corporation	Aa1	Aaa	Baa1	
General Motors Company	Ba1	Baa3	Baa3	
Cox Communications, Inc.	Baa1	A3	Baa2	
Waste Management, Inc.	Baa2	Baa1	Baa1	

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Feb. 10	Feb. 3	Spread Diff
United States Steel Corporation	Caa2	441	401	41
Nordstrom, Inc.	Baa3	291	273	18
DPL Inc.	Ba1	353	336	18
Commercial Metals Company	Ba2	293	277	16
First Industrial, L.P.	Baa2	245	232	13
Univision Communications Inc.	Caa2	433	422	11
Pactiv Corporation	Caa1	293	282	11
Entergy Corporation	Baa2	38	30	9
Service Corporation International	Ba3	164	156	8
JetBlue Airways Corp.	Ba3	555	547	8

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Feb. 10	Feb. 3	Spread Diff
Nabors Industries, Inc.	Caa2	1,037	1,257	-220
K. Hovnanian Enterprises, Inc.	Caa3	933	1,138	-205
United Airlines Holdings, Inc.	Ba3	497	577	-79
Murphy Oil Corporation	Ba3	425	481	-56
Occidental Petroleum Corporation	Ba2	297	351	-54
L Brands, Inc.	B2	187	227	-40
Goodyear Tire & Rubber Company (The)	B2	257	297	-40
Ford Motor Credit Company LLC	Ba2	164	202	-39
Talen Energy Supply, LLC	B3	1,069	1,108	-39
American Axle & Manufacturing, Inc.	B2	360	398	-38

Source: Moody's, CMA

## Market Data

Figure 4. CDS Movers - Europe (February 3, 2021 – February 10, 2021)

CDS Implied Rating Rises		CDS Implied Ratings		
Issuer		Feb. 10	Feb. 3	Senior Ratings
Spain, Government of		Aa2	A1	Baa1
Natixis		Aa1	Aa2	A1
UniCredit Bank AG		Aa1	Aa2	A2
Swedbank AB		Aa1	Aa2	Aa3
Vodafone Group Plc		A3	Baa1	Baa2
Total SE		Aa1	Aa2	Aa3
Bayerische Motoren Werke Aktiengesellschaft		A2	A3	A2
SEB AB		Aa1	Aa2	Aa2
Volkswagen Aktiengesellschaft		Baa2	Baa3	A3
HSBC Bank plc		Aa1	Aa2	A1

CDS Implied Rating Declines		CDS Implied Ratings		
Issuer		Feb. 10	Feb. 3	Senior Ratings
Landesbank Hessen-Thuringen GZ		Baa2	Baa1	Aa3
Anheuser-Busch InBev SA/NV		Baa1	A3	Baa1
KBC Bank N.V.		Aa2	Aa1	Aa3
Banca Monte dei Paschi di Siena S.p.A.		Ba3	Ba2	Caa1
FCE Bank plc		Ba3	Ba2	Ba2
Credit Suisse AG		A2	A1	Aa3
Atlantia S.p.A.		Ba3	Ba2	Ba3
Bank of Scotland plc		A2	A1	A1
National Bank of Greece S.A.		B3	B2	Caa1
Ardagh Packaging Finance plc		B1	Ba3	Caa1

CDS Spread Increases		CDS Spreads			
Issuer	Senior Ratings	Feb. 10	Feb. 3	Spread Diff	
Deutsche Lufthansa Aktiengesellschaft	Ba2	313	300	13	
Sappi Papier Holding GmbH	Ba2	354	341	13	
Permanent tsb p.l.c.	Baa2	220	211	9	
Alpha Bank AE	Caa1	423	417	7	
Boparan Finance plc	Caa1	586	581	5	
Stena AB	Caa1	633	627	5	
EWE AG	Baa1	110	106	4	
3i Group plc	Baa1	97	93	4	
Stagecoach Group Plc	Baa3	80	76	4	
Anheuser-Busch InBev SA/NV	Baa1	49	46	3	

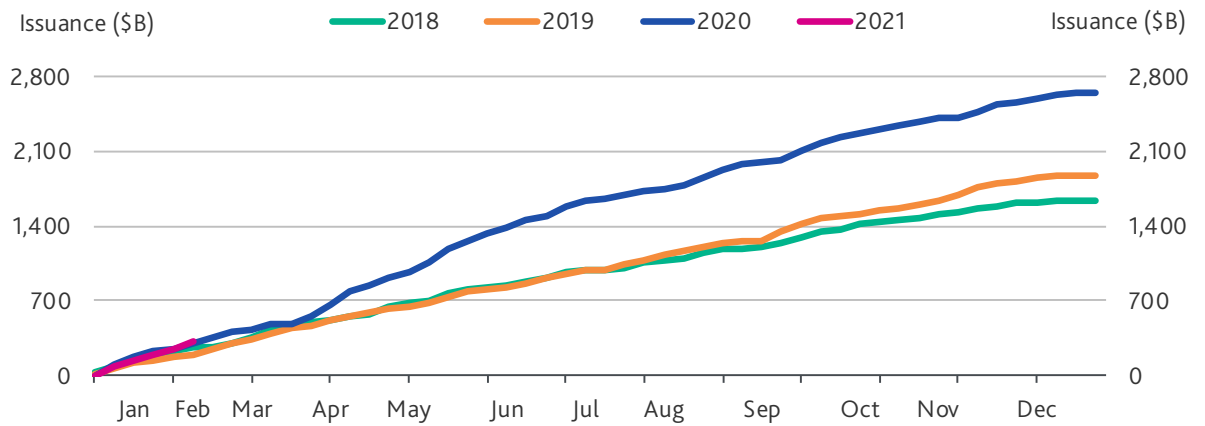
CDS Spread Decreases		CDS Spreads			
Issuer	Senior Ratings	Feb. 10	Feb. 3	Spread Diff	
TUI AG	Caa1	730	765	-35	
Novafives S.A.S.	Caa2	882	916	-34	
Iceland Bondco plc	Caa2	337	370	-32	
Casino Guichard-Perrachon SA	Caa1	585	613	-28	
CMA CGM S.A.	Caa1	408	427	-19	
Telecom Italia S.p.A.	Ba2	159	174	-14	
Jaguar Land Rover Automotive Plc	B1	387	401	-14	
Ziggo Bond Company B.V.	B3	198	210	-12	
RCI Banque	Baa2	172	182	-10	
Avon Products, Inc.	B1	214	224	-10	

Source: Moody's, CMA

Market Data

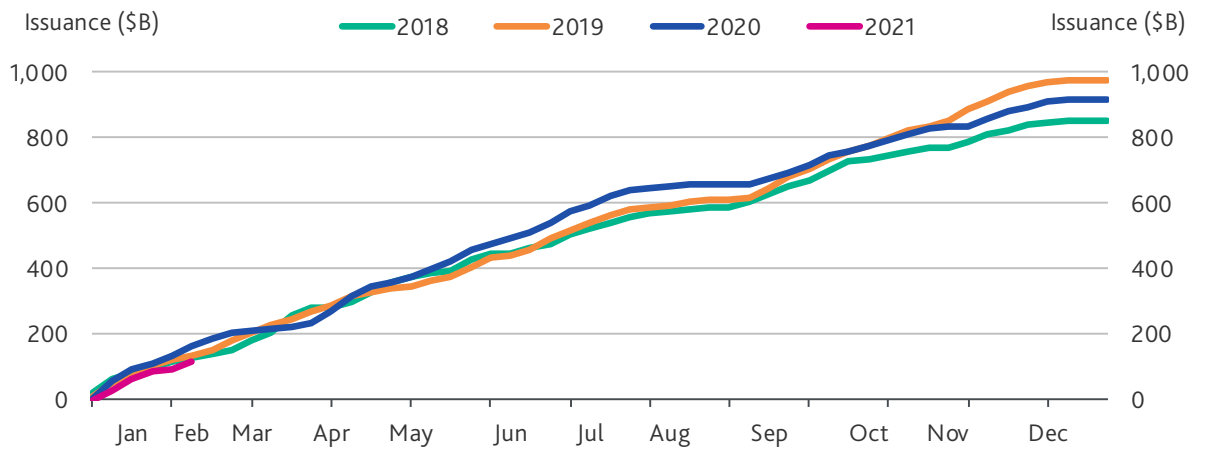
Issuance

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 \$B	Amount \$B	Amount \$B
Weekly	53.769	11.219	67.127
Year-to-Date	211.396	89.171	311.011

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	16.197	2.791	20.558
Year-to-Date	91.574	20.156	114.651

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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