MOODY'S ANALYTICS

Default Outlook: Markets Appear Less Worried than Credit Analysts

WEEKLY MARKET OUTLOOK

Moody's Analytics Research

Weekly Market Outlook Contributors:

Moody's Analytics/New York:

John Lonski
Chief Economist
1.212.553.7144
john.lonski@moodys.com

Yukyung Choi
Quantitative Research

Moody's Analytics/Asia-Pacific:

Shahana Mukherjee
Economist

Moody's Analytics/Europe:

Barbara Teixeira Araujo
Economist

Ross Cioffi
Economist

Moody's Analytics/U.S.:

Ryan Sweet
Economist

Dan White
Economist

Steven Shields
Economist

Editor
Reid Kanaley

Contact: help@economy.com

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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 recent surge in corporate bond issuance helps to reduce near-term default risks.

Credit Spreads	Investment Grade: We see the year-end 2020's average investment grade bond spread under its recent 175 basis points. High Yield: Compared with a recent 775 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 from April 2019's 2.8% to April 2020's 5.4% 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 35.2% for IG to $1.770 trillion, while high-yield supply may sink by 9.7% to $390 billion.

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Market Data
Credit spreads, CDS movers, issuance.
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Moody's Capital Markets Research *recent publications*
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Credit Markets Review and Outlook

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

Default Outlook: Markets Appear Less Worried than Credit Analysts

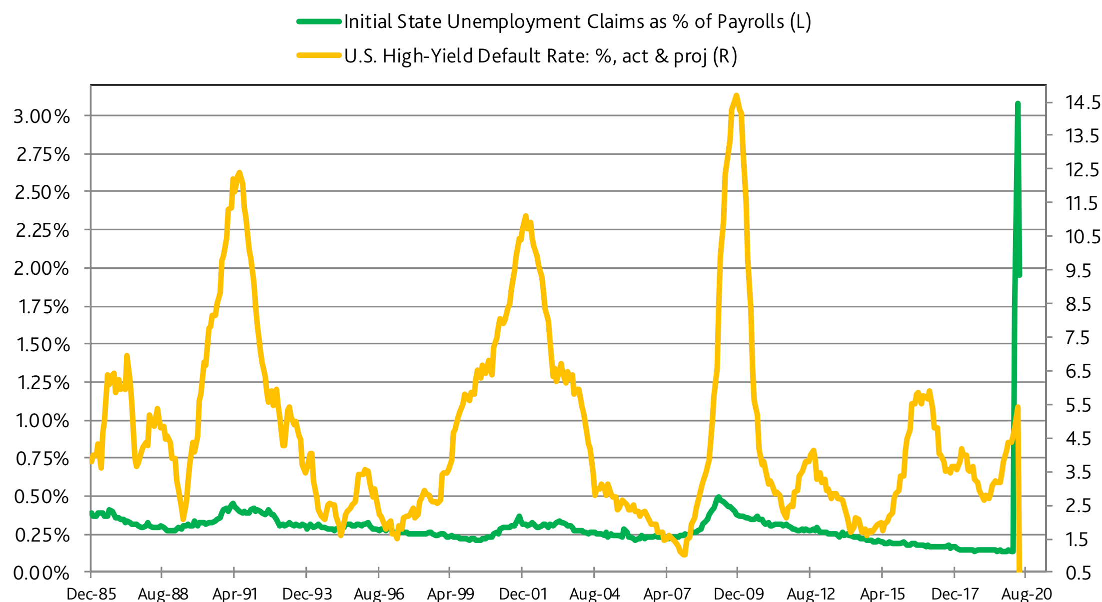
As inferred from May-to-date's average 2.56-million initial state jobless claims per week, another outsized shrinkage of payrolls is likely following the loss of 881,000 jobs in March and the mind-boggling disappearance of 20.54-million jobs in April. Recent estimates for May's decline in payrolls are 5 million to 10 million jobs.

Reportedly, April's home-mortgage delinquencies have soared in a manner that is worse than occurred during the housing crisis that triggered the Great Recession. Nevertheless, the CARES Act prohibits lenders from initiating foreclosures against delinquent mortgage borrowers holding federally-backed mortgages during the 60 days after March 18.

Because the grace period for overdue mortgage payments may not be extended indefinitely, it is imperative to reopen the economy as quickly and as safely as possible. From the perspective of financial, economic and social stability, waiting for a vaccine or the complete elimination of COVID-19 may not be a viable option.

Default forecasters either believe that the historical relationship between the default rate for U.S. issuers of high-yield business debt and initial state unemployment claims has broken down or that weekly jobless claims will quickly plunge from May 16's 2.56 million first-time filings to no more than 600,000 per week. Otherwise, the forecasted default rate for 2021's first quarter would be much greater than early May 2020's projection of 13%. Figure 1 suggests the current situation is without precedent regarding the difficulty of predicting what once unimaginable job losses tell us about the repayment of business debt.

Figure 1: High-Yield Default Rate Shows a Correlation of 0.57 with Jobless Claims of Three Months Earlier
sources: BLS, Moody's Investors Service, Moody's Analytics



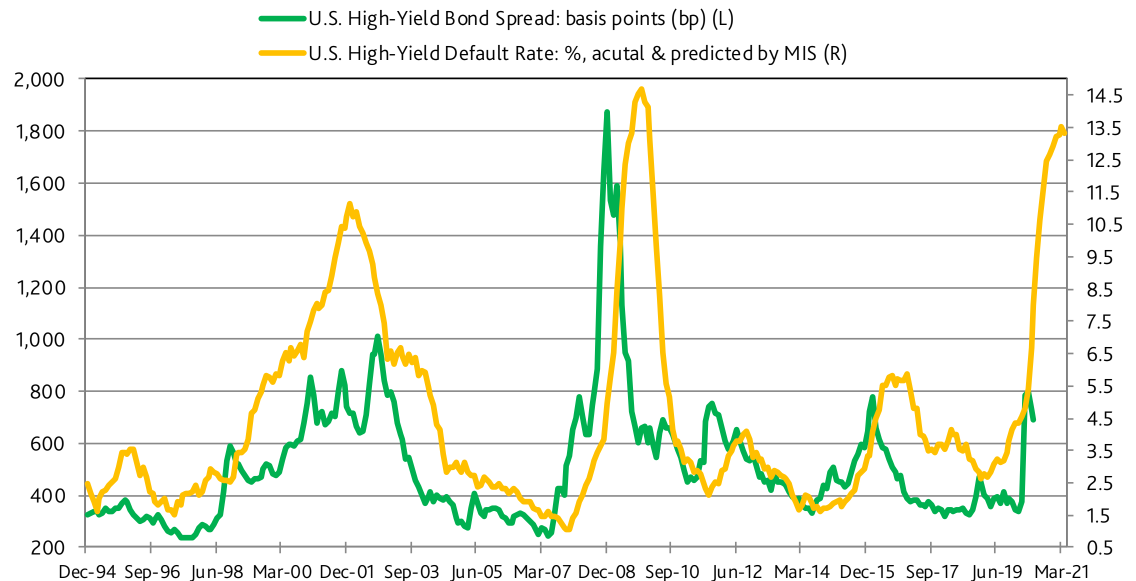
High-Yield Spreads Resemble 2015-2016's Slowdown More Than 2008-2009's Recession

The high-yield bond market implicitly believes that the losses arising from the impending climb by the default rate will be considerably less compared to what followed from 2008-2009's Great Recession. Speculative-grade bond yields and spreads over Treasuries have dropped considerably from their highs of late March 2020.

For example, after peaking at March 23's 11.69% and 1,100 basis points, Bloomberg/Barclays speculative-grade bond yield and spread have since dropped to May 20's 7.59% and 691 bp, respectively. Not only is the spec-grade bond yield now well under its 8.19% average of October 2015 through June 2016, it is but a fraction of its stratospheric 17.61% average of October 2008 through June 2009, or the final nine months of the Great Recession.

Albeit in an irregular fashion, the high-yield bond spread's now declining trend reflects market expectations of a declining default rate beginning in the spring of 2021. Moreover, the high-yield bond spread's much lower peak month-long average of 795 bp for April 2020 compared to December 2008's 1,874 bp record high suggests the market looks for a top for the U.S. default rate that is closer to 10% than to November 2009's post-1930s high of 14.7%. Not to be overlooked is how yield spreads are more the product of expected recovery rates on defaulted debt than the actual default rate.

Figure 2: High-Yield Bond Spread More Closely Resembles Its Showing During 2015-2016's Profits Recession Compared to Economic Recessions of 2008-2009 and 2001
sources: Bloomberg, Moody's Investors Service, Moody's Analytics



High-Yield EDF Concurs with Market's View of a Manageable Ascent by Defaults

The high-yield bond spread is not alone at implicitly predicting a top for the default rate that falls considerably short of November 2009's 14.7%. Moody's Analytics' average expected default frequency metric for U.S./Canadian high-yield companies has declined from March 18, 2020's current cycle high of 10.62% to May 20's 7.84%. Like the high-yield bond spread, the average high-yield EDF suggests that the default rate will enter a declining trend during the spring of 2021. Moreover, the recent path taken by the average high-yield EDF weighs against a top for the default rate that is much above 10%.

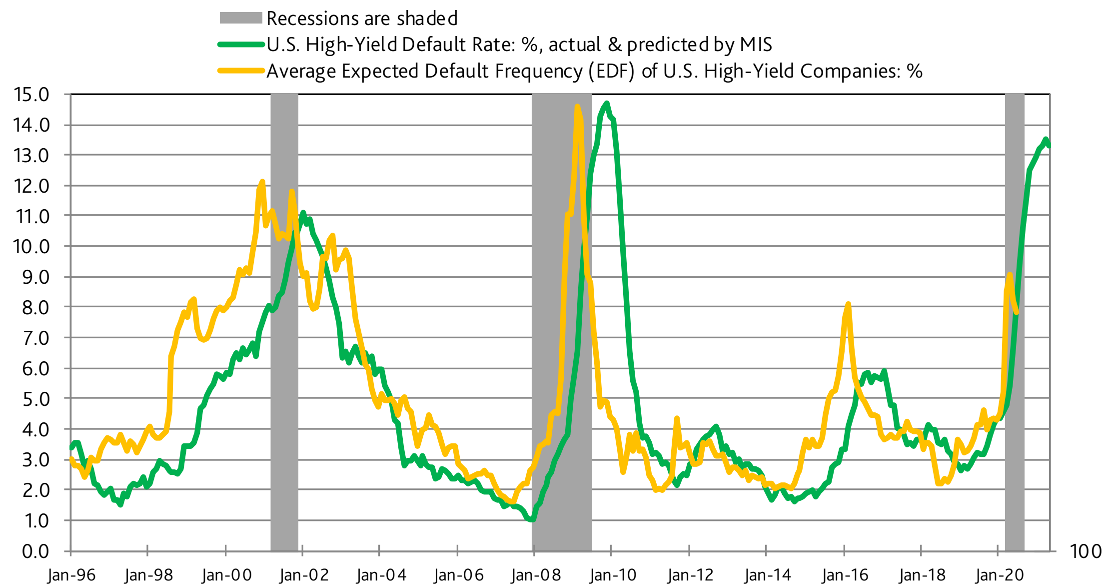
For the current recession, the average high-yield EDF's month-long average has climbed no higher than April's 9.09% and has since eased to the 8.20% of May-to-date. In stark contrast, not only did the average high-yield EDF peak at February 2009's much higher 14.58%, it also averaged a significantly greater 12.34% during November 2008 through April 2009.

And that's not all. In conjunction with 2001's comparatively mild recession, the average high-yield EDF metric averaged 10.83% from September 2000 through November 2001, wherein the EDF's month-long average crested at September 2001's 11.79%.

Neither the high-yield bond spread nor the average high-yield EDF has yet to warn of a jarring lift-off by the default rate that might befit the highest unemployment rate since the Great Depression and the FactSet consensus' predicted 20.3% calendar-year 2020 plunge by S&P 500 earnings per share.

Figure 3: Average High-Yield Expected Default Frequency (EDF) Metric Has Yet to Rise to Its Highest Ranges of the Recessions of 2001 and 2008-2009

sources: Moody's Investors Service, NBER, Moody's Analytics



Today's Multitude of High-Yield Downgrades Contradicts Market Outlook

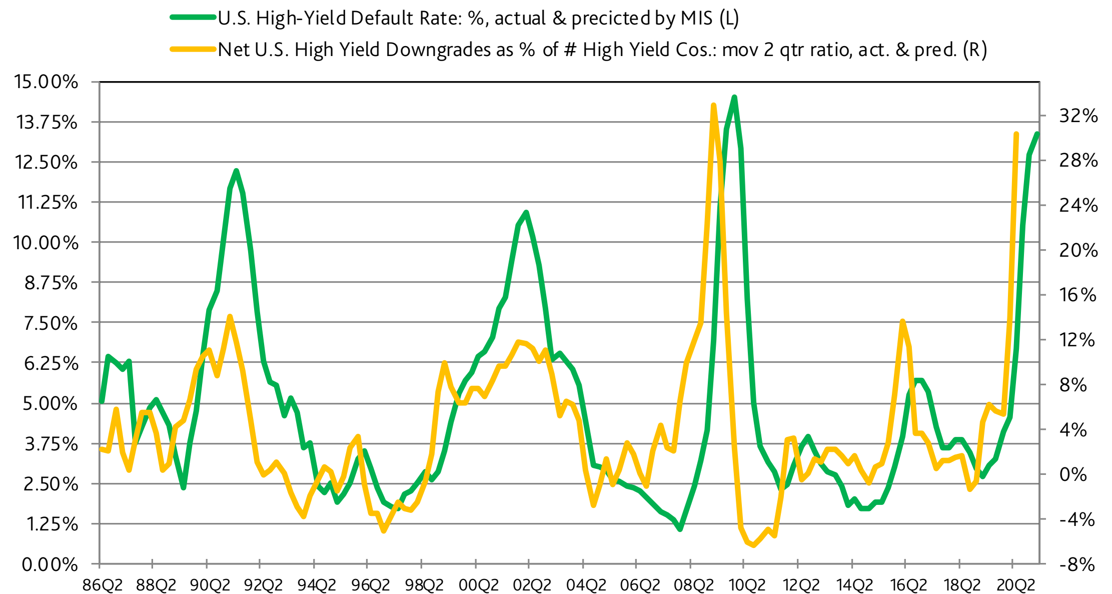
Nevertheless, in addition to mass layoffs and severe contractions of business sales and operating profits, the likelihood of an early 2021 default rate well above 10% finds support in the latest surge by net high-yield downgrades. (Net high-yield downgrades equal the difference between the number of downgrades less upgrades for U.S. high-yield credit rating revisions.)

The moving two-quarter ratio of net high-yield downgrades to the number of high-yield issuers leads the high-yield default by two to three quarters. For example, the high-yield default rate shows relatively high correlations of 0.81 and 0.82 with the net high-yield downgrade ratios of two and three quarters earlier.

Second-quarter 2020's high-yield net downgrade ratio should at least equal 30% and might surpass first-quarter 2009's record high ratio of 32.8%. Back in 2009, the high-yield default rate soared up from first-quarter 2009's 6.9% to the 13.5% and 14.5% of 2009's third and fourth quarters. From the perspective of second-quarter 2020's extraordinarily large number of high-yield downgrades, a rise by the default rate from April 2020's 5.4% to 13% by 2021's first quarter seems likely.

Credit Markets Review and Outlook

Figure 4: Net High-Yield Downgrades Concurs with Forecast of 13% Default Rate for 2021's First Quarter
sources: Moody's Investors Service, Moody's Analytics



Homebuyer Mortgage Applications Supply Reason for Hope

The Mortgage Bankers Association's index of homebuyer mortgage applications for the week ended May 15 rose by 6.4% from the prior week. This barometer of housing demand has now increased sequentially for five straight weeks and has risen by a cumulative 41.8% from April 10's bottom.

Moreover, the year-to-year decline by the homebuyer mortgage applications index has narrowed from an April 10 bottom of -34.9% to May 15's -1.6%. Could it be that the homebuyer mortgage applications index is on the verge of again posting year-to-year increases? If true, then the normalization of housing activity may arrive more quickly than commonly thought.

The average homebuyer mortgage applications index of the first two weeks of May tops April 2020's month-long average by 27.7%. Perhaps a host of metrics for May's household expenditures will show double-digit percent monthly increases from April's readings that were badly suppressed by COVID-19.

Nevertheless, May 19's cost of insuring $10,000 of homebuilder's debt has risen considerably since the end of 2019. The median CDS spread—or cost of insuring $10,000 of debt—for seven U.S. homebuilders increased from year-end 2019's $83 to May 19's $238.

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

THE U.S.
By Dan White of Moody's Analytics

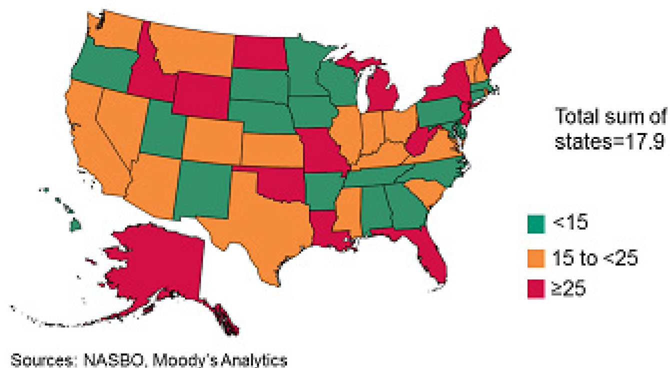
What Happens If Washington Ignores State and Local Governments?

State and local government policymakers are facing the most challenging budget environment in at least a generation. The baseline economic outlook calls for a GDP decline more than twice the magnitude of the Great Recession, but what level of federal help will be coming remains very much up in the air. In the meantime, revenues are falling precipitously and social service spending is accelerating at a record pace across the country.

Our recently completed state stress tests revealed that the level of fiscal shock—the degree to which revenues will decline and social service spending will increase—that is set to hit state budgets over the next fiscal year is beyond anything we've seen since the Great Depression.

In practice, the average state will see about a fifth of its budget disappear by the end of fiscal 2021. That is nearly twice the level of fiscal shock seen by the average state during the entirety of the Great Recession, and orders of magnitude larger than during any other downturn in our lifetimes.

However, one of the important lessons of the Great Recession and our annual stress-testing exercises is that there is no such thing as the average state. The distribution around the average can be enormous, especially in regard to revenues, with some of the most volatile states seeing shocks of more than 40%.

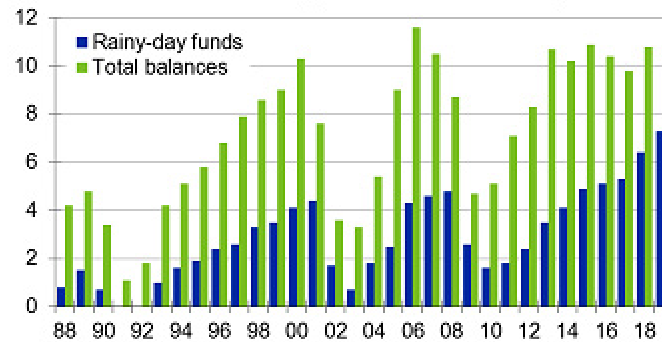


In general, the states set to see the largest fiscal shocks under the baseline economic outlook are those states with:

- Large COVID-19 exposures and death rates;
- Heavier than average reliance on tourism, international trade and energy; or
- Highly volatile tax structures such as energy taxes or very progressive personal income taxes.

Dealing with this level of fiscal shock is something for which few states are prepared. That is not an indictment of most state fiscal practices, but is instead a testament to the sheer magnitude of the current crisis. In actuality, states as a whole have never been more prepared for an economic downturn. Our annual stress-testing exercise in the fall of 2019 found that more states were prepared to handle a

moderate recession than ever before and that overall state rainy-day funds were at the highest level on record.



The catch is that the current downturn can be called many things, but moderate isn't one of them. As a result, even a number of states that have been exceptionally prudent will need to make some very difficult fiscal decisions in the months ahead.

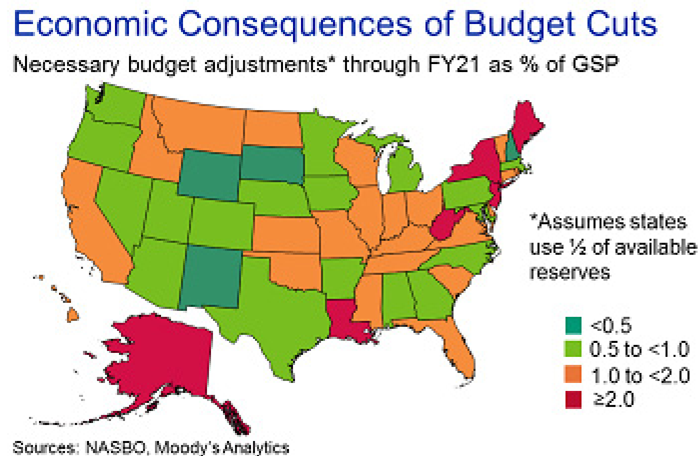
That's because state budgeting, unlike at the federal level, is a zero-sum game. State budgets must balance, and for all practical purposes states are forbidden from borrowing across fiscal years for operational purposes. There is no plan B. They can't just issue a bunch of long-term debt and move on to the next year. Spending cuts and tax increases must be implemented. The federal government has the ability to smooth out business cycles through the use of debt. State and local governments do not.

This will result in some devastating fiscal actions needing to be taken by states without additional aid from the federal government.

How devastating? Assuming that states receive no more assistance from the federal government, our stress tests estimate that state governments will need to cut spending or raise revenues by approximately $200 billion through June 2021. Accounting for similar actions that will need to be taken at the local government level conservatively raises that estimate to about $300 billion.

Based on past recessions, we have previously estimated an economic multiplier on state and local government aid during a recession of 1.39, giving an overall economic impact of more than $415 billion over the next year. For context, that represents 2.1 percentage points off of national GDP and about 3 million jobs.

However, some regional impacts would be much worse, reflecting a state's expected level of fiscal shock and its preparedness. In states such as Louisiana, New York and New Jersey, where the impacts of COVID-19 are plentiful and budget reserves scarce, spending cuts and their economic consequences will be most significant.



Notice, however, that even in states with much lower COVID-19 exposure and that have diligently prepared for the next recession, such as Minnesota, Ohio and Idaho, necessary budget adjustments would still shave a full percentage point or more off their gross state product.

This highlights the fact that without more flexible federal aid to state and local governments, above and beyond the restricted COVID-19-specific relief provided so far, the eventual economic recovery will be much slower all across the country.

Once we accept this reality, two key questions need to be answered.

First, how much do state and local governments really need? There are many estimates of potential shortfalls floating around due to the unprecedented uncertainty in the economic outlook. Most of these estimates, including those accounted for in the House's latest stimulus proposal, are much larger than what our stress-testing exercises project. Based on our modeling, state and local governments need additional flexible aid of approximately $500 billion to make it through the next two fiscal years without having to make crippling budget cuts or tax increases.

Second, how quickly does new legislation need to be passed? As soon as legislatively possible. State officials are already grappling with how to close out the current fiscal year, ending June 30 for most. Then they must cope with new revenue forecasts and likely convene special legislative sessions in late summer and early fall to address shortfalls for fiscal 2021. The longer they fly blind on how much federal aid will ultimately be available, the more conservative their decision-making will have to be—to the detriment of the entire U.S. economy.

Next week

The key data next week will be new-home sales, consumer confidence, revisions to first quarter GDP, durable goods orders, initial claims, advance economic indicators, personal income, spending and PCE deflators.

EUROPE

By Barbara Teixeira Araujo of Moody's Analytics

Watching for Good News as Lockdowns Ease

After activity grounded to a halt in April, life is gradually returning to normal in May as lockdown measure ease. Still, significant disparity across countries remains. While most governments have allowed shops and restaurants to reopen, others are still enforcing widespread shutdowns. The U.K. is in the spotlight. There, most shops will remain closed until June 1, while restaurants will remain shut until the end of June, making the U.K. one of the last European countries to reopen its economy. This doesn't come as a surprise, since cases and deaths in the U.K. continue to rise at a much steeper rate than in Germany, France, Italy and other countries.

In economic data the focus will be on Germany's detailed first-quarter GDP numbers. We expect them to confirm that the economy fell 2.2% q/q in the three months to March, building on a 0.1% fall in the previous stanza and marking the worst decline in 11 years. While grim, we caution this is still much better than the slumps across the country's major peers. France's GDP is expected to have fallen by 5.8% q/q, Spain's by 5.2% and Italy's by 4.7%. The reason the German economy took s softer hit in March quarter from the COVID-19 crisis is that the country did not enforce lockdown measures until March 22—Italy did so on March 10, Spain on March 12, and France on March 17—while the restrictions there were also less stringent.

The breakdown details should show that German household consumption fell sharply and so did manufacturing investment. The closure of nonessential shops, restaurants, bars and leisure facilities made it impossible for households to spend on discretionary services, while the uncertainty likely pushed consumers and businesses into wait-and-see mode, hurting capital expenditure. Exports and imports are also expected to have slumped; global trade ground to a halt as large swaths of the world economy closed for business because of the virus. Adding to the shock were the supply chain disruptions and border closures in Europe. On the upside, German government spending should have increased and so should have construction investment. Although construction decreased across most of Europe, the softer restrictions in Germany meant builders were able to carry on with most of their work throughout March.

However, we expect the German economy to retreat further in April, when the lockdown lasted throughout most of the month. Most other countries also imposed restrictions, which would add to the weakness in the domestic economy. As an open economy, Germany relies heavily on exports, meaning it is likely to suffer more than its peers from the decline in global demand. Although restrictions are gradually being lifted in May, we still expect activity to shrink by 10.5% in the second quarter, the worst result since World War II.

Elsewhere, we expect second numbers to confirm that France's GDP fell by 5.8% q/q and Italy's by 4.7%. We caution, though, that the first-quarter numbers are prone to sharp revisions in coming months. They are mainly based on estimates, since large parts of the economy were closed during March. Each statistical office has its own methodology for making estimates when numbers are missing, and some could be more pessimistic than others. We're skeptical that France's GDP slumped more than Italy's and Spain's. Not only was the lockdown enforced earlier in those countries than in France, but it was also more draconian; all nonessential businesses were shuttered during part of the month, not just retail and consumer-facing services.

The euro zone's preliminary CPI numbers for May will also be released, and we expect them to show that inflation fell to 0.2% y/y from 0.3% in April. Our view is that the demand shock from the COVID-19 crisis will take the upper hand over the supply shock, depressing overall inflation pressures. Both core and noncore inflation will plunge in coming months. The recent slump in oil prices points to energy inflation remaining deep in deflation. That most other commodity prices have also fallen sharply since

the end of February will only add to the downside pressures in noncore inflation. All in, we expect the euro zone CPI headline to fall below zero by the summer and to remain depressed and below target throughout next year. Although we pencil in a sharp recovery in the second half of the year, we expect that the increase in supply will be faster than that in demand, since people will lose their jobs, companies will refrain from investing, and precautionary savings will be raised. This should keep overall prices depressed, which corroborates our view that the European Central Bank will need to increase its PEPP asset purchase programme soon. We are penciling in a €500 billion increase to €1.25 trillion.

	Key indicators	Units	Moody's Analytics	Last
Mon @ 8:00 a.m.	Germany: GDP for Q1	% change	-2.2	-0.1
Tues @ 2:00 p.m.	Russia: Retail Sales for April	% change yr ago	3.6	5.6
Tues @ 2:00 p.m.	Russia: Unemployment for April	%	5.1	4.7
Thur @ 9:00 a.m.	Spain: Retail Sales for April	% change	-25.0	-15.3
Thur @ 10:00 a.m.	Euro Zone: Business and Consumer Sentiment for May	index	78.0	67.0
Thur @ 11:00 a.m.	France: Job Seekers for April	mil, SA	3.74	3.49
Fri @ 7:00 a.m.	Germany: Retail Sales for April	% change	-3.9	-5.6
Fri @ 7:45 a.m.	France: Household Consumption Survey for April	% change	-3.0	-17.9
Fri @7:45 a.m.	France: GDP for Q1	% change	-5.8	-0.1
Fri @ 9:00 p.m.	Italy: GDP for Q1	% change	-4.7	-0.3
Fri @ 10:00 a.m.	Euro Zone: Preliminary Consumer Price Index for May	% change	0.2	0.3

ASIA-PACIFIC

By Shahana Mukherjee of Moody's Analytics

South Korea's Central Bank Likely to Cut Rates

The Bank of Korea's interest rate decision will be the highlight on the economic calendar. We expect the central bank to lower its benchmark policy rate from 0.75% to 0.25% in its May announcement. South Korea's central bank kept its interest rate unchanged at 0.75% in its April meeting, following a 50-basis point cut in March in response to the coronavirus outbreak. The COVID-19 crisis has dealt a heavy blow to South Korea's growth prospects. The country was the first economy outside China to be seriously impacted by a localized spread. The growth-deterring effects of this outbreak were reflected in the metrics. South Korean GDP contracted 1.4% on a quarterly basis in the March quarter, the sharpest pace seen since the global financial crisis in 2008, led by domestic consumption which contracted by a significant 6.4% over the period.

Further, South Korea's dependency on trade makes it particularly vulnerable to the shock from the sharp slump in global demand conditions as the outbreak spread rapidly across most countries. This was reflected in April trade figures, as exports plunged by 24.3% on yearly terms, while imports fell by 15.9%. While a gradual resumption in China's production activity is a positive development, the U.S. is yet to recover, and large economies including Russia and India are now in the eye of the storm, factors which are expected to weigh unfavourably on South Korea's exporters. Additionally, the risks of a second wave of infections (both domestically and abroad), are pertinent, with an unexpected resurgence in the number of domestic cases reported last week and new cases in the North-Eastern region of China. With household spending conservative and price pressures easing, the downside risks for South Korea remain elevated in the near term and are expected to prompt the Bank of Korea to further ease its monetary settings.

In other developments, we expect India's real GDP growth to ease to 3.2% in the March quarter, from 4.7% in the December quarter. India's growth moderated in 2019, led by sustained weakness in domestic investment and consumption, while exports also weakened in the wake of the U.S.-China trade conflict. While industrial production and exports had begun to pick up in the first two months of 2020, the COVID-19 outbreak and the accompanying containment measures, in the form of a nationwide lockdown, have more than undone the improvement. Production contracted by 16.7% in yearly terms in March, while exports declined annually by a sharp 34.2%. The effects of the lockdown

(which was imposed from the fourth week of March) will be more clearly reflected in the June quarter performance, but the combined effect from the hit to domestic production caused by supply chain disruptions and extended weakness in domestic demand conditions is expected translate into weaker growth for the March quarter.

	Key indicators	Units	Confidence	Risk	Moody's Analytics	Last
Tues @ 7:00 a.m.	South Korea Consumer Sentiment Index for May	Index	2	↓	64	70.8
Thur @ 11:00 a.m.	South Korea Monetary Policy for May	%	3	↓	0.25	0.75
Fri @ 9:00 a.m.	South Korea Retail Sales for April	% change	2	↓	0.9	-1.0
Fri @ 9:30 a.m.	Japan Unemployment rate for April	%	3	↑	3.0	2.5
Fri @ 9:50 .a.m.	Japan Industrial Production for April	% change	3	↓	-5.0	-3.7
Fri @ 9:50 .a.m.	Japan Retail Sales for April	% change yr ago	2	↑	0.4	0.4
Fri @ 10:00 .p.m.	India GDP for Q1	% change yr ago	3	↓	3.2	4.7

The Long View

The recent surge in corporate bond issuance helps to reduce near-term default risks.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group
May 21, 2020

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 175 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 775 bp is thinner than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 274 bp and the recent VIX of 29.1 points. The latter has been statistically associated with an 805 bp midpoint for the high-yield bond spread.

DEFAULTS

April 2020's U.S. high-yield default rate of 5.4% was up from April 2019's 2.8% and may approximate 13.3% 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 a 0.4% rise for IG and a 19.0% drop 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.

EUROPE

By Ross Cioffi and Barbara Teixeira Araujo of Moody's Analytics
May 21, 2020

EURO ZONE

The flash composite PMI for the euro zone rose to 30.5 in May, from April's record low of 13.6. The result supports our view that the COVID-19 crisis bottomed out in April. Before getting too excited, though, we note that May's reading remains below the trough of the previous crisis, at 36.2 in February 2009. The improvement in May is the first sign that the euro zone economy is getting back on its feet, but the rebound will be slow and fraught with uncertainty. There will be some respite as the supply shock eases and households come out of hibernation and release pent-up demand. But we expect this to dissipate quickly as job insecurity sets in and individuals worry about engaging in 'risky' activities such as spending a vacation in a hotel or going to a busy shopping center.

Short-time work schemes are preventing a massive increase in unemployment that would ensure a slump in domestic demand. But we don't see overall demand recovering to its pre-virus levels before these benefit programs end later this year. Jobs will remain on the line, especially if external demand lags. The euro zone is an export-oriented economy that spent 2019 struggling from low export demand because of the trade war and Brexit. Furlough schemes may prevent most, but not all, redundancies.

May's survey does show a step in the right direction. Granted, the euro zone economy is still in contraction as lockdown measures have been in place for much of the month and have only just begun to ease. But at least fewer firms reported declines, as inflows of new orders decreased by the smallest amount in three months. Sentiment also improved, though it remained below pre-pandemic levels. Firms continued to lower their prices to attract clients; price cuts for goods were the deepest since October 2009, while those for services slowed a bit from April.

Across countries, the flash composite climbed to 30.5 from 11.1 in France, and to 31.4 from 17.4 in Germany, with details matching those in the euro zone survey. We expect to see the same pattern of improvement in the other euro zone countries when their final results are posted later this month.

UNITED KINGDOM

March's slump in U.K. CPI inflation from 1.5% y/y to 0.8% marked the sharpest drop recorded since December 2008 and left the indicator at its lowest in almost four years. But this result wasn't unexpected. As we had forecast, the decline in the headline was largely driven by a further plunge in energy price pressures, with both electricity and gas (due to the drop in Ofgem's price cap) and motor fuels inflation (because of the slump in oil prices) plummeting over the month. Underlying inflation pressures also eased, however, as the COVID-19 crisis dealt a blow to consumer demand for most goods and services—especially in the travel and tourism sector—which led to aggressive discounting by some retailers. This came in line with our expectations that the current crisis will be more deflationary than inflationary, as the demand shock will take the upper hand over the supply shock.

The fact that people were forced to stay at home led food and alcoholic beverages inflation to rise as expected in April, but nowhere near enough to offset the weakness elsewhere, as some were forecasting. The stay-at-home policies also drove up inflation for games, toys and hobbies, computer software, and garden tools. But the core inflation rate still eased to 1.4% y/y in April from 1.6%, led by a slump in clothing and housing goods inflation, as well as in prices for most services, notably transport services and communication. Miscellaneous goods and services inflation also pulled back sharply.

Our view remains that the trend in CPI inflation is to the downside, with prices due to remain muted in coming months and years as the hit to demand lingers after the containment measures end. We expect headline inflation in the U.K. to fall below 0.5% y/y during the summer, well shy of the Bank of England's 2% target. After that, we expect it will still take some years before it reaches 2% again. Employment and incomes will be hit by the crisis and businesses will fail, which should dent growth and prevent GDP from reaching 2019's growth rates before 2022. Without demand there is no underlying inflation, which means that the BoE shouldn't worry much about inflation expectations getting out of hand as a result of its aggressive monetary policy package. On the contrary, we think the bank would not hesitate to ramp up its quantitative easing purchases already in coming months (by around £100 billion) or adopt other nonconventional measures if the crisis escalates.

ASIA PACIFIC

By Shahana Mukherjee of Moody's Analytics
May 21, 2020

JAPAN

The economic costs of the COVID-19 crisis continue to manifest for the Asia-Pacific region. In the latest development, following the global trend, Japan's GDP growth is off to a disappointing start in 2020. Japan's economy contracted yet again in the March quarter, as seasonally adjusted real GDP fell by 0.9% on a quarterly basis, following a 1.9% decline in the December quarter. The slowdown was broad-based, led by a 0.7% quarterly decline in private consumption and 0.5% decline in non-residential investment, though government consumption rose by 0.1% and partially offset some of this pressure. Japan's external sector, however, recorded a sharp decline, as exports collapsed by 6% on a quarterly basis, whereas imports fell by 4.9% over this period. This is the second consecutive quarterly decline in output and marks the beginning of a technical recession in Japan.

Japan's economy was at a crossroads in the beginning of 2020. On the consumer side, households were yet to recover from the sales tax hike implemented in October, while the production side slowed down following the frontloading prior to the tax hike, the protracted trade U.S.-China war and the unexpected hit from the "super typhoon" that hit Tokyo. Both sides of the economy were starting to witness a turnaround, as industrial production reversed the decline from January, rising by 1.9% on yearly terms, whereas retail sales also showed improvement, rising by 1.6% in February. The coronavirus outbreak, however, has altered Japan's expected recovery path.

The shocks triggered by the COVID-19 crisis have impacted Japan's economy through various channels. While domestic production was the first to be hit by supply disruptions (largely triggered by the regional shutdown in China), this was soon followed by a sharp decline in outbound shipments, as Japan's exports plummeted by 11.7% on yearly terms in March, as the virus rapidly spread across nations. Making matters worse for Japan was the internal spread and the progressively strict restrictions, which weakened consumer sentiment and dissuaded household consumption. These developments have more than undone the gains in domestic spending observed during the first two months of 2020 and have weighed heavily on the several export-reliant sectors, which were already weakened by a near-two-year U.S.-China trade conflict.

Looking ahead, the downside risks for Japan's economy are expected to arise from several sources. First, the extent of the downturn in overseas demand has not fully materialized, and with the U.S. yet to recover and large economies including Russia and India currently in the eye of the storm, the months ahead are expected to plumb new lows in global trade. The detrimental effects of the COVID-19 crisis on France, the U.S., China, which contracted by 5.8%, 4.8 and 6.8%, respectively, among other markets, are already visible, which suggests that a resumption in the demand for durable goods (including motor vehicles) or in global industrial activity to pre-crisis levels, will be some distance away, which will weigh heavily on the demand for machinery and transport equipment, some of Japan's main export items. While a gradual pickup in production activity in China will partially offset some this pressure in the short-term, a sustainable recovery can only take place once the global conditions improve, as China's recovery will eventually be contingent on that. Second, how well domestic demand copes in the post-emergency phase will be important. In view of a weak March quarter performance and the sustained pressure on the external sector, the strain on Japan's labour market will determine how subdued domestic demand conditions are likely to become. While the US$1.1 trillion emergency stimulus (and additional stimulus which is likely to follow in the weeks ahead) will assume an important role in buoying some pressure, the significant setback in consumer sentiment may cause households to remain retreated for a longer duration.

In addition to the above, there are new risks at play. First, a second wave of infections, either domestically or in other countries, is likely to extend the phase-out period of restrictions, which can deepen the current slowdown and delay the start of the recovery phase. A second wave of infections is already unfolding in China, as the North-eastern provinces of Jilin, Liaoning and Heilongjiang are placed under enhanced lockdowns. This is a formidable risk and one that threatens to not only destabilize China's recovery and trigger a second round of shocks for regional economies further down the supply chain; but one that also signals the need for extended lockdowns across the world, the opportunity costs of which, will only intensify over time. Second, reignited tensions between the U.S. and China will be another pressure point, which can potentially inflict more damage than just undoing the trade deal signed earlier this year. Further, brewing frictions between China and Australia, which have already intensified this week following the imposition of tariffs on Australia's barley exports, can escalate further in the days ahead, especially if Australia retaliates.

The Long View

In the aftermath of the destruction caused by the COVID-19 crisis, geopolitical frictions have every possibility of stoking trade tensions, since countries have increasingly resorted to tariffs to settle political scores in recent years. If these tensions formalize, they have the potential to induce additional disruptions, shift global value chains, and reorient current trade flows and in doing so, inflict significant economic damage which can weigh asymmetrically on export-reliant economies like Japan. In the current setting, the downside risks are expected to further weaken aggregate demand conditions for Japanese producers in the near-term, leading to a deeper downturn in the June quarter, before signs of a reversal surface.

Ratings Round-Up

All Downgrades for the Latest Week

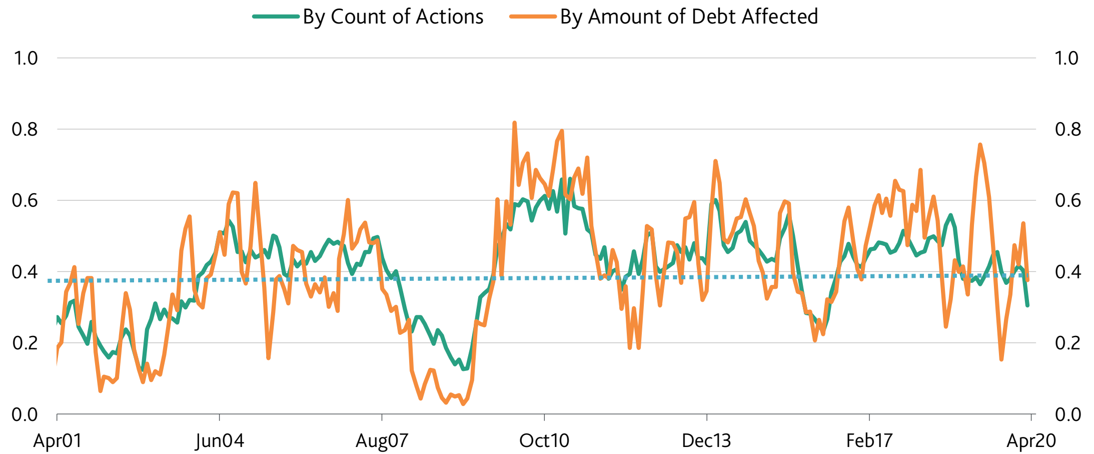
By Steven Shields

Corporate credit quality continues to deteriorate as coronavirus-related weakness spreads throughout the global economy. For the week ended May 19, downgrades accounted for all 23 U.S. rating changes. All but four changes were made to speculative-grade firms. The week's rating change activity was headlined by Penney (J.C.) Company Inc.'s following the company's decision to begin voluntary prearranged Chapter 11 proceedings. Moody's Investors Service will withdraw J.C. Penney's credit ratings as the result of its bankruptcy filing. Michael's Stores Inc.'s credit ratings were also lowered in the period, with its senior unsecured rating lowered to B2 from B3. Carnival Corp. was the largest U.S. downgrade in terms of debt affected ($8.6 billion) with its senior secured notes downgraded to Baa3 from Baa2. Few industries have been harder hit by the COVID-19 fallout than the cruise sector given its sensitivity to consumer demand and sentiment. Carnival's exposure to increased travel restrictions has left it vulnerable to shifts in market sentiment in these unprecedented operating conditions and the company remains vulnerable to the continued uncertainty around the potential recovery from the outbreak. Carnival's outlook remains negative. On May 18, Apache Corp. was downgraded to Ba1 from Baa3, impacting $8.5 billion in outstanding debt. The rating change reflects ongoing low oil prices which are pressuring its credits metrics and limiting the pace of debt reduction. Apache has substantially cut its dividend and capital spending to minimize negative free cash flow in 2020 and generate free cash flow as commodity prices recover to reduce debt, but low capital investment will drive lower production and reserves that will result in higher E&P leverage metrics than most Baa3 and Baa1 peers. Energy firms have been particularly vulnerable to credit downgrades in recent weeks as the global economic recession and stay-in-place measures reduce demand for oil products. The sharp fall in demand for oil products worldwide has knocked oil markets off-balance, and though prices are off their pandemic-fueled lows, they remained depressed. During the reference period, Moody's Investors Service withdrew Ultra Resource Inc.'s credit rating following its voluntary filing of petitions for relief under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the Southern District of Texas.

European rating activity was equally negative with all nine rating changes confined to credit downgrades. Among the changes, Moody's Investors Service lowered Hammerson PLC's senior unsecured notes to Baa2 from Baa1. The decision reflects higher-than-expected leverage metrics after the announcement that its sale of seven UK retail parks will not proceed. The rating also reflects concern the pandemic will make it more challenging for the company to achieve its deleveraging plans. Moody's downgraded Intelsat's probability of default rating (PDR) to D-PD following its Chapter 11 filing, and lowered Intelsat Jackson Holdings S.A.'s senior secured credit facilities ratings to Caa2 from B3. Luxembourg-based Consolidated Energy Finance S.A. was also downgraded in the past week. The rating actions were based on holding company Consolidated Energy Limited's higher credit risk, derived from lower cash generation and weak credit metrics in 2019-21, driven primarily by lower commodities prices but also by lower than expected production volumes.

Ratings Round-Up

FIGURE 1
Rating Changes - US Corporate & Financial Institutions: Favorable as % of Total Actions



* Trailing 3-month average

Source: Moody's

FIGURE 2
Rating Key

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

FIGURE 3

Rating Changes: Corporate & Financial Institutions – US

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG
5/13/20	OLIN CORPORATION	Industrial	SrUnsec	3,220	D	Ba2	Ba3	SG
5/13/20	SINCLAIR BROADCAST GROUP, INC. -DIAMOND SPORTS GROUP, LLC	Industrial	SrSec/SrUnsec /BCF/LTCFR/PDR	4,875	D	Ba2	Ba3	SG
5/13/20	OQ CHEMICALS CORPORATION	Industrial	SrSec/BCF		D	B2	B3	SG
5/13/20	CRG HOLDING CORP.-SALIENT CRGT, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
5/13/20	MICHAELS COMPANIES, INC. (THE) -MICHAELS STORES, INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR/PDR	500	D	B1	B2	SG
5/13/20	CENTENNIAL RESOURCE DEVELOPMENT, INC. -CENTENNIAL RESOURCE PRODUCTION, LLC	Industrial	SrUnsec/LTCFR/PDR	900	D	Caa2	Caa3	SG
5/13/20	POWER SOLUTIONS-CLARIOS GLOBAL LP	Industrial	SrSec/SrUnsec /BCF/LTCFR/PDR	5,657	D	Ba3	B1	SG
5/14/20	ENDO INTERNATIONAL PLC -PAR PHARMACEUTICAL INC.	Industrial	SrSec/BCF	4,843	D	B1	B2	SG
5/14/20	GULF FINANCE, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
5/14/20	INMAR, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG
5/15/20	PARK-OHIO INDUSTRIES INCORPORATED	Industrial	SrUnsec/LTCFR/PDR	350	D	B3	Caa1	SG
5/15/20	ULTRA PETROLEUM CORP.-ULTRA RESOURCES, INC.	Industrial	PDR		D	Ca	D	SG
5/15/20	FORUM ENERGY TECHNOLOGIES, INC.	Industrial	SrUnsec/LTCFR/PDR	342	D	Caa2	C	SG
5/15/20	JPW INDUSTRIES HOLDING CORPORATION	Industrial	SrSec/LTCFR/PDR	280	D	B3	Caa1	SG
5/18/20	APACHE CORPORATION	Industrial	SrUnsec/CP	8,457	D	Baa3	Ba1	IG
5/18/20	CARNIVAL CORPORATION	Industrial	SrSec/SrUnsec/CP	8,560	D	Baa2	Baa3	IG
5/18/20	SERVICE PROPERTIES TRUST	Industrial	SrUnsec/SrSub/JrSub/PS	5,650	D	Baa3	Ba1	IG
5/18/20	GAVILAN RESOURCES, LLC	Industrial	PDR		D	Ca	D	SG
5/18/20	APERGY CORPORATION	Industrial	SrUnsec/SrSec/BCF	300	D	B1	B2	SG
5/19/20	PENNEY (J.C.) COMPANY, INC.	Industrial	PDR		D	Caa3	D	SG
5/19/20	COOPER-STANDARD HOLDINGS INC. -COOPER-STANDARD AUTOMOTIVE INC.	Industrial	SrSec/BCF		D	Ba3	B1	SG
5/19/20	ELEMENT MATERIALS TECHNOLOGY LIMITED	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG

Source: Moody's

Ratings Round-Up

FIGURE 4

Rating Changes: Corporate & Financial Institutions – Europe

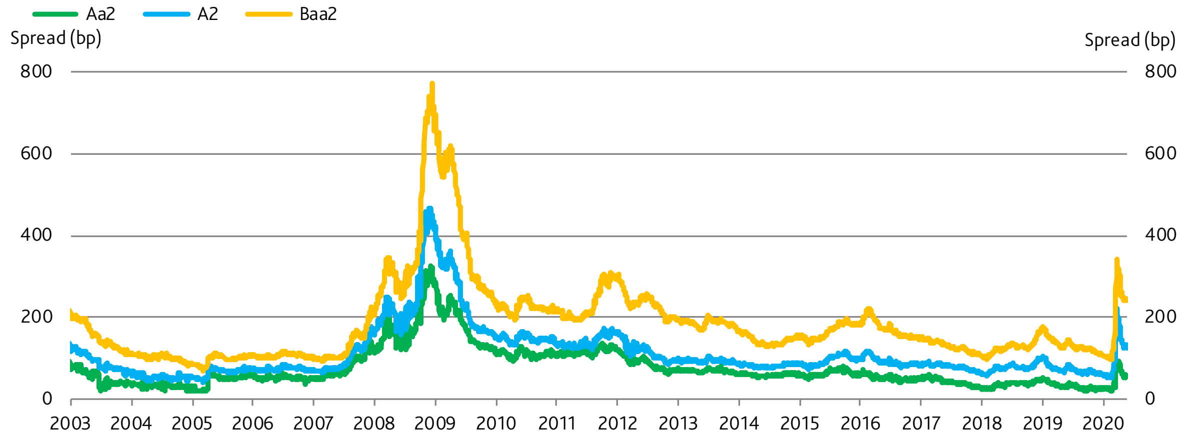
Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG	Country
5/13/20	HAMMERSON PLC	Industrial	SrUnsec/LTIR	2,112	D	Baa1	Baa2	IG	UNITED KINGDOM
5/13/20	AI AVOCADO HOLDING B.V.	Industrial	SrSec/BCF /LTCFR/PDR		D	B2	B3	SG	NETHERLANDS
5/13/20	CONSOLIDATED ENERGY LIMITED -CONSOLIDATED ENERGY FINANCE, S.A.	Industrial	SrUnsec/SrSec /BCF/LTCFR	1,325	D	B1	B2	SG	LUXEMBOURG
5/13/20	OXEA HOLDING VIER GMBH-OQ CHEMICALS HOLDING DREI GMBH	Industrial	SrSec/BCF		D	B2	B3	SG	GERMANY
5/14/20	INTELSAT S.A. -INTELSAT JACKSON HOLDINGS S.A.	Industrial	SrSec/BCF/PDR	1,840	D	B3	Caa2	SG	LUXEMBOURG
5/15/20	NOSTRUM OIL & GAS PLC	Industrial	SrUnsec/LTCFR/PDR	1,125	D	Caa3	Ca	SG	UNITED KINGDOM
5/18/20	MASRAF AL RAYAN (Q.P.S.C.) -AL RAYAN BANK PLC	Financial	LTD		D	Aa3	A1	IG	UNITED KINGDOM
5/18/20	TAKKO FASHION S.A R.L.	Industrial	SrSec/LTCFR/PDR	552	D	B3	Caa3	SG	LUXEMBOURG
5/18/20	ELIOR GROUP S.A.	Industrial	LTCFR/PDR		D	Ba2	Ba3	SG	FRANCE

Source: Moody's

Market Data

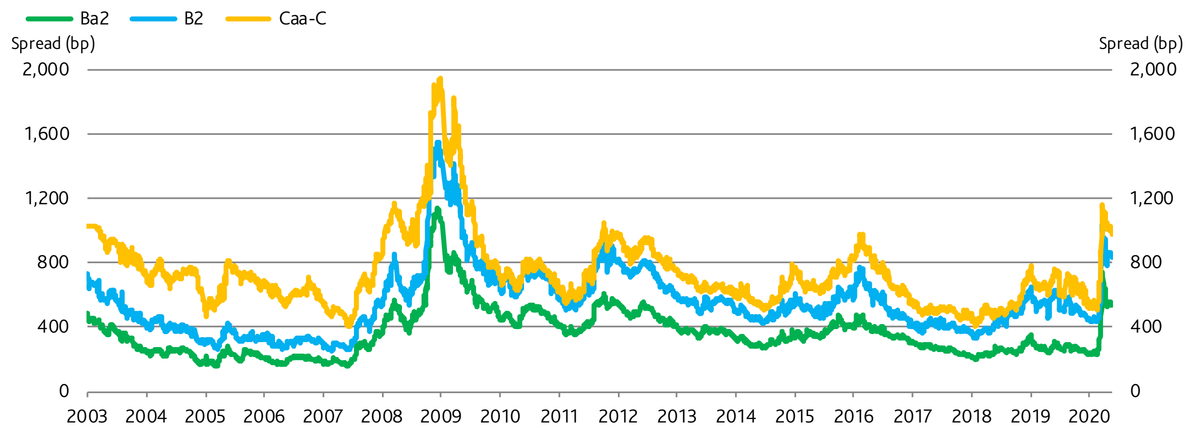
Spreads

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 (May 13, 2020 – May 20, 2020)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	May. 20	May. 13	Senior Ratings
Williams Companies, Inc. (The)	A1	Baa2	Baa3
Kinder Morgan Energy Partners, L.P.	Aa2	A3	Baa2
Kinder Morgan, Inc.	Aa1	A2	Baa2
Eastman Chemical Company	Aa1	A2	Baa3
Weyerhaeuser Company	Aa1	A2	Baa2
Motorola Solutions, Inc.	Aa1	A2	Baa3
Loews Corporation	Aa1	A2	A3
Entergy Corporation	Aa1	A2	Baa2
Domtar Corporation	Aa3	Baa1	Baa3
American Express Credit Corporation	Aa1	A1	A2

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	May. 20	May. 13	Senior Ratings
Carnival Corporation	Ca	Caa3	Ba1
Republic Services, Inc.	Baa1	A3	Baa2
Iron Mountain Incorporated	Ba1	Baa3	Ba3
CIT Group Inc.	B2	B1	Ba1
Talen Energy Supply, LLC	Ca	Caa3	B3
Olin Corporation	B3	B2	Ba3
Pitney Bowes Inc.	C	Ca	B1
United States Steel Corporation	C	Ca	Caa2
Cummins, Inc.	A3	A2	A2
Enbridge Energy Limited Partnership	Baa3	Baa2	Baa2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 20	May. 13	Spread Diff
Hertz Corporation (The)	Ca	21,440	12,153	9,287
Chesapeake Energy Corporation	C	34,766	30,580	4,187
Pitney Bowes Inc.	B1	1,570	1,464	106
SLM Corporation	Ba1	713	643	70
Olin Corporation	Ba3	488	431	57
Enbridge Energy Limited Partnership	Baa2	124	87	37
United States Steel Corporation	Caa2	1,514	1,481	34
Liberty Interactive LLC	B2	418	385	33
Nordstrom, Inc.	Baa3	547	516	32
Talen Energy Supply, LLC	B3	1,235	1,206	30

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 20	May. 13	Spread Diff
American Airlines Group Inc.	B1	5,268	8,062	-2,795
Avis Budget Car Rental, LLC	B3	1,897	3,155	-1,258
United Airlines Holdings, Inc.	Ba3	1,952	3,163	-1,211
United Airlines, Inc.	Ba3	1,664	2,696	-1,032
K. Hovnanian Enterprises, Inc.	Caa3	4,360	4,912	-553
Nabors Industries, Inc.	B3	3,998	4,547	-549
L Brands, Inc.	B2	897	1,237	-340
Delta Air Lines, Inc.	Baa3	1,022	1,270	-248
Staples, Inc.	B3	1,469	1,690	-220
Realogy Group LLC	Caa1	1,140	1,345	-205

Source: Moody's, CMA

Market Data

Figure 4. CDS Movers - Europe (May 13, 2020 – May 20, 2020)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	May. 20	May. 13	Senior Ratings
Equinor ASA	Aa1	A2	Aa2
Credit Agricole S.A.	Aa2	A2	Aa3
Credit Agricole Corporate and Investment Bank	Aa2	A2	Aa3
Nordea Bank Abp	Aa1	A1	Aa3
Svenska Handelsbanken AB	Aa1	A1	Aa2
Landesbank Baden-Wuerttemberg	Aa2	A2	Aa3
DNB Bank ASA	Aa2	A2	Aa2
Siemens Aktiengesellschaft	Aaa	Aa3	A1
Telia Company AB	Aaa	Aa3	Baa1
BASF (SE)	Aa1	A1	A2

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	May. 20	May. 13	Senior Ratings
Jaguar Land Rover Automotive Plc	C	Caa3	B1
Raiffeisen Bank International AG	Baa3	Baa2	A3
Iceland, Government of	Baa2	Baa1	A2
SKF AB	Baa2	Baa1	Baa1
BNP Paribas	A3	A3	Aa3
Netherlands, Government of	Aaa	Aaa	Aaa
Deutsche Bank AG	Baa3	Baa3	A3
Barclays Bank PLC	Baa3	Baa3	A1
Barclays PLC	Baa3	Baa3	Baa2
Banco Bilbao Vizcaya Argentaria, S.A.	Baa1	Baa1	A3

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 20	May. 13	Spread Diff
Matalan Finance plc	Caa2	7,119	5,981	1,138
TUI AG	B2	2,350	2,063	286
Jaguar Land Rover Automotive Plc	B1	1,403	1,235	169
CMA CGM S.A.	Caa1	1,764	1,716	49
Deutsche Lufthansa Aktiengesellschaft	Ba1	440	415	26
UPC Holding B.V.	B2	351	326	25
Unibail-Rodamco-Westfield SE	A3	303	279	23
Vue International Bidco plc	Caa2	947	930	17
Banca Monte dei Paschi di Siena S.p.A.	Caa1	439	425	14
Publicis Groupe S.A.	Baa2	175	167	7

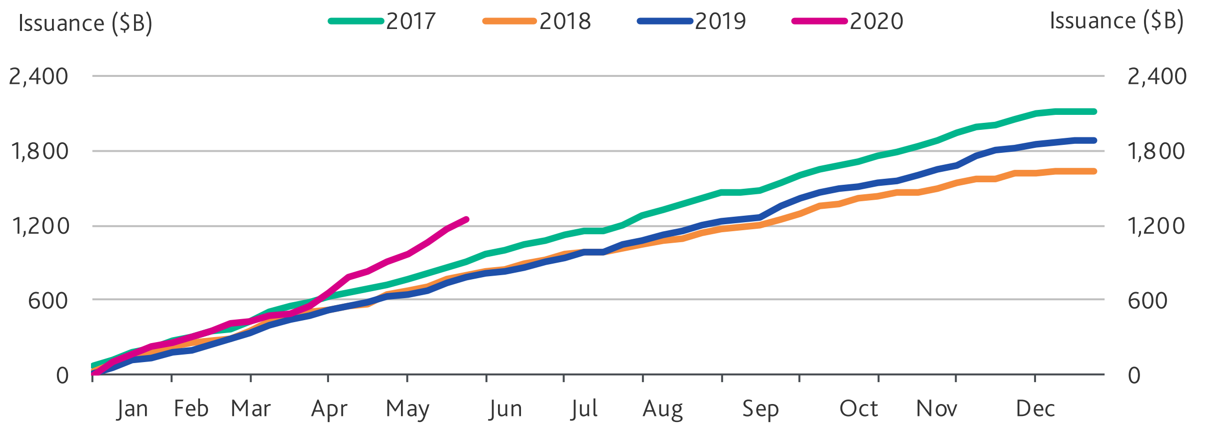
CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 20	May. 13	Spread Diff
PizzaExpress Financing 1 plc	C	11,054	13,870	-2,816
Selecta Group B.V.	Caa2	6,466	7,791	-1,325
Vedanta Resources Limited	B3	2,099	2,743	-644
Novafives S.A.S.	Caa2	1,871	2,025	-154
thyssenkrupp AG	B1	429	557	-129
Heathrow Finance plc	Ba1	212	280	-68
Ineos Group Holdings S.A.	B2	390	434	-44
Valeo S.A.	Baa3	281	318	-36
Premier Foods Finance plc	Caa1	252	287	-35
Casino Guichard-Perrachon SA	B3	715	747	-32

Source: Moody's, CMA

Market Data

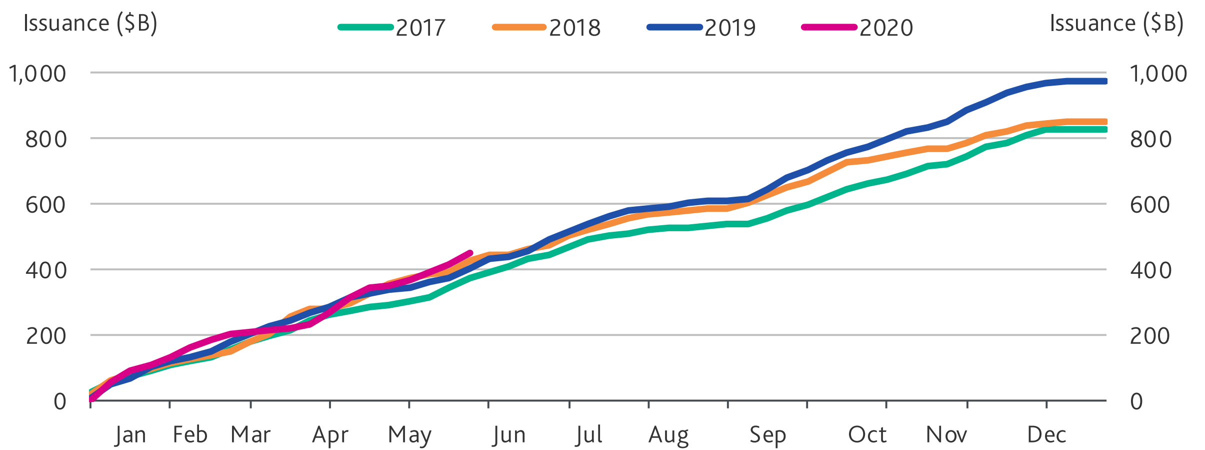
Issuance

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 & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	66.195	11.957	78.855
Year-to-Date	1,017.948	186.002	1,249.496

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	27.729	3.072	36.389
Year-to-Date	385.718	42.206	451.031

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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Report Number: 1230295

Editor
Reid Kanaley
help@economy.com

Contact Us

Americas:	1.212.553.4399
Europe:	+44 (0) 20.7772.5588
Asia:	813.5408.4131

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