

## WEEKLY MARKET OUTLOOK

Moody's Analytics Research

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## April's Financial Markets Transcend Miserable Economic Data

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

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### [The Week Ahead](#)

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

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### [The Long View](#)

Full updated stories and key credit market metrics: The refinancing of short-term debt has been one of the primary drivers of April's corporate bond issuance.

Credit  
Spreads

Investment Grade: We see the year-end 2020's average investment grade bond spread under its recent 183 basis points. High Yield: Compared with a recent 785 bp, the high-yield spread may approximate 650 bp by year-end 2020.

Defaults

US HY default rate: According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped up from March 2019's 2.7% to February 2020's 4.7% and may average 12.7% during 2020's final quarter.

Issuance

For 2019's offerings of US\$-denominated corporate bonds, IG bond issuance rose by 2.6% to \$1.309 trillion, while high-yield bond issuance surged by 55.8% to \$432 billion. In 2020, US\$-denominated corporate bond issuance is expected to grow by 21.1% for IG to \$1.586 trillion, while high-yield supply may sink by 14.4% to \$370 billion.

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Energy Industry Still Hardest Hit by Downgrades

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Credit spreads, CDS movers, issuance.

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

Links to commentaries on: Speculation, default risk, credit stress, rate cuts, optimism, coronavirus, corporate credit, spreads, leverage, rate sensitivity, sentiment, VIX, fundamentals, next recession, liquidity and defaults, cheap money, fallen angels, yields, inversions.

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[Click here for Moody's Credit Outlook](#), our sister publication containing Moody's rating agency analysis of recent news events, summaries of recent rating changes, and summaries of recent research.

## Credit Markets Review and Outlook

## Credit Markets Review and Outlook

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

## April's Financial Markets Transcend Miserable Economic Data

April will be home to the most pronounced monthly shrinkage of U.S. payrolls since January 1939 at least. Moreover, unrivaled monthly percent declines will probably apply to consumer spending, home sales, industrial production, business sales and new orders.

Nevertheless, corporate bond issuance has surprised on the upside. Investors have shown a willingness to extend credit to companies from hard-hit industries such as energy, cruise lines, theme parks, restaurants, hotels and retailing.

In conjunction with 2008-2009's Great Recession, the moving yearlong average of core pretax profits sank by 25% from a December 2006 peak to a June 2009 bottom. And that may help to explain the 49% plunge by the moving yearlong sum of rated borrowing by U.S. businesses (bonds plus rated loans) from a September 2007 peak to a June 2010 bottom. However, the behavior by rated U.S. business borrowing differed considerably depending on the borrower's credit quality.

## Investment-Grade Corporate Bond Offerings Rose Throughout Much of the Great Recession

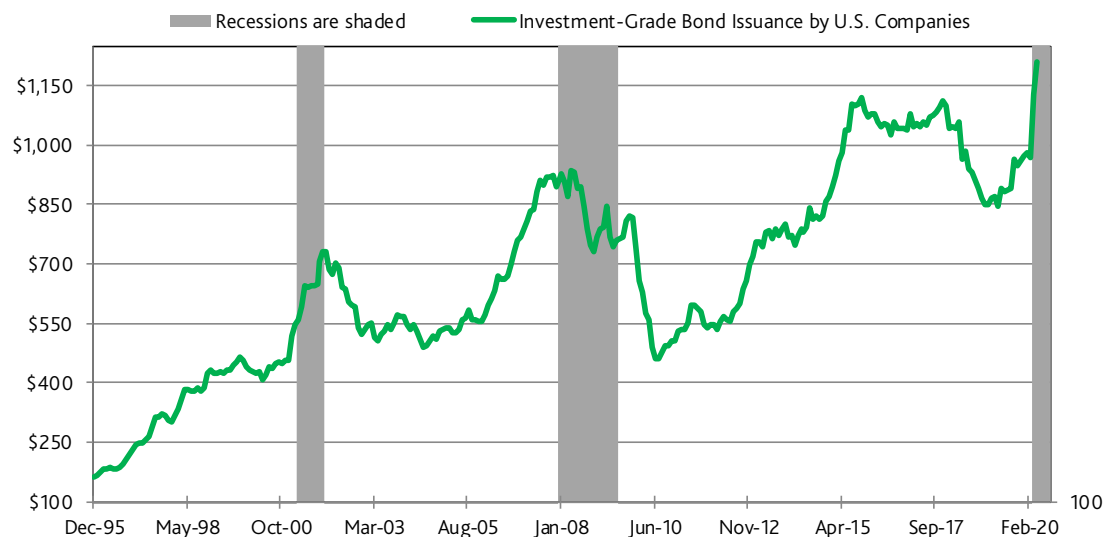
The issuance of investment-grade corporate bonds held its own up until September 2009's collapse of Lehman Brothers transformed a mild recession into the Great Recession. More specifically, the moving yearlong sum of investment-grade bond issuance by U.S. companies fell by 22% from an April 2008 high of \$935 billion to a November 2008 low of \$732 billion. However, support programs from the federal government helped the moving yearlong sum of U.S. IG corporate bond issuance up to \$846 billion by March 2009. Thereafter, yearlong U.S. IG corporate bond issuance sank to the \$459 billion of June 2010. The latter remains the lowest since the \$456 billion of calendar-year 2000.

Mostly because of March 2020's record-breaking \$256 billion of issuance, the year-ended March 2020 showed a record-high \$1.127 trillion of IG bond offerings from U.S. companies, where the amount was up by 29% year-over-year. The latter eclipsed the former zenith of \$1.119 trillion from the 12-months-ended October 2015. To appreciate the unsustainability of maintaining March 2020's unrivaled pace of \$256 billion, consider that the former record-high for IG bond offerings from U.S. companies was the much lower \$165 billion of May 2017.

**Figure 1: March 2020's Investment-Grade Bond Issuance by U.S. Companies Exceeded Its Old Record High by 55%**

*moving 12-sum in \$ billions*

*sources: Dealogic, NBER, Moody's Analytics*



## Credit Markets Review and Outlook

As shown by the Great Recession, the desire to assure adequate liquidity during a business cycle downturn often prompts a temporary surge by IG bond offerings. For example, IG issuers often refinance outstanding short-term debt, such as commercial paper, as long-term fixed-rate bonds in order to eliminate the risk of not being able to roll-over very short-dated credit market instruments. Once the recession subsides and the return of profits growth is visible, the imperative to buttress liquidity fades and IG bond issuance sinks as was the case during the 12-months-ended June 2010.

The influence of borrowing costs on IG bond issuance during and immediately after recessions can defy the conventional view of bond issuance being inversely related to the level of IG corporate bond yields. As might be expected, the decline by the yearlong sum of IG bond issuance from April 2008 to November 2008 was accompanied by an increase in the accompanying average of Barclays IG corporate bond yield from 5.83% to 6.50%, respectively. However, the rush for liquidity lifted IG issuance of the 12-months-ended March 2009 despite the accompanying climb by the average IG bond yield to 7.13%.

Finally, the yearlong sum of IG bond issuance from U.S. companies would slump to what is now a 19-year low notwithstanding a slide by the average IG bond yield to the 4.64% of the 12-months-ended June 2010.

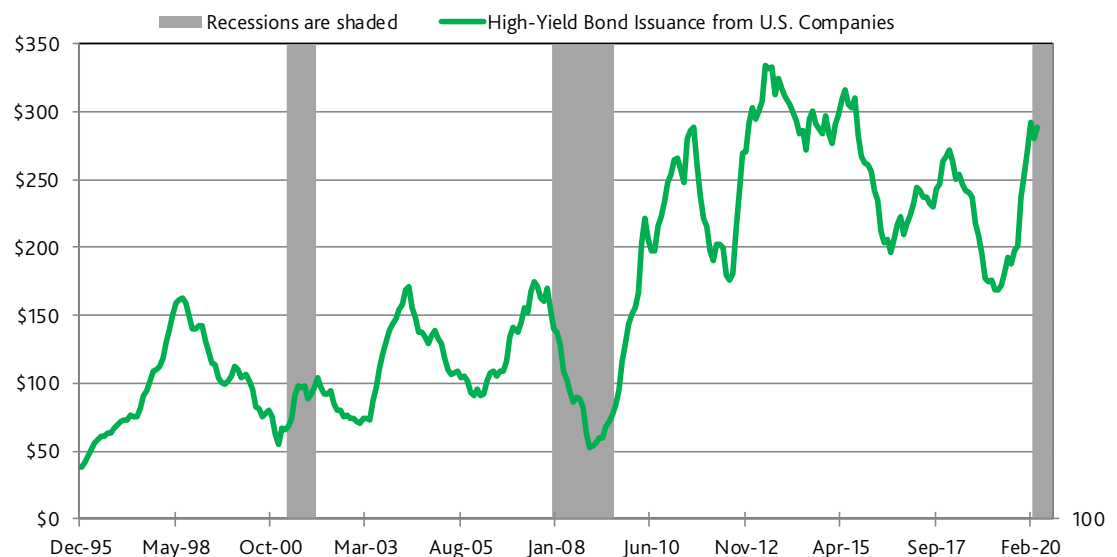
#### April 2020's High-Yield Bond Offerings Shine Amid Economic Gloom

The path taken by high-yield corporate bond issuance can differ radically from that of IG issuance during and immediately after recessions. After peaking at the \$174 billion of the span-ended June 2007, the moving yearlong sum for the HY bond offerings of U.S. companies would then plunge by 70% to a November 2008 bottom of \$52 billion. Note that the slide by IG bond offerings from an April 2008 peak to November 2008 bottom was a much shallower 22%.

**Figure 2: Yearlong Sum of High-Yield Bond Issuance Plunged by -70% from a June 2007 Top to a November 2008 Bottom**

*moving 12-sum in \$ billions*

*sources: Dealogic, NBER, Moody's Analytics*



After bottoming in November 2008, the moving yearlong sum for HY bond offerings from U.S. companies began an extended climb that would not end until reaching the \$288 billion of the span-ended July 2011. In terms of moving yearlong sums, the HY bond offerings from U.S. companies soared higher by 47.7% annualized, on average. Far different was the comparably-measured 13.0% average annualized contraction by the IG bond issuance of U.S. companies.

High-yield corporate bond issuance conformed to what might be inferred from the behavior of speculative-grade bond yields. When the yearlong sum for the HY bond issuance of U.S. companies sank by 70% from June 2007 to November 2008, the accompanying average for Barclays' high-yield bond yield soared from 7.86% to 12.01%, respectively. When HY issuance peaked, the 12-month average of the high-yield bond yield had sunk to the 7.33% of the span-ended July 2011.

## Credit Markets Review and Outlook

March 2020's meager \$4.2 billion of HY bond offerings from U.S. businesses differed radically from March 2020's record \$256 billion of IG bond issuance by U.S. corporations. March 2020's HY bond issuance was the lowest for the month of March since the \$2.0 billion of March 2009 and the \$1.5 billion of March 2008. Quite fittingly, the latter two months overlapped the Great Recession.

However, April-to-date's \$28 billion issuance of HY bonds by U.S. companies has well exceeded expectations at the start of the month. By the end of April, HY bond offerings from U.S. companies should surpass \$30 billion. Though \$8 billion of April's HY bond offerings are from a U.S.-based motor vehicle manufacturer, April 2020 will be the liveliest April for HY bond issuance from U.S. businesses since the record \$39.5 billion of April 2015. Notwithstanding the worst month for U.S. economic performance since probably the darkest days of the Great Depression, April 2020's business-cycle sensitive HY bond offerings from U.S. companies will probably end up being among the top 10% of all months since 1995.

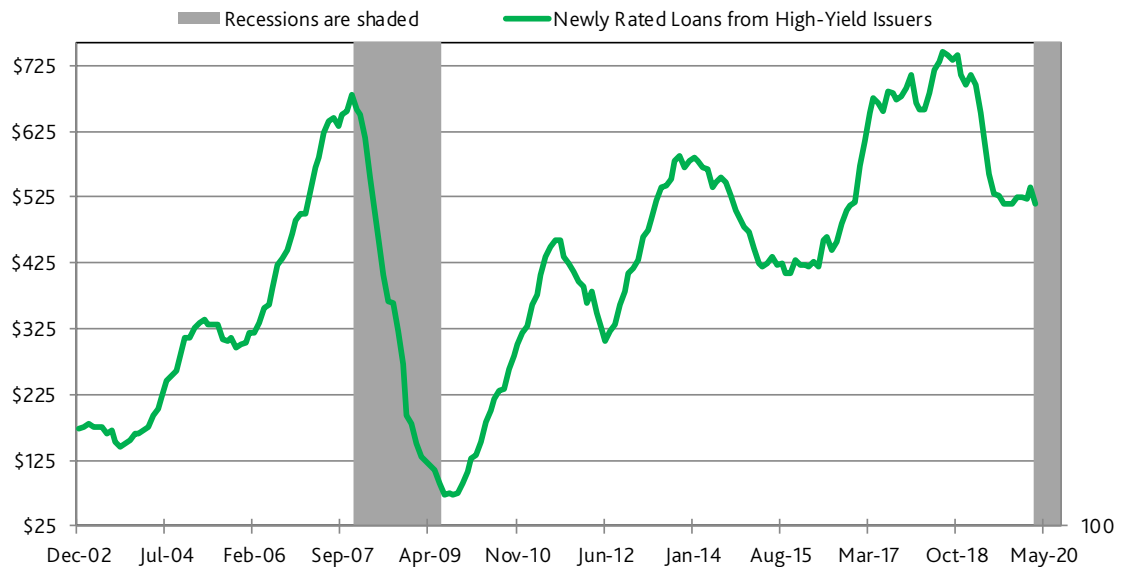
### Leveraged Loan Borrowing May Incur the Deepest Drop of the Current Recession

Just prior to the start of the 2008-2009 recession, the moving yearlong sum of new bank loan programs from high-yield issuers peaked at November 2007's then record-high of \$680 billion. That zenith would hold until new HY bank loan programs reached the \$685 billion of the 12-months-ended July 2017.

During the Great Recession, the moving yearlong sum of HY bank loan programs would plummet by 89% from November 2007's high to a September 2009 bottom of \$72 billion.

Having already sunk by 31% from July 2018's current zenith of \$745 billion to March 2020's \$514 billion, the moving 12-month sum of new bank loan programs from HY issuers may shrink to roughly \$325 billion by December 2020. Unlike the issuance of corporate bonds, the refinancing of outstanding debt serves as a much less important driver of high-yield loan issuance.

**Figure 3: Yearlong Sum of Newly Rated Loans from High-Yield Issuers Sank by -89% from November 2007's High to September 2008's Bottom**  
moving 12-sum in \$ billions  
sources: NBER, Moody's Analytics



### Equities Staged a Deceptive Rally during December 2008 and Early January 2009

Horrible readings on April's business activity that may eventually include the loss of 19-million jobs in April (according to a recent consensus estimate provided by Bloomberg) and an unemployment rate in excess of 15% did not prevent Bloomberg/Barclays high-yield bond yield and spread from sinking from March 23 highs of 11.69% and 1,100 basis points to April 22's 8.26% and 761 bp, respectively.

## Credit Markets Review and Outlook

The firming of the high-yield bond market has been in concert with a recent 25.6% advance by the market value of U.S. common stock from March 23's low. After plunging by 21.3% during 2020's first quarter, the market value of U.S. common stock is up by 8.6% thus far in the second quarter.

For now, the COVID-19 recession's peak-to-trough plunge by the U.S. equity market has been shallower than that of the Great Recession. For example, the 35.1% plunge by the market value of U.S. common stock from February 19, 2020's existing zenith to March 23's latest low lacked the depth of the market's 56.6% plummet from October 9, 2007's then record high to a March 9, 2009 bottom.

However, in view of how the equity market was recently up by 25.6% from its March 23 low, it should be mentioned that during the equity market's long trek to its March 2009 trough, at one point (on January 6, 2009 to be exact) the equity market was up by an even greater 26.3% from its then low of November 20, 2008. As it turned out, the U.S. equity market sank by 27.3% from January 6, 2009's misleading high to March 9, 2009's bottom. Thus, even a 26% jump by the equity market from a bottom does not necessarily obviate the impending formation of an even lower trough.

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

### THE U.S.

By Bernard Yaros of Moody's Analytics

### PPP Round 2: Another Shot for States

Loan forgiveness to small businesses under the Paycheck Protection Program is the cornerstone of the Paycheck Protection Program and Health Care Enhancement Act, which passed the Senate on Tuesday. The PPP accounts for about two-thirds of the \$484 billion in funding provided in this latest pandemic relief package.

#### 'Phase 3.5' Pandemic Relief: \$484 Billion

Cost of Paycheck Protection Program  
and Health Care Enhancement Act



Sources: Politico, Moody's Analytics

The CARES Act, which passed in late March, originally appropriated \$350 billion for the PPP, which provides forgivable loans to small business employers, defined as having fewer than 500 employees, if they maintain their full-time employees on the payroll for eight weeks.

The Small Business Administration started accepting applications on April 3, and in just less than two weeks, funding for the PPP was [exhausted](#), with more than 1.6 million loans originated. The popularity of this program, as well as the fear that many small businesses would be left to hang dry, forced lawmakers to put aside their differences, despite weeks of bickering.

The latest bill replenishes the PPP with \$320 billion in new loan funds. Of this amount, \$30 billion is set aside for banks and credit unions with \$10 billion to \$50 billion in assets, while another \$30 billion is earmarked for institutions with assets less than \$10 billion. Writers of the bill sought to target underbanked small businesses and to address criticism that the PPP had benefited larger, well-connected businesses.

This \$320 billion infusion of loan funds nearly doubles the amount provided to small businesses under the PPP, and the combined amount of PPP loans under the CARES Act and this week's bill is equivalent to about a quarter of the total annual payroll of U.S. small businesses.

We now have complete [data](#) from the SBA on the original \$350 billion tranche, which provides us a foundation on which to speculate how loans may be differently allocated across states and industries in the new tranche.

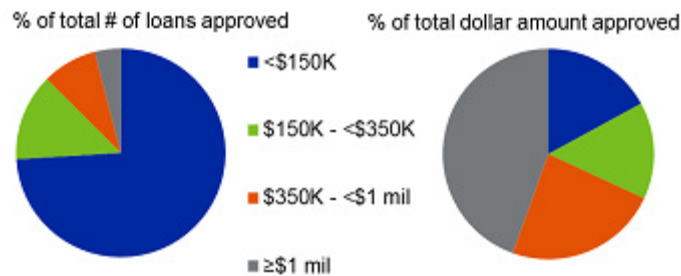
In the original tranche, which was depleted on April 16, loans of less than \$150,000 accounted for 74% of all PPP loans approved but only 17% of the total dollar amount approved. On the other hand, loans of more than \$1 million made up only 4% of loans approved but 45% of all dollars approved. Because

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of the \$60 billion set aside for underbanked small businesses and the bad press that large, publicly traded companies have gotten for taking advantage of loopholes to qualify for PPP loans, we expect that the share of dollars approved in this next tranche will be less skewed to those greater than \$1 million.

### Breakdown of PPP Loans

PPP loans by size through 4/16/20

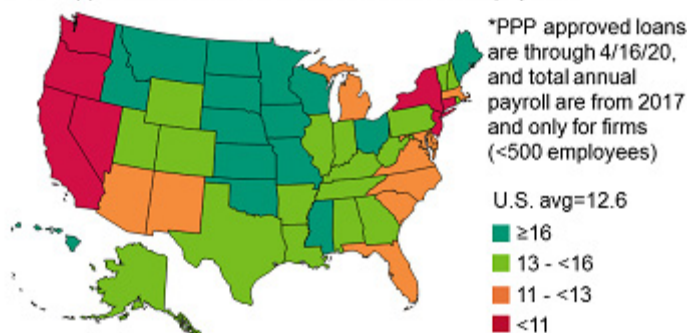


Sources: Small Business Administration, Moody's Analytics

On average, the original tranche of PPP loans amounted to more than 12% of annual U.S. small-business payroll. However, some states were approved for more loans relative to their annual small-business payroll than others. The American heartland has benefited the most from the PPP, with Nebraska, North Dakota and Kansas receiving close to 20% of annual small-business payroll in PPP loans. On the other hand, the West Coast and some of the most populous Northeast states seem to have benefited the least. Even though the heartland has gained disproportionately from the PPP, it's worth remembering that many Mountain and Plains states have above-average shares of small-business employment.

### Heartland Has Benefited Most from PPP

PPP approved loan amounts, % of total annual payroll\*



Sources: Census Bureau, Small Business Administration, Moody's Analytics

In this next tranche of PPP loans, policymakers ought to concern themselves with states that seem to have been underserved thus far by the PPP. To determine which states were underserved, we compared the share of PPP dollars that a state received to its share of total U.S. small-business payroll. We found that only 15 states received a smaller share of the PPP pie than their shares of total U.S. small-business payroll would have implied. California and New York are the two states that come out as the most



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underserved by this metric. California received less than 10% of all PPP dollars approved, even though it accounts for nearly 14% of total U.S. small-business payroll. Similarly, New York got less than 6% of all dollars approved, even as it accounts for 8% of total U.S. small-business payroll.

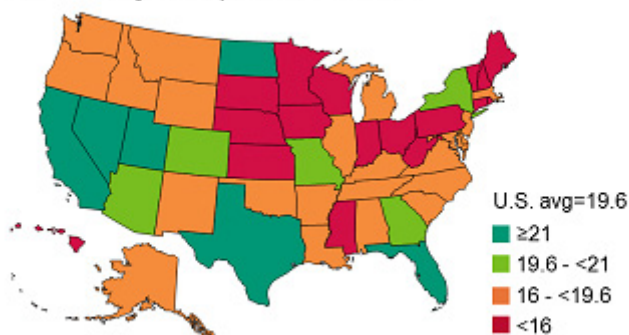
[See the spreadsheet on PPP loans by state](#)

There's reason to believe that states that have been underserved by the PPP may benefit more than the rest from the \$60 billion that is set aside for underbanked small businesses. Past [research](#) by the Federal Reserve shows that young firms less than 2 years old, as well as minority- and female-owned businesses, are more likely than their counterparts to tap into nontraditional sources of credit from family and friends. These are precisely the types of businesses that the \$60 billion allotment is designed to target. Moody's Analytics leveraged the Census Bureau's Business Dynamics [Statistics](#), which provide the number of firms by age and by state. We specifically looked at the share of firms that are aged 2 years or less, since these are the most likely to be underbanked. Though the data are lagged, they still contain useful implications for states in the next tranche of PPP loans.

The top five states with the largest share of young firms are in order of magnitude: Nevada, Florida, Texas, Utah and California. Of these, Nevada, Florida and California have been relatively underserved by the PPP, but they stand to benefit the most from this restricted \$60 billion pot of funds. New York also has an above-average share of young firms and may similarly benefit more than the rest in this next tranche.

### CA, NV & FL May Benefit More This Time

% of firms aged two years or less, 2014



Sources: Census Bureau, Moody's Analytics

We used the same approach to determine which industries have been underserved by PPP and to speculate which ones may benefit more in the next tranche of PPP loans. When we compare the share of all PPP loans that an industry received to its share of total U.S. small-business payroll, accommodation and food services, manufacturing, and retail trade appear to be the three most overserved industries under the PPP. This is an encouraging finding, because social distancing will disproportionately hurt retailers, restaurants and hospitality. On the other hand, we find that financial activities, wholesale trade and healthcare have been the most underserved.

It's concerning that healthcare is among the most underserved, since it has seen its bottom line shredded by a rise in coronavirus-related expenditures and a reduction in revenue from elective surgeries and regular patient checkups. Healthcare employment plummeted by 60,000 in March, which augurs poorly for the unfolding downturn. Despite how bad the financial crisis was, healthcare was a reliable growth driver throughout it. The industry added more than 500,000 jobs between the official start and end dates of the Great Recession.



## The Week Ahead

Unlike with states, our analysis suggests that industries that have been overserved by the PPP stand to benefit the most by the \$60 billion set aside for underbanked businesses. According to the same research by the Fed, accommodation and food services and retail trade rely the most of any industry on nontraditional financing from family and friends. On the other hand, financial activities, which have benefited the least from the PPP, are among the least reliant industries on such nontraditional financing and hence less likely to qualify for the restricted \$60 billion pot of funding.

NAICS subsectors	Approved PPP loans through Apr 16, \$	Annual small-business payroll, 2017	Small-business employment, 2017	Approved PPP loans, % of annual small-business payroll	Approved PPP loans per small-business employee, \$	Share of PPP loans approved, %	Share of total U.S. small-business payrolls	Share of industry relying on nontraditional sources of financing, %, 2014
Accommodation and Food Services	30,500,417,573	157,655,839,000	8,542,661	19	3,570	9	6	21
Administrative and Support and Waste Management and Remediation Services	15,285,814,286	144,299,362,000	3,754,463	11	4,071	4	5	10
Agriculture, Forestry, Fishing and Hunting	4,374,343,877	5,848,679,000	136,591	75	32,025	1	0	12
Arts, Entertainment, and Recreation	4,939,280,138	51,763,690,000	1,428,531	10	3,458	1	2	14
Construction	44,906,538,010	309,515,331,000	5,373,702	15	8,357	13	11	11
Educational Services	8,062,652,288	55,567,119,000	1,645,962	15	4,898	2	2	15
Finance and Insurance	8,177,041,995	160,852,504,000	1,909,993	5	4,281	2	6	9
Health Care and Social Assistance	39,892,493,481	368,437,302,000	8,384,159	11	4,440	12	14	11
Information	6,675,630,276	75,055,947,000	984,379	9	6,782	2	3	11
Management of Companies and Enterprises	1,170,748,130	32,927,584,000	423,295	4	2,766	0	1	7
Manufacturing	40,922,240,021	248,745,364,000	5,039,772	16	8,120	12	9	12
Mining	3,894,793,207	19,280,096,000	244,367	20	15,938	1	1	10
Other Services (except Public Administration)	17,707,077,167	145,903,097,000	4,697,878	12	3,769	5	5	16
Professional, Scientific, and Technical Svcs.	43,294,713,938	385,580,377,000	5,190,980	11	8,340	13	14	9
Public Administration	1,197,353,586	N/A	N/A	N/A	N/A	0	N/A	N/A
Real Estate and Rental and Leasing	10,743,430,227	73,807,510,000	1,451,546	15	7,401	3	3	10
Retail Trade	29,418,369,063	184,988,807,000	5,526,296	16	5,323	9	7	17
Transportation and Warehousing	10,598,076,231	73,522,705,000	1,685,388	14	6,288	3	3	14
Utilities	1,027,575,137	8,672,653,000	111,747	12	9,196	0	0	5
Wholesale Trade	19,489,410,472	208,798,225,000	3,413,157	9	5,710	6	8	12
<b>Total</b>	<b>342,277,999,103</b>	<b>2,711,536,979,000</b>	<b>60,556,081</b>	<b>13</b>	<b>5,652</b>	<b>100</b>	<b>100</b>	<b>13</b>

Note: Small businesses refer to firms with fewer than 500 employees. Nontraditional sources of financing refer to funding provided by family and friends. Businesses that receive such financing are likely underbanked.

Sources: Census Bureau, Federal Reserve, Small Business Administration, Moody's Analytics

Besides the PPP, there are a handful of other key provisions included in this week's rescue package. Small businesses will also benefit from a separate \$60 billion allocation to the Economic Injury Disaster Loan program, of which \$10 billion would be in the form of grants. The CARES Act had provided \$10 billion in EIDL grants, which, along with the PPP loan funds, were quickly depleted. Under the latest pandemic package, hospitals will also receive \$75 billion in financial assistance from the federal government, and \$25 billion will be provided for coronavirus testing. Of the testing funding, \$11 billion will go to states, while the rest will end up at federal agencies such as the Centers for Disease Control and Prevention and the National Institute of Health.

### Phase 3.5 and beyond

This week's pandemic relief package would be the fourth piece of major fiscal [legislation](#) to come out of Washington DC since early March, but it is widely considered as just an interim bill, or the phase 3.5 response to the COVID-19 crisis. This is because it does not put forth any new provisions but rather builds upon funding that was provided under phase three, the CARES Act. Moreover, this week's legislation is supposed to be a bridge between the CARES Act and another mammoth rescue package potentially costing in the trillions of dollars.

The Senate's recent passage of this phase 3.5 bill tees up a House vote on the measure for Thursday, and the president's signature is all but guaranteed. Once the bill is passed, legislative activity will not die down at all, as Congress will start work on what would be a phase four bill. Based on guidance from congressional leadership and the White House, aid to states and local governments will figure

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prominently in phase four, and infrastructure will make its debut. Additional funding for the PPP is possible, since this next tranche of loan funds could be exhausted within days, given its popularity.

Though this phase 3.5 bill will likely be sandwiched between two massive relief packages, it still should be appreciated for the lifeline it throws to small businesses and the healthcare response to coronavirus, both of which are coming under intense pressure from the pandemic.

### Next week

The key data next week will be initial claims for unemployment insurance benefits, GDP, personal income and spending, PCE deflators, vehicle sales and the ISM manufacturing index.

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## EUROPE

By Barbara Teixeira Araujo of Moody's Analytics

### Expect Poor GDP Numbers for the First Quarter

Preliminary first-quarter GDP estimates for several euro zone member countries and for the currency area itself will make the coming week extremely busy. We expect the numbers to be awful. Whole swaths of the European economies were forced to shut down in March owing to the COVID-19 crisis. We are forecasting that euro zone GDP fell by as much as 3.9% q/q in the first quarter, which would be the worst result since records began in 1995. Across sectors, we expect the main blow was dealt to the services industries as lockdown measures meant that most consumer-faced services businesses were forced to shut their doors. While the timing of the enforcement of containment measures varied from country to country—Italy was the first, imposing a national lockdown on March 10—it is fair to say that most of the area's economies had at least some sort of lockdown in place from the third week of March. Restaurants, cafes, cinema, theaters and nonessential retail shops were closed almost everywhere, while public gatherings were forbidden. Adding to that, travel was banned (with most countries closing their external borders), and free movement was restricted. We thus expect that the industries that suffered most are transport, travel, accommodation and food services, leisure, arts and entertainment, and retail. Granted, supermarket sales likely soared as people rushed to stockpile and were forced to eat at home, and this provided some offset to retail sales. Also, online shops have enjoyed a sharp increase in purchases, based on anecdotal evidence. Even so, we don't expect that any rise in sales in those sectors will be enough to offset the slump we see coming elsewhere.

Manufacturing and construction should have performed a bit better. Most member countries didn't enforce factory closures, nor did they ban building activity. Only the Italian and the Spanish governments shut down all non-essential activities including manufacturing and construction for some time as the virus hit those two countries hard. But even without enforced lockdowns elsewhere, many manufacturers closed their plants, as did many builders, either because demand for their products slumped, or because they were under pressure to keep their employees safe. This means we expect that manufacturing and construction output fell sharply in the second half of March, though the numbers are set to be uneven across countries.

Worse news is that the overall decline in expected first-quarter activity pales in comparison with the 12% q/q fall we are penciling in for the second quarter. Lockdown and quarantine measures were extended into April everywhere in the currency area, and in some countries they are expected to remain in place during a large part of May as well, with chances being that life won't fully go back to normal until summer. With numbers suggesting that the virus already peaked in the euro zone, several countries have started publishing plans for easing the restrictions. However, it is clear that the lockdown measures will be phased out only gradually, with small and craft shops opening first, but with restaurants and other leisure services business remaining closed for longer. It looks like public events won't be allowed to take place during this summer at all, which will hurt the arts and entertainment sector badly. Also, travel is set to remain restricted for the foreseeable future. Businesses

## The Week Ahead

won't want to risk a second wave of infection coming from abroad. Some governments have suggested that they are unlikely to fully open their borders until a vaccine or a cure is found, and this is not expected to happen until 2021.

March unemployment data should also be released next week. The numbers are expected to be bad, but they still won't fully reflect the size of the damage that was done to euro zone's labour market by the COVID-19 crisis. We will have to wait for April or May's figures for that. The high-frequency unemployment claims figures have been dreadful, showing that jobless claims have soared to historically high levels across all euro zone countries over the past weeks. They are suggesting that the unemployment rate could almost double in coming months to around 15%, erasing all of the gains of the past decade. We aren't as pessimistic, since we think the unprecedented support put in place by the euro zone governments will help put a lid on the losses. But the truth is that not everyone is eligible for the support schemes, and many firms will still go bankrupt and lay off employees. In any case, we expect that the jobless numbers won't be very reliable in coming months, and that's mostly because of methodological issues. Many people who have lost or will soon lose their jobs won't actually be counted as unemployed, as they are unlikely to start looking for another job right away given the current situation. Also, the short-term unemployment schemes suggest that many people will be counted as employed even if they lost most of their income and are working far fewer hours.

	Key indicators	Units	Moody's Analytics	Last
Tues @ 8:00 a.m.	Spain: Unemployment for Q1	%	14.9	13.8
Wed @ 9:00 a.m.	Spain: Retail Sales for March	% change	-4.1	0.3
Wed @ 10:00 a.m.	Euro Zone: Business and Consumer Sentiment for April	index	82.0	94.5
Thur @ 6:30 a.m.	France: GDP for Q1	% change	-3.2	-0.1
Thur @ 7:00 a.m.	Germany: Retail Sales for March	% change	-2.2	1.2
Thur @ 7:45 a.m.	France: Household Consumption Survey for March	% change	-0.6	-0.1
Thur @ 8:55 a.m.	Germany: Unemployment for April	%	5.3	5.0
Thur @ 9:00 a.m.	Italy: Unemployment for March	%	10.5	9.7
Thur @ 11:00 a.m.	Euro Zone: Preliminary GDP for Q4	% change	-3.9	0.1
Thur @ 10:00 a.m.	Euro Zone: Unemployment for March	%	8.0	7.3
Thur @ 10:00 a.m.	Euro Zone: Preliminary Consumer Price Index for April	% change	0.1	0.7
Thur @ 12:45 p.m.	Euro zone: Monetary Policy for April	%	0.0	0.0

## ASIA-PACIFIC

By Shahana Mukherjee of Moody's Analytics

## A Grim Outlook for South Korean Foreign Trade

South Korea's April foreign trade figures will be the highlight on the economic data calendar. We expect exports to contract by up to 8.5% y/y in April, following a 0.2% decline in March. Imports are likely to contract by up to 5% y/y in April, following a 0.3% decline in March. The grim outlook for South Korea's trade comes against the backdrop of an escalation in the spread of COVID-19 in April that has disrupted activity in various parts of Europe and the U.S. Further, there are signs of additional strain in Asia, as new risks from a second wave of infections have led several countries to extend their lockdowns.

The slowdown in exports in March was caused by supply chain disruptions due to the regional shutdown in China. In contrast, the decline in South Korea's exports in April is likely to result from a significant slowdown in global manufacturing, with demand for semiconductors, its main export item, likely to come under serious pressure. Japan's exports in March were severely impacted by a slump in global industrial production and waning demand for motor vehicles. We expect these drivers to result in similar reductions for South Korea, the other export-driven economy in Asia, even though the turnaround in China may help neutralize the extent of the slowdown. While lower oil prices will reduce the import bill and support the net trade position, the underlying drivers of change are expected to

## The Week Ahead

remain unfavourable over the June quarter, with significant implications for the domestic labour market.

The Bank of Japan is expected to announce its monetary policy decision this week. We expect the central bank to leave its benchmark policy rate unchanged at -0.1%. The BoJ joined leading central banks in easing its monetary settings in March by increasing its annual target of risky asset purchases and launching a new loan program to increase funding for firms severely impacted by a slump in sales due to the viral outbreak. The BoJ has maintained an ultra-accommodative stance for several years and has limited ammunition left for further easing. A reduction in the short-term rate may further lower the profitability in parts of the financial sector, which is already operating under increased strain and facing potentially higher risks of bankruptcies. Therefore, policy efforts have focused on mobilizing increased fiscal support to combat the fallout from the COVID-19 outbreak, and the government has launched a generous stimulus package (worth nearly 20% of GDP) in response to the crisis. With significant resources channeled through this medium, we expect monetary policy to remain accommodative, but the policy rate to hold steady at -0.1%.

	Key indicators	Units	Confidence	Risk	Moody's Analytics	Last
Tues @ 7:00 a.m.	South Korea Consumer sentiment index for April	Index (100=neutral)	3	↓	68.0	78.4
Tues @ 9:30 a.m.	Japan Unemployment rate for March	%	3	↓	2.6	2.4
Tues @ 1:00 p.m.	Japan Monetary policy decision for April	¥	4	↔	80 tril	80 tril
Wed @ 9:00 a.m.	South Korea Retail sales for March	% change	2	↓	-3.2	-6.0
Wed @ 11:30 a.m.	Australia CPI for Q1	% change	3	↔	0.5	0.7
Thurs @ 9:50 a.m.	Japan Retail sales for March	% change yr ago	2	↓	-1.8	1.7
Thurs @ 9:50 a.m.	Japan Industrial production for March	% change	2	↓	-1.5	0.4
Thurs @ 3:00 p.m.	Japan Consumer confidence index for April	Index (50=neutral)	3	↓	25.5	30.9
Thurs @ 11:00 a.m.	China Manufacturing PMI for April	Index	3	↑	47.4	52.0
Fri @ 10:00 a.m.	South Korea Foreign trade for April	US\$ bil	2	↓	3.1	5.0

## The Long View

### The refinancing of short-term debt has been one of the primary drivers of April's corporate bond issuance.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group  
April 23, 2020

#### CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 183 basis points far exceeded its 122-point mean of the two previous economic recoveries. This spread may be no wider than 165 bp by year-end 2020.

The recent high-yield bond spread of 785 bp is thinner than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 305 bp and the recent VIX of 41.0 points. The latter has been statistically associated with a 1,175 bp midpoint for the high-yield bond spread.

#### DEFAULTS

March 2020's U.S. high-yield default rate of 4.7% was up from March 2019's 2.87 and may approximate 14% by 2021's first quarter.

#### US CORPORATE BOND ISSUANCE

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

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

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

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

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 17.7% for IG and 26.5% for high-yield, wherein US\$-denominated offerings increased by 43.7% for IG and grew by 21.4% for high yield.

For 2019, worldwide corporate bond offerings grew by 5.4% annually (to \$2.447 trillion) for IG and advanced by 49.2% for high yield (to \$561 billion). The projected annual percent changes for 2020's worldwide corporate bond offerings are -4.6% for IG and -19.7% for high yield.

#### US ECONOMIC OUTLOOK

An unfolding global recession will rein in Treasury bond yields. As long as the global economy operates below trend, the 10-year Treasury yield may not remain above 1.25% for long. Until COVID-19 risks fade, substantially wider credit spreads are possible.

## The Long View

### EUROPE

By Barbara Teixeira Araujo of Moody's Analytics  
April 23, 2020

#### EURO ZONE

April's flash composite PMI for the euro zone plummeted to 13.5 from 29.7, deepening the record low reached in March. The decline is consistent with a quarterly contraction in GDP of around 7.5%, marking the sharpest drop in business activity and employment ever recorded in the survey's history. The service sector did worse than manufacturing, plunging to 11.7 from 26.4. Manufacturing is hardly in a good spot, though, with the index sliding to 18.4 from 38.5 in March. The composite manufacturing PMI fell to 33.6 from 44.5, but this has lost significance since it includes the reading for supplier delivery times and inventories. In normal times, when either of these increases, it implies that activity is heating up.

Lockdown measures have put European economies on pause, meaning inflows of new business have fallen at record rates while backlogs were burned through faster than before. Employment was in a dismal state across the economy: Job cuts topped the record for the service sector, while in manufacturing they neared the rate hit in April 2009.

Confirming our view that the demand effects will outweigh the supply effects for inflation is that average prices charged for goods and services dropped the most since June 2009. Companies resorted to discounting to shore up demand. Average input costs likewise fell at the fastest rate since July 2009, with labor and commodity costs driving the decline. Factories reported some upward pressure in inputs due to supply chain disruptions, however.

The French composite index, which tumbled to 11.2 from 28.9, came in below the German index, which fell to 17.1 from 35. This was due to France's more stringent lockdown measures. Germany is already thinking of easing the lockdown, while France recently extended its own to mid-May.

If the number of cases continues its current trend, we will see the most severe and widespread lockdown measures in April. Supply-side disruptions should also peak in April as a result. But coming down from such a dizzying peak will be torturous, and if job losses worsen in the meantime, we can rule out a V-shaped recovery.

#### UNITED KINGDOM

The fall in U.K. inflation in March to 1.5% y/y from 1.7% pales in comparison to the plunge we are forecasting for the coming months. March's price data were collected before the government enacted lockdown measures on March 23, which means they do not incorporate much of the damage that COVID-19 did to the U.K. economy. Granted, that large swaths of the economy have been closed point to a supply-side crisis, which is normally inflationary. But while we acknowledge that prices of some goods such as processed food, alcohol and sanitary products have risen, our view is that the shock to the demand side of the economy will take the upper hand, depressing overall inflation in the short and medium terms. We think headline inflation in the U.K. will slow to 0.5% y/y in the summer, well below the Bank of England's 2% target. After that, we expect it will still take some years before it reaches 2% again, which will allow monetary policy to remain expansionary until 2022.

In the short term, the main hit to the headline will come from noncore inflation pressures, mainly because energy inflation is set to slump further in April and remain deep in deflation in the second and third quarters of 2020. First, the price of Brent is now reading at a 21-year low of \$18—for comparison, it peaked at \$68 in January—and this should push motor fuels inflation deeper into deflation in coming months. Admittedly, OPEC+ producers agreed to cut oil supply earlier this month, but the cut was nowhere near enough to offset the historic plunge in demand caused by the pandemic. Adding to this drag from lower oil prices, electricity prices are also expected to sink into deflation as Ofgem will likely lower its cap on electricity and gas bills from April 1; this new cap will remain until September.

Core inflation pressures will also pull back, though. With large parts of the economy now closed for business because of containment measures, firms won't be able to raise their prices for goods and services for the time being. And even when the measures are lifted, we expect the crisis will mean that firms won't manage to raise prices without risking losing customers, so they are likely to absorb any increase in import prices arising from the lower pound, or from the disruptions in global supply chains. Transportation inflation will probably be hurt the most, but prices for most other services will also be seriously affected, and so will prices for nonessential goods such as clothing.

## The Long View

### ASIA PACIFIC

By Shahana Mukherjee of Moody's Analytics  
April 23, 2020

#### JAPAN

The first signs of the true economic costs of the COVID-19 pandemic are surfacing in Asia. Japan's trade position weakened significantly in March, as exports slumped to a near four-year low, contracting by 11.7% on a yearly basis. While the decline was broad-based, it was led by significant reductions in the shipment of transport equipment and general machinery. This marks the 16th consecutive decline in Japan's foreign sales and will serve as an important lead indicator for the rest of Asia.

A weakened trade position was an expected outcome for March as the incidence of the COVID-19 outbreak escalated in various countries. The magnitude of decline, however, was larger than expected, and it reveals important information about the underlying drivers. A significant share of the slump in Japan's exports in March was a result of fewer shipments to China, its main export partner, as the regional shutdown imposed to contain the spread of the virus severely curtailed demand for intermediate goods as well as final consumption goods. Making matters worse is the impact from lockdowns in Italy, Spain and other affected European countries, which incapacitated the region's industrial activity, hurt demand for Japan's capital goods, and exacerbated the slowdown in March. The first signs of a slump in U.S. demand are also evident, as U.S.-bound shipments declined at their fastest rate since 2011, driven by sharp declines in demand for cars and general machinery.

The factors driving imports, too have changed. While the significant reduction in Japan's imports in March was largely due to China's regional shutdown, the numbers reflect the combined impact from the oil-price war, halted production due to extended supply-chain disruptions, and waning domestic demand, as household spending contracted following the imposition of new restrictions. The unplanned halt in production from the shortage of imported inputs is likely to have further aggravated the decline in outbound shipments and weakened Japan's trade position further.

#### Pandemic's costs are rising

The costs from the COVID-19 pandemic are rising by the day. With the U.S. at the epicentre of the pandemic, Europe yet to recover and several Asian countries facing new risks from a second wave of infections, external conditions have deteriorated and will only weigh more heavily on global trade volumes in the months ahead. With industrial production down and employment prospects significantly weakened among the Western economies, the main pressure point for Japan's exporters in the near term will be a deeper slowdown in general-purpose machinery exports, as these markets receive 33% of Japan's machinery shipments. Japan's auto manufacturers also stand to be disproportionately impacted by the U.S. and Europe, as they collectively receive nearly 42% of total shipments of motor vehicles, even though the turnaround in China may mitigate the net downturn for automakers, a feature already visible in the March figures.

The internal risks have also increased, as the nationwide emergency will dampen household spending further and temporarily halt several production processes. This in turn can intensify existing disruptions, further weaken the external sector, and weigh heavily on the domestic labour market. As things stand, downside risks are the only risks at play in the short term, and with exports likely to experience new lows in April and May, a recession in 2020 appears imminent.



## Ratings Round-Up

## Ratings Round-Up

## Energy Industry Still Hardest Hit by Downgrades

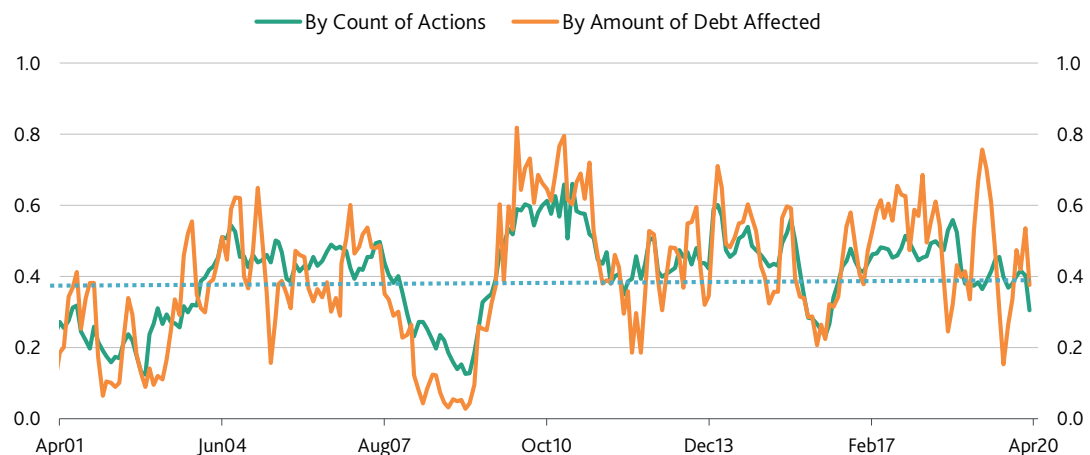
By Michael Ferlez

The COVID-19 pandemic continues deal a heavy blow to corporate credit quality. For the reference period ending April 21, there were a total of 35 downgrades and one upgrade. Although this marks a modest decline from last week's total of 58 downgrades, the outlook remains unchanged. Although downgrades are affecting many industries, the energy industry remains the hardest hit. During reference period, energy firms accounted for 8 downgrades. Within the energy industry, Diamond Offshore Drilling Inc was the most notable downgrade. The firm saw its senior unsecured credit rating cut to Ca from Caa2 after the firm announced it would not make a scheduled interest payment and would hire advisors to assist in reviewing alternative capital structures. The downgrade affected \$2 billion in debt. Outside the energy industry, notable downgrades included Frontier Communications Corp. and Aramark Services Inc. Moody's Investors Service downgraded Frontier Communications Corp.'s probability of default rating to D-Pd and its senior unsecured debt to Ca after the company filed a petition for relief under Chapter 11 of the U.S. Bankruptcy Code. Meanwhile, Aramark Services Inc.'s senior secured debt was downgraded to Ba2, reflecting Moody's Investors Service expectations that the firm's revenue, profit and free cash flow to decline substantially in fiscal 2020.

Similarly, the European rating change landscape remained dour. For the week ended April 21, there were 20 downgrade and no upgrades. Downgrades impacted firms in eleven different countries, with Luxembourg receiving the most changes. The most notable change was made to Intelsat Connect Finance S.A. Moody's Investors services downgraded the Luxembourgian telecommunications firm's senior unsecured credit rating to C from Ca, reflecting the high likelihood that the firm would require restructuring in the near-term. The downgrade impacted \$23.5 billion in debt.

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
4/15/20	CENTURY ALUMINUM COMPANY	Industrial	SrSec/LTCFR/PDR	250	D	Caa1	Caa2	SG
4/15/20	STEAK N SHAKE INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Ca	SG
4/15/20	LONESTAR RESOURCES, INC. -LONESTAR RESOURCES AMERICA INC.	Industrial	SrUnsec/SrSec/BCF	250	D	Caa2	Ca	SG
4/15/20	CONSOL ENERGY INC.	Industrial	SrSec/BCF/LTCFR/PDR	300	D	B2	Caa1	SG
4/15/20	PRIORITY HOLDINGS LLC-PRIORITY PAYMENT SYSTEMS HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
4/16/20	FRONTIER COMMUNICATIONS CORPORATION	Utility	SrUnsec/LTCFR/PDR	11,294	D	Caa3	Ca	SG
4/16/20	LOEWS CORPORATION -DIAMOND OFFSHORE DRILLING, INC.	Industrial	SrUnsec/LTCFR/PDR	2,000	D	Caa2	Ca	SG
4/16/20	EQUIFAX INC.	Industrial	SrUnsec	3,400	D	Baa1	Baa2	IG
4/16/20	KAR AUCTION SERVICES, INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR/PDR	950	D	B3	Caa1	SG
4/16/20	MRC GLOBAL INC. -MRC GLOBAL (US) INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
4/16/20	NEW ACADEMY FINANCE COMPANY LLC -ACADEMY, LTD.	Industrial	LTCFR/PDR		D	Caa1	Caa2	SG
4/16/20	NORTH AMERICAN LIFTING HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG
4/16/20	PRISO ACQUISITION CORPORATION	Industrial	SrUnsec/SrSec/BCF/LTCF R/PDR	200	D	Caa1	Caa2	SG
4/16/20	ENGINE GROUP, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG
4/17/20	PEABODY ENERGY CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR	1,000	D	Ba3	B1	SG
4/17/20	PYXUS INTERNATIONAL, INC.	Industrial	SrSec/BCF/LTCFR/PDR	910	D	B2	Caa2	SG
4/17/20	LONGVIEW INTERMEDIATE HOLDINGS C, LLC	Utility	SrSec/BCF		D	Ca	C	SG
4/17/20	AMC ENTERTAINMENT HOLDINGS, INC.	Industrial	SrSec/BCF /LTCFR/SrSub/PDR	2,295	D	Ba3	B3	SG

Source: Moody's

## Ratings Round-Up

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
4/17/20	MACQUARIE INFRASTRUCTURE CORPORATION -ATLANTIC AVIATION FBO, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba3	B2	SG
4/17/20	NBG INTERMEDIATE HOLDINGS, INC -KNB HOLDINGS CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG
4/17/20	CSTN MERGER SUB, INC.	Industrial	SrSec/LTCFR/PDR	450	D	B2	B3	SG
4/20/20	BI-LO HOLDING FINANCE, LLC-BI-LO, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG
4/20/20	CSI COMPRESSCO LP	Industrial	SrSec/SrUnsec /LTCFR/PDR	1,292	D	B1	B3	SG
4/20/20	SUMMIT MIDSTREAM PARTNERS, LLC -SUMMIT MIDSTREAM HOLDINGS, LLC	Industrial	SrUnsec/SrSec/BCF /LTCFR/PDR/PS	1,100	D	B1	Caa1	SG
4/20/20	FXI HOLDINGS, INC.	Industrial	SrSec/LTCFR/PDR	525	D	B2	B3	SG
4/20/20	LOTUS MIDSTREAM, LLC -CENTURION PIPELINE COMPANY LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba3	B1	SG
4/20/20	SP PF BUYER LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	Caa2	SG
4/20/20	1236904 B.C. LTD.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
4/21/20	LEGGETT & PLATT, INCORPORATED	Industrial	SrUnsec/MTN	1,600	D	Baa1	Baa2	IG
4/21/20	KAISER ALUMINUM CORPORATION	Industrial	SrUnsec/LTCFR/PDR	500	D	Ba3	B1	SG
4/21/20	PERFORMANCE FOOD GROUP COMPANY -PERFORMANCE FOOD GROUP, INC.	Industrial	SrUnsec/LTCFR/PDR	1,410	D	B1	B2	SG
4/21/20	TOWN SPORTS INTERNATIONAL HOLDINGS, INC.-TOWN SPORTS INTERNATIONAL, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Ca	SG
4/21/20	ARAMARK-ARAMARK SERVICES, INC.	Industrial	SrSec/BCF/LTCFR/PDR	2,604	D	Ba1	Ba2	SG
4/21/20	QUESO HOLDINGS, INC. -CEC ENTERTAINMENT, INC.	Industrial	SrUnsec/SrSec/BCF/LTCF R/PDR	255	D	Caa3	Ca	SG
4/21/20	EVEREST INTERMEDIATE HOLDINGS, INC. -TRANSCENDIA HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
4/21/20	ARROW BIDCO LLC	Industrial	SrSec/LTCFR/PDR	337	D	B2	Caa1	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
4/15/20	TATA STEEL LTD. -TATA STEEL UK HOLDINGS LIMITED	Industrial	LTCFR		D	B2	B3	SG	UNITED KINGDOM
4/15/20	STENA AB	Industrial	SrSec/SrUnsec/LTCFR/PDR	1,570	D	Ba3	B1	SG	SWEDEN
4/15/20	PGS ASA	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	NORWAY
4/15/20	INTELSAT S.A. -INTELSAT CONNECT FINANCE S.A.	Industrial	SrUnsec/SrSec/BCF	23,470	D	Ca	C	SG	LUXEMBOURG
4/15/20	BME GROUP HOLDING B.V.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa2	SG	NETHERLANDS
4/16/20	LSF9 BALTA ISSUER S.A R.L.	Industrial	SrSec/LTCFR/PDR	316	D	B2	Caa1	SG	BELGIUM
4/16/20	MOBY S.P.A.	Industrial	SrSec/LTCFR/PDR	653	D	Caa3	Ca	SG	ITALY
4/17/20	LA FINANCIERE ATALIAN S.A.S.	Industrial	SrUnsec/LTCFR/PDR	1,343	D	Caa1	Caa2	SG	FRANCE
4/17/20	SK SPICE HOLDINGS SARL (ARCHROMA) -ARCHROMA FINANCE SARL	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	LUXEMBOURG
4/17/20	O1 PROPERTIES LIMITED	Industrial	SrUnsec/LTCFR/PDR	1,037	D	Caa3	C	SG	CYPRUS
4/17/20	INSPIRED ENTERTAINMENT, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa2	SG	UNITED KINGDOM
4/17/20	F-BRASILE S.P.A.	Industrial	SrSec/BCF/LTCFR/PDR	505	D	B2	B3	SG	ITALY
4/20/20	ENAGAS S.A.	Utility	SrUnsec/LTIR	186	D	Baa1	Baa2	IG	SPAIN
4/20/20	HIBU GROUP LIMITED -YELL BONDCO PLC	Industrial	SrSec/LTCFR/PDR	281	D	Caa1	Caa2	SG	UNITED KINGDOM
4/21/20	WELLTEC INTERNATIONAL APS -WELLTEC A/S	Industrial	SrSec/LTCFR/PDR	340	D	B2	B3	SG	DENMARK
4/21/20	ARENA LUXEMBOURG INVESTMENTS S.A R.L.	Industrial	SrSec/LTCFR/PDR	626	D	Ba3	B1	SG	LUXEMBOURG
4/21/20	LSF10 EDILIANS INVESTMENTS S.A R.L.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	LUXEMBOURG
4/21/20	BERING III S.A R.L.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG	LUXEMBOURG
4/21/20	AERNNOVA AEROSPACE CORPORATION S.A.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	SPAIN
4/21/20	Q-PARK HOLDING B.V.	Industrial	SrSec/LTCFR/PDR	1,584	D	Ba2	Ba3	SG	NETHERLANDS

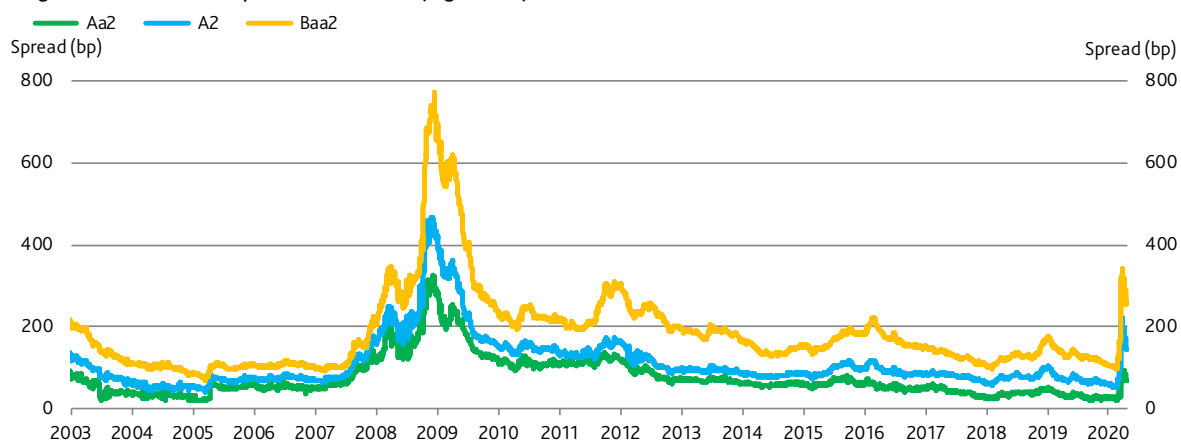
Source: Moody's

## Market Data

## Market Data

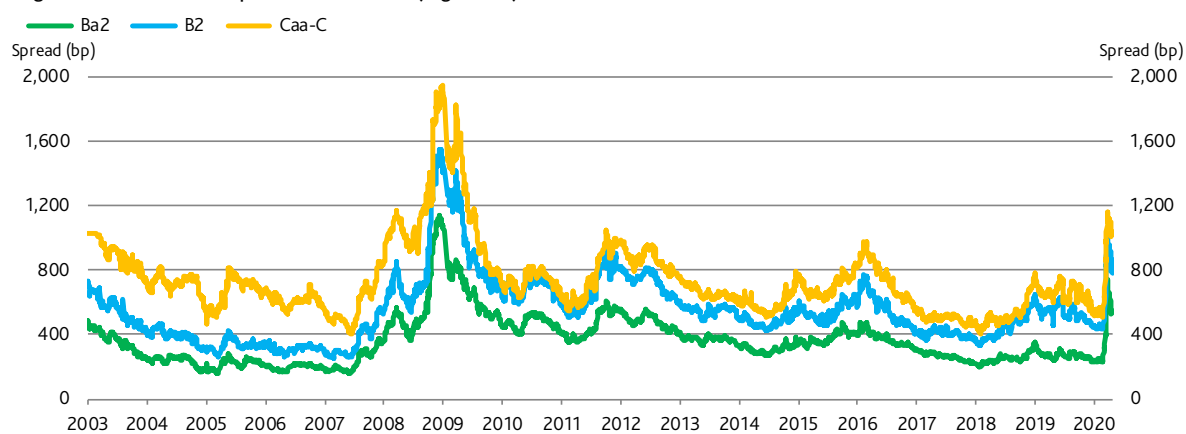
## Spreads

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 (April 15, 2020 – April 22, 2020)

CDS Implied Rating Rises		CDS Implied Ratings		Senior Ratings
Issuer		Apr. 22	Apr. 15	
PNC Financial Services Group, Inc.		Aa3	Baa1	A3
Embarq Corporation		Ba3	B3	Ba2
Pepco Holdings, LLC		A1	A3	Baa2
CVS Health		A2	A3	Baa2
Exxon Mobil Corporation		Baa1	Baa2	Aa1
Enterprise Products Operating, LLC		Baa1	Baa2	Baa1
Kraft Heinz Foods Company		Baa2	Baa3	Baa3
Becton, Dickinson and Company		Baa2	Baa3	Ba1
Cargill, Incorporated		A2	A3	A2
Dish DBS Corporation		B2	B3	B1

CDS Implied Rating Declines		CDS Implied Ratings		Senior Ratings
Issuer		Apr. 22	Apr. 15	
HP Inc.		A2	Aa1	Baa2
JPMorgan Chase Bank, N.A.		A2	Aa2	Aa2
Microsoft Corporation		A1	Aa1	Aaa
U.S. Bancorp		A1	Aa1	A1
Amazon.com, Inc.		A1	Aa1	A2
Kroger Co. (The)		Aa3	Aaa	Baa1
Kinder Morgan, Inc.		Baa2	A2	Baa2
Cardinal Health, Inc.		A1	Aa1	Baa2
Eastman Chemical Company		Baa1	A1	Baa3
Praxair, Inc.		A1	Aa1	A2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Apr. 22	Apr. 15	Spread Diff
Neiman Marcus Group LTD LLC	Ca	31,471	18,155	13,315
Chesapeake Energy Corporation	Caa3	31,669	18,459	13,210
Diamond Offshore Drilling, Inc.	Ca	14,718	4,144	10,574
Hertz Corporation (The)	Caa1	7,642	2,552	5,089
Nabors Industries, Inc.	B3	5,688	3,359	2,329
American Airlines Group Inc.	B1	4,136	1,967	2,169
Staples, Inc.	B3	2,480	1,399	1,081
K. Hovnanian Enterprises, Inc.	Caa3	3,287	2,410	878
Avis Budget Car Rental, LLC	B1	1,666	931	735
L Brands, Inc.	Ba3	1,104	778	326

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Apr. 22	Apr. 15	Spread Diff
Penney (J.C.) Corporation, Inc.	C	25,539	41,289	-15,750
Embarq Corporation	Ba2	286	465	-179
Avon Products, Inc.	B3	610	716	-106
Noble Energy, Inc.	Baa3	435	520	-85
Beazer Homes USA, Inc.	B3	951	1,005	-54
Cameron International Corporation	Baa1	178	212	-35
Macy's Retail Holdings, Inc.	Ba1	899	931	-32
PNC Financial Services Group, Inc.	A3	39	67	-29
Olin Corporation	Ba2	302	329	-27
Expedia Group, Inc.	Baa3	285	310	-24

Source: Moody's, CMA

## Market Data

Figure 4. CDS Movers - Europe (April 15, 2020 – April 22, 2020)

CDS Implied Rating Rises		CDS Implied Ratings		Senior Ratings
Issuer		Apr. 22	Apr. 15	
Lloyds Bank plc		A2	A3	Aa3
Standard Chartered PLC		Baa2	Baa3	A2
Banca Monte dei Paschi di Siena S.p.A.		B1	B2	Caa1
Fiat Chrysler Automobiles N.V.		B1	B2	Ba2
Tesco Plc		Baa2	Baa3	Baa3
SSE plc		A2	A3	Baa1
Hamburg Commercial Bank AG		Baa3	Ba1	Baa2
Bank of Scotland plc		A2	A3	Aa3
NXP B.V.		Baa2	Baa3	Baa3
Novo Banco, S.A.		Ba3	B1	Caa2

CDS Implied Rating Declines		CDS Implied Ratings		Senior Ratings
Issuer		Apr. 22	Apr. 15	
France, Government of		A1	Aa1	Aa2
Belgium, Government of		A1	Aa1	Aa3
ABN AMRO Bank N.V.		A1	Aa1	A1
ING Bank N.V.		A1	Aa1	Aa3
Nordea Bank Abp		A1	Aa1	Aa3
Swedbank AB		A2	Aa2	Aa3
Landesbank Hessen-Thüringen GZ		A2	Aa2	Aa3
Svenska Handelsbanken AB		A1	Aa1	Aa2
SEB AB		A2	Aa2	Aa2
DZ BANK AG		A3	Aa3	Aa1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Apr. 22	Apr. 15	Spread Diff
PizzaExpress Financing 1 plc	C	12,380	9,256	3,124
Matalan Finance plc	Caa2	5,619	2,814	2,805
Novafives S.A.S.	Caa2	2,254	1,901	353
CMA CGM S.A.	Caa1	2,133	1,830	303
TUI AG	B2	1,278	979	299
Stena AB	Caa1	939	771	168
Selecta Group B.V.	Caa2	1,918	1,797	121
Deutsche Lufthansa Aktiengesellschaft	Ba1	317	202	115
thyssenkrupp AG	B1	446	370	76
Jaguar Land Rover Automotive Plc	B1	1,227	1,159	68

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Apr. 22	Apr. 15	Spread Diff
Vue International Bidco plc	Caa2	933	1,076	-143
Premier Foods Finance plc	Caa1	348	411	-63
Iceland Bondco plc	Caa2	760	784	-24
Hammerson Plc	Baa1	402	423	-22
Hamburg Commercial Bank AG	Baa2	133	153	-20
ITV plc	Baa3	274	283	-9
Alstom	Baa2	44	52	-9
Credit Suisse Group AG	Baa2	113	121	-8
Compagnie de Saint-Gobain SA	Baa2	101	109	-8
Continental AG	Baa2	157	164	-8

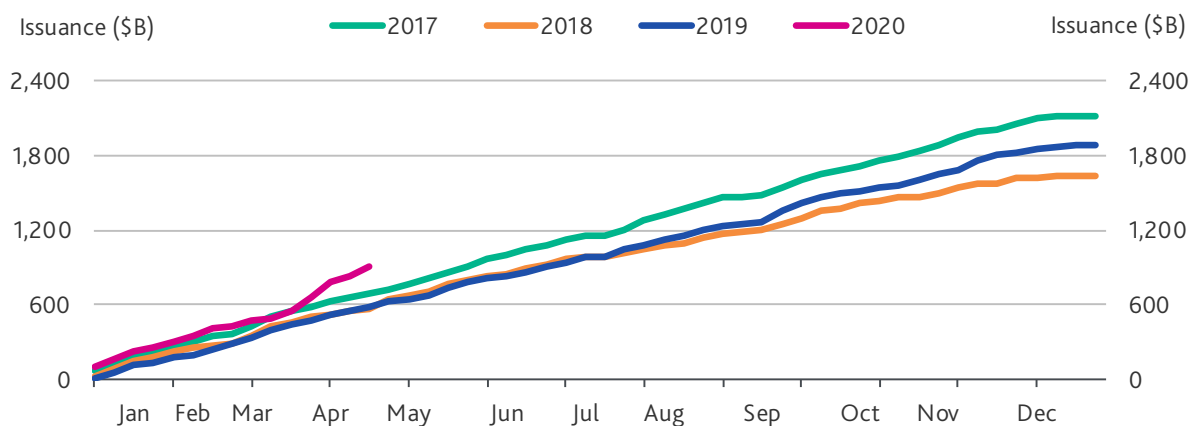
Source: Moody's, CMA



## Market Data

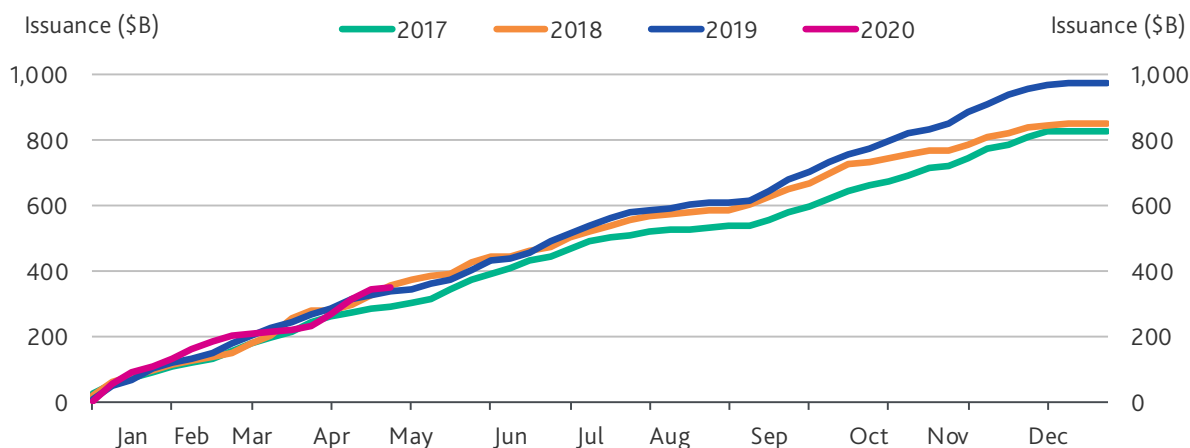
## Issuance

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



Source: Moody's / Dealogic

Figure 6. Market Cumulative Issuance - Corporate &amp; 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	Amount	Amount
	\$B	\$B	\$B
Weekly	57.856	15.550	78.356
Year-to-Date	717.510	152.228	907.451

Euro Denominated			
	Investment-Grade	High-Yield	Total*
	Amount	Amount	Amount
	\$B	\$B	\$B
Weekly	9.440	0.219	9.659
Year-to-Date	302.890	36.662	353.005

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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