

WEEKLY MARKET OUTLOOK

Record COVID-19 Hospitalizations for Now

Equity and Corporate Debt Rallies Withstand

Moody's Analytics Research

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Credit Markets Review and Outlook by John Lonski

Equity and Corporate Debt Rallies Withstand Record COVID-19 Hospitalizations for Now

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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: Higher Treasury bond yields warn of significantly less US\$-denominated IG bond issuance in 2021.

Credit Spreads	bond spread may exceed its recent 105 basis points. <u>High Yield:</u> A composite high-yield spread may be wider than its recent 406 bp by year-end 2020.
Defaults	<u>US HY default rate</u> : According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped from October 2019's 3.8% to October 2020's 8.3% and may average 10.3% during 2021's first quarter.
Issuance	For 2019's offerings of US\$-denominated corporate bonds, IG bond issuance rose 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 soar higher by 53% for IG to a record \$2.002 trillion, while high-yield supply may rise 28% to a record-high \$556 billion. For 2021, US\$-denominated corporate bond offerings may dealing by 35% (to \$15 trillion) for IG and dip by 15% (to

Investment Grade: Year-end 2020's average investment grade

decline by 25% (to \$1.5 trillion) for IG and dip by 15% (to \$480 billion) for high-yield, both of which top their respective annual averages for the five years ended 2020 of \$1.494 trillion for IG and \$410 billion for high-yield.

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Ratings Round-Up

Upgrades Match Downgrades in U.S., Europe

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Market Data

Credit spreads, CDS movers, issuance.

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Moody's Capital Markets Research recent publications

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

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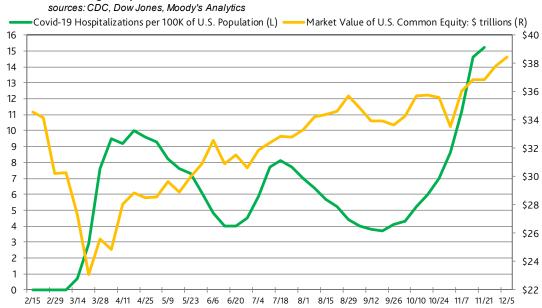
Credit Markets Review and Outlook

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

Equity and Corporate Debt Rallies Withstand Record COVID-19 Hospitalizations for Now

Hospitalizations related to resurgent COVID-19 have been setting new record highs, but so has the market value of U.S. common equity. Forward-looking financial markets have discounted the unfolding near term loss of business activity to resurgent COVID-19 and, instead, have focused on the faster normalization of economic activity that will occur after a vaccine has been sufficiently distributed. Not only do markets sense that the U.S. will better cope with the latest upsurge by COVID-19 compared with what occurred during March and April of this year, they also believe that when push comes to shove Congress will be quick to compensate those suffering unduly from the virus.

Figure 1: Market Value of U.S. Common Stock Sets New Zenith Despite COVID-19's Record-High Hospitalization Rate



The number of COVID-19 related hospitalizations last bottomed at the 3.7 per 100,000 Americans on September 19 and has since risen to a record high ratio of 15.2 per 100,000 as of November 21. The prior record high rate for hospitalizations was the 10.0 of April 18, 2020.

Since COVID-19 related hospitalizations bottomed on September 19, the market value of U.S. common stock has managed to increase by 12.8% to a new record high. The equity market's increase since mid-September includes an awesome 24.8% advance by the Russell 2000 stock price index for smaller companies.

Equity Market Breadth Improves High-Yield Credit Quality

The faster climb by the Russell 2000 reflects a healthy broadening of the current equity rally. As participation in an equity rally widens, the rally supplies more benefits to overall business activity. Of special importance is how the equity rally's improved breadth implies that smaller, highly leveraged companies may benefit from an increase the market value of their net worth. An increase in the market value of net worth ought to enhance the ability of high-yield companies to access financial capital.

Leverage does not depend on debt alone. All else the same, an increase in the market value of the business assets backing corporate debt and/or the growth of the business corporate earnings that service debt will

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reduce leverage. Recent rallies in corporate debt and equities have largely stemmed from widespread expectations of a material expansion by corporate earnings in 2021 and 2022. Today's relatively thin credit spreads and richly valued equity market warn of harsh corrections if fears of a contraction by corporate earnings take hold.

Despite resurgent COVID-19, the credit rating revisions of U.S. high-yield issuers show fewer downgrades than upgrades thus far in 2020's final quarter. An improved outlook for operating profits, the lengthening of maturities and reduction of interest expense brought on by debt refinancings, as well as credit-quality-enhancing mergers and acquisitions help to explain the arrival of negative net high-yield downgrades. In addition, credit ratings have benefited from reductions in outstanding debt that have been funded by the securing of cash via (i) divestments or (ii) infusions of common equity capital.

In response to the first wave of COVID-19, net U.S. high-yield downgrades soared from fourth-quarter 2019's 54 to the 194 of 2020's first quarter and then to the second-quarter's record-high 368. Subsequently, net U.S. high-yield downgrades have sunk to the third quarter's 29 and, most recently, to the -19 of the fourth quarter-to-date. (Net downgrades equal the difference between the number of downgrades less the number of upgrades.)

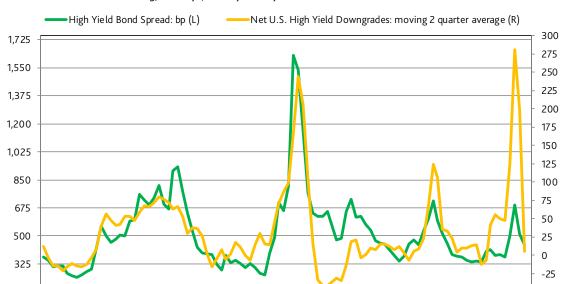


Figure 2: Plunge by U.S. Net High-Yield Downgrades Complements Narrowing of High-Yield Bond Spread sources: Bloomberg/Barclays, Moody's Analytics

The negative sign attached to net high-yield downgrades reflects fewer downgrades than upgrades for high-yield credit rating revisions. More specifically, a recent tally of U.S. high-yield rating changes for 2020's ongoing final quarter shows the 69 upgrades leading 50 upgrades. The last negative reading for U.S. net high-yield downgrades was the -42 of 2018's third quarter.

99Q2 01Q1 02Q4 04Q3 06Q2 08Q1 09Q4 11Q3 13Q2

The unprecedented adverse shock that accompanied COVID-19's first wave quickly ballooned the high-yield bond spread from mid-February's 344 basis points to the 1,013 bp of March 20, or when COVID-19 related hospitalizations formed their first peak. The current upswing by COVID-19 hospitalizations to a new recordhigh has instead been joined by the high-yield bond spread's narrowing from September 18's 490 bp to a recent 377 bp.

15Q1 16Q4 18Q3

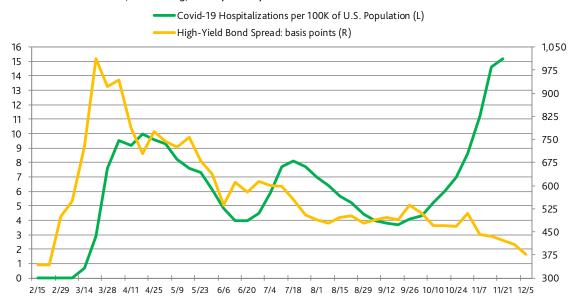
-50

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Figure 3: High-Yield Bond Spread's Response to Latest Upswing by COVID-19's Hospitalization Rate Differs Radically from March's Reaction

sources: CDC, Bloomberg, Moody's Analytics



Treasury Yields Have Yet to Anticipate a Double Dip

Another financial market indicator that has thus far defied the economically bearish implications of resurgent COVID-19 is the narrowing of Moody's analytics long-term Baa industrial company bond yield spread from September 19's 209 bp to December 9's 164 bp. By contrast, the first wave widened the yield spread of the long-term Baa industrials from mid-February's 176 bp to a March 20 high of 418 bp.

Moreover, the market's correct anticipation of a recession helped to drive the 10-year Treasury yield down from nearly 1.60% in mid-February to 0.60% by late April. In stark contrast, despite how resurgent COVID-19 supposedly increases the risk of a double dip recession, the 10-year Treasury yield has risen from 0.69% on September 18 to a recent 0.93%.

Base Metals Price Surge Stems from Upturn by Industrial Activity

In part, the latest rise by the 10-year Treasury yield can be ascribed to an increase in inflation expectations. The return of industrial metals price inflation is but one development that has diminished the likelihood of ruinous price deflation.

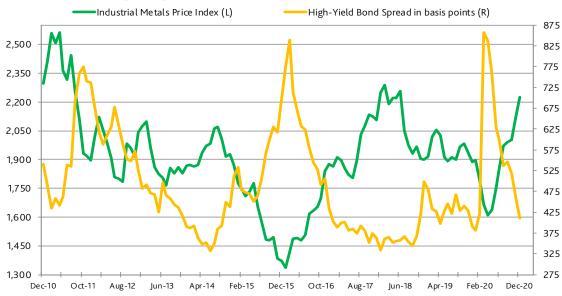
After being down by as much as 24.4% from a year earlier on March 30, Moody's Analytics industrial metals price index was recently up by 21.1% year-to-year. Now at its highest reading since 2018's second quarter, the return of base metals price inflation is largely the consequence of a global expansion of industrial output. The following is a sample of some recent eye-opening year-to-year industrial commodity price increases: copper (up 27.7%), U.S. Midwest steel (up 60.8%), steel rebar (up 28.3%), iron ore (up 59.7%), zinc (up 26.1%), nickel (up 24.8%), and lumber futures (up 88.9%).

During the past 10 years, the high-yield bond spread has tended to move in a direction opposite to that taken by the industrial metals price index. Thus, it follows, that the return of base metals price inflation has been accompanied by a narrowing of the high-yield bond spread.

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Figure 4: Latest Ascent by Industrial Metals Price Index Helps to Narrow High-Yield Bond Spread source: Moody's Analytics



Mortgage Applications Have Yet to Warn of a Collapse by Household Spending

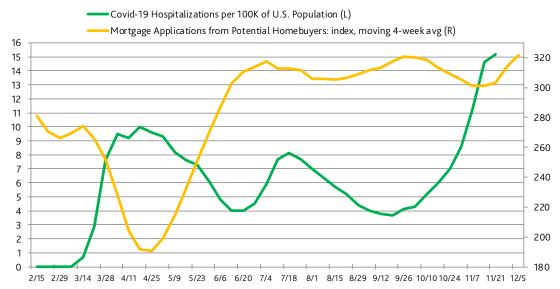
The nearly 89% yearly lift-off by the price of lumber futures favors a continuation of above-trend housing activity. Very lively readings on mortgage applications from potential homebuyers suggest the latest upswing by COVID-19 will subtract considerably less from business activity compared with the first wave of March-April 2020. In stark contrast to homebuyer mortgage applications' 19.7% year-over-year increase of the four-weeks-ended December 4, the moving four-week average of homebuyer mortgage applications suffered a year-over-year plunge as deep as the 30.6% from the span-ended April 17, 2020.

Resurgent COVID-19 might be expected to prompt an easing of seasonally adjusted homebuyer mortgage applications into 2021's first quarter, but the depth of the prospective decline may be considerably shallower than the plunge of April 2020.

Notwithstanding a sharp upswing by COVID-19-related hospitalizations, the homebuyer mortgage applications of December's first week were 1.9% above September 2020's average.

Figure 5: Homebuyer Mortgage Applications Withstand Upturn by COVID-19's Hospitalization Rate For Now sources: CDC, Mortgage Bankers Association, Moody's Analytics

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As inferred from recent consensus forecasts, core retail sales (which exclude gasoline station sales) are likely to fall by 0.3% monthly in November and that differs considerably from November's 2.7% monthly increased by homebuyer mortgage applications. Resilient homebuyer mortgage applications suggest consumers possess the wherewithal to avoid a replay of the second-quarter's calamitous plunge by household spending. And once COVID-19 risks have been sufficiently reduced, household spending may surprise on the upside.

The Week Ahead

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

THE U.S.

By Adam Kamins of Moody's Analytics

Pandemic's Grip Tightens, Widens

The latest update to the Moody's Analytics COVID-19 exposure index reveals that the pandemic's grip on the U.S. economy is not only tightening but also widening. Like virus hot spots more broadly, a diffuse set of economies now find themselves feeling the strain.

Specifically, an increasing portion of the northern Great Plains has joined the big coastal cities, tourism hubs, and the Sun Belt to earn an unwanted distinction: a member of the top tier of most-exposed economies.

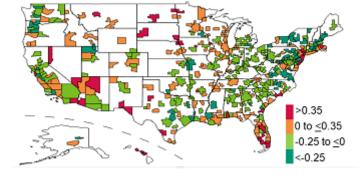
Increased virus exposure

The relentless spread of COVID-19 has now made its way into the z-scores reflecting relative economic vulnerability. North and South Dakota have shifted into the top five for exposure, while neighboring states like Iowa, Montana and Wisconsin keep climbing the ranks. In Iowa and Wisconsin, this is especially striking, as almost all structural measures of exposure—such as tourism reliance and demographic characteristics—indicate below-average risk. This signals just how badly those states' relative advantages were squandered, and how widespread the virus has become in each.

Some of the most striking increases are also noteworthy because they reflect the geographic spread of the coronavirus. While the upper Midwest has been the epicenter of the most recent wave, the ripple effects are reflected in the December update. Colorado, Minnesota and Wyoming have all become more exposed as case counts rise at an alarmingly rapid clip. Each of those states borders or sits in close proximity to one in which cases have been surging for some time, and the creep of new infections south is also evident based on rising numbers in New Mexico. That increase in cases has prompted some of the strictest lockdown measures since the latest wave took hold.

COVID-19 Exposure Has Shifted North





Source: Moody's Analytics

This can also be seen at the metro area level. Among the index's 14 biggest moves toward the top of the rankings, all but one occurred in the Midwest or Rocky Mountains. On the flip side, the Sun Belt

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has improved most noticeably, with the Southeast looking significantly better than many of its peers.

Further shifts

Interestingly, those southeastern states that have improved markedly are also among those whose populations have been less constrained in recent weeks. Thanksgiving week travel slowed far less in the Sun Belt than in much of the rest of the nation, potentially foretelling a spike in new cases in the weeks ahead.

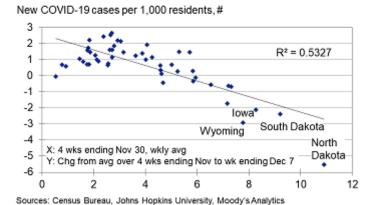
There is already some evidence that this is beginning to occur, but one needs to squint to see it. The southeastern states that experienced the most movement have generally seen an above-average increase in new per capita cases since Thanksgiving weekend concluded. This includes South Carolina, which experienced the smallest weekly decline in searches for directions of any state on the Wednesday before Thanksgiving and now ranks in the top five in the change in new positive tests.

It remains far too early to draw any conclusions, and in the weeks to come any data will likely be influenced by warmer weather in the South, giving its residents more opportunities to hold gatherings outdoors, limiting virus spread to some degree. But the recent figures could reflect something of an early indicator.

Swelling wave

A more compelling narrative revolves around a shift from higher- to lower-exposure regions. In fact, states that ranked in the top 10 for new COVID-19 cases during the last week of November experienced a slight decrease in reported cases over the subsequent week. But those outside of the top 10 saw more than one additional case per thousand residents relative to the preceding week.

Reach of Latest Wave Is Expanding



The increased spread is also evident when taking a longer view. States that have added the most cases over the past four weeks are experiencing some mean reversion following a period of exponential growth. But those with relatively low infection rates in November are seeing a noticeable increase. This bodes poorly for areas that have mostly avoided the worst of the fall wave to date, including big cities in the Northeast. And it may explain why numerous governors are considering or implementing stricter containment measures.

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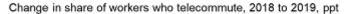
Remote work trends

Another update to this month's index involves new information from the Census Bureau on how people work. The American Community Survey recently updated its estimates of commuting pattern data to include 2019 figures. With more recent information in tow, the trade and travel category has been updated accordingly.

The broad narrative remains largely unchanged. Colorado is still by far the most reliant state on remote work, followed by Utah, Arizona and Idaho. While telecommuters as a share of the total workers increased nationally from 2018 to 2019, each of those states boasted an above-average increase. This highlights the growing edge that much of the Mountain West enjoys, insulating it to a degree from disruptions due to the pandemic and positioning it well for future growth. As more movers enjoy the flexibility to choose where they live regardless of their job location, no region is better suited to capitalize. Still, the contrast between fast-growing, tech-reliant Mountain states and the rest of the division, particularly Montana and Wyoming, is striking.

Relatively inexpensive Sun Belt states that are already adding residents should also benefit. The Southeast, along with Nevada, has seen its share of remote workers grow as well. Desirable weather will remain an important draw, especially given that many of the states with a larger remote workforce are dependent on hard-hit tourism.

Remote Workers Power Faster Growth





Sources: Census Bureau, Moody's Analytics

States in which remote work became less prevalent are generally small, cold and inexpensive. The list includes numerous resource-dependent places such as Alaska, Nebraska and the Dakotas, all of which rely on either energy or agriculture or both. Telecommuting is not an option in these industries, limiting future in-migration to some degree. Still, the states that depend on these industries should be able to attract or retain enough workers to prevent a demographic disaster. This is less likely to occur in portions of the Northeast and Midwest that rely on more footloose officeusing jobs, which could result in more out-migration.

Conversely, the link between rapid population growth and a more rapid pickup in remote work last year is clear. The strongly positive relationship signals that more movement was driven by personal reasons, as opposed to a new job, even before the pandemic. With this trend likely to be turbocharged in the years ahead, areas that already boast high in-migration should have even more reason for optimism in the medium and long term.

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Next Week

Following a weak October report, November retail sales will help clear the picture on what to expect for holiday sales. The Federal Open Market Committee meets for a final time in 2020 but is not expected to alter its stance on interest rates. Other data will come for import and export prices, industrial production, business inventories, and surveys by the Kansas City and Philadelphia Fed banks. New residential construction and the NAHB housing market index will further gauge the health of the housing industry.

EUROPE

By Ross Cioffi of Moody's Analytics

Energy Weighs Down Euro Zone Inflation

Next week will be busy with data releases in Europe, chief among them the trade figures for the euro zone, various consumer price indexes, and the Bank of England's monetary policy decision. We expect that the euro zone's external trade surplus rose to €32 billion in October from €24.8 in September. Exports likely continued recovering faster from month to month than imports thanks to demand from Asia—from China in particular. Export demand also likely supported industrial production in October. We now expect a 1.5% m/m increase in October following the 0.4% decrease. We had been more pessimistic, but after two large upside surprises in German and French industrial production figures we now expect stronger growth. We suspect this strength may have continued into November despite the lockdown measures, though their downward pressure on domestic demand will catch up with European manufacturers in December and January.

The bloc's consumer price index likely fell 0.3% y/y in November. According to the preliminary survey, energy remained a heavy weight on the headline index. Although services inflation sped up, goods prices fell by more than previously, leaving the overall inflation rate unchanged. CPI inflation likely remained weak in France and Italy too, though there may have been some slight upward movement thanks to supply disruptions in November. We expect French CPI inflation to have kicked up again to 0.2% y/y from 0% in October, while Italy's CPI likely fell 0.2% instead of 0.3%. Oil prices also firmed up relative to October, but they are still far below year-ago levels, meaning energy is set to weigh on headlines across Europe for months to come.

We expect that the U.K.'s three-month moving average unemployment rate was unchanged at 4.8% in October. Because the country extended its short-time work scheme, it will avoid an uptick in unemployment this season. But benefits are due to expire at the end of the first quarter of 2021, so the stability in the market is mostly temporary.

By contrast, we fear the Russian unemployment rate ticked up to 6.4% from 6.3% in November thanks to continued stress on the economy particularly via the all-important oil and gas industries. Lockdown measures in November in Europe, Russia's main export market, will only increase the pressure, so despite some improvement in oil prices coming from November's news of a vaccine, the sector is not yet in the clear. For this reason, we expect Russia's industrial production fell even further in November, down 6.5% y/y following the 5.9% decline in October. Given the loose labor market and overall weakness, we also expect retail sales slumped slightly in November, falling by 2.8% year over year, down from the 2.4% decline in October.

Finally, we don't expect either the Bank of England or the Central Bank of Russia to change their policy interest rates at their meetings next week. The BoE, moreover, expanded its quantitative easing program at its previous meeting, and since then there haven't been many signs that the macroeconomy has worsened enough to warrant another move.

The Week Ahead

	Key indicators	Units	Moody's Analytics	Last
Mon @ 11:00 a.m.	Euro Zone: Industrial Production for October	% change	1.5	-0.4
Tues @ 8:00 a.m.	U.K.: Unemployment for October	% 3-mo MA	4.8	4.8
Tues @ 8:45 a.m.	France: Consumer Price Index for November	% change yr ago	0.2	0.0
Tues @ 10:00 a.m.	Italy: Consumer Price Index for November	% change yr ago	-0.2	-0.3
Tues @ 5:00 p.m.	Russia: Industrial Production for November	% change yr ago	-6.5	-5.9
Wed @ 8:00 a.m.	U.K.: Consumer Price Index for November	% change yr ago	0.7	0.7
Wed @ 11:00 a.m.	Euro Zone: External Trade for October	€bil	32.0	24.8
Thur @ 11:00 a.m.	Euro Zone: Consumer Price Index for November	% change yr ago	-0.3	-0.3
Thur @ 1:00 p.m.	U.K.: Monetary Policy and Minutes for September	%	0.1	0.1
Fri @ 8:00 a.m.	U.K.: Retail Sales for November	% change	0.5	1.2
Fri @ 5:00 p.m.	Russia: Monetary Policy for December	%	4.25	4.25
Fri @ 5:00 p.m.	Russia: Unemployment for November	%	6.4	6.3
Fri @ 5:00 p.m.	Russia: Retail Sales for November	% change yr ago	-2.8	-2.4

Asia-Pacific

By Shahana Mukherjee of Moody's Analytics

New Zealand Rebounds; Bank of Japan on Hold

New Zealand's September-quarter GDP will be the highlight on the economic calendar. We expect the economy to have rebounded in the third quarter with GDP having risen by 8% on yearly terms following a 12.2% decline in the second quarter. Though the economy had considerable success in containing the localized outbreak, the restrictions induced an unprecedented downturn in the June quarter, characterized by significant declines in investment, exports and domestic consumption. While the easing of restrictions and conducive policy settings have supported the revival in domestic consumption since May, weaker employment prospects, conservative investment amid the ongoing uncertainty, and the severe hit to services (as international borders remain closed) will weigh on the rebound expected over the three months through September.

We expect the Bank of Japan to keep its monetary settings unchanged in December. Japan's policymakers have been proactive through the COVID-19 crisis, with fiscal efforts taking the lead. The Suga government recently announced a fresh stimulus worth ¥73.6 trillion (US\$ 708 billion) and intended to be spent on investment in new growth areas as well as to meet the short-term needs of adversely impacted households and businesses. The new package, partly financed by the next year's budget, is expected to drive policy efforts in the first half of 2021, while the Bank of Japan is expected to complement this stance through quantitative easing measures to sustain ultra-low funding costs.

Australia's unemployment rate is likely to have risen to 7.1% in November from 7% in October. Employment prospects in Australia continue to improve following the progressive easing of restrictions. The uptick in the jobless rate in October resulted despite 179,000 new positions added to the market, but this was largely due to a notable increase in the number of people looking for jobs. With consumer spending continuing to recover and domestic tourism starting to pick up, we expect more positions to have been added to the market, though a higher increase in participation may still contribute to the aggregate unemployment rate.

China's industrial production is likely to have increased by 7.1% in yearly terms in November, following a 6.9% increase in October. China's economy continues to recover in its post-COVID-19 phase with recent months seeing a stronger trade position as well as improvement in domestic spending, which has led to a narrowing of the demand and supply gap. We expect this momentum to have continued in November and, as a result, for industrial activity to have gained pace, likely led by a stronger pickup in manufacturing production.

South Korea's unemployment rate is likely to have eased to 3.9% in November from 4.2% in October. South Korea's labour market remains under pressure from the COVID-19-induced volatility in demand

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conditions. Even though exports have strongly rebounded, supported well by the surge in tech-demand, an incomplete recovery in global consumption coupled with weakness in domestic spending have prevented a meaningful revival in employment levels. Further, with the domestic third wave of the virus intensifying through November, weaker consumer spending (especially on services) is likely to have limited the scope for new employment opportunities.

	Key indicators	Units	Moody's Analytic	s Confidence	Risk	Last
Mon @ 11:00 p.m.	India CPI for November	% change yr ago	7.2	3	•	7.6
Tues @ 1:00 p.m.	China Industrial Production for November	% change yr ago	7.1	3	•	6.9
Tues @ 1:00 p.m.	China Retail Sales for November	% change yr ago	4.5	3	•	4.3
Tues @ 1:00 p.m.	China Fixed-Asset Investment for November	% change yr ago	2.1	3	•	1.8
Tues @ 3:30 p.m.	Indonesia Foreign Trade for November	US\$bil	2.6	2	•	3.6
Tues @ 11:20 p.m.	India Foreign Trade for November	US\$bil	-10	3		-8.7
Wed @ 10:00 a.m.	South Korea Unemployment Rate for November	%	3.9	3	•	4.2
Wed @ 10:50 a.m.	Japan Foreign Trade for November	¥bil	410.0	3	•	872.0
Thur @ 8:45 a.m.	New Zealand GDP for Q3	% change	8.0	3	•	-12.2
Thur @ 11:30 a.m.	Australia Unemployment Rate for November	%	7.1	3		7.0
Thur @ 11:30 a.m.	Singapore Nonoil Exports for November	% change yr ago	-2.8	3	•	-3.1
Fri @ 10:30 a.m.	Japan Core CPI for November	% change yr ago	-0.4	3	+	-0.4
Fri @ 10:30 a.m.	Japan Monetary Policy for November	%	-0.1	4	(-0.1

The Long View

The Long View

Higher Treasury bond yields warn of significantly less US\$-denominated IG bond issuance in 2021.

By John Lonski, Chief Capital Markets Economist, Moody's Capital Markets Research December 10, 2020

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 105 basis points was less than its 116 basis-point median of the 30 years ended 2019. This spread may be no wider than 115 bp by year-end 2020.

The recent composite high-yield bond spread of 406 bp is somewhat wider than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 164 bp but is narrower than what might be inferred from the recent VIX of 22.2 points. The latter has been historically associated with a 650-bp midpoint for a composite high-yield bond spread.

DEFAULTS

October 2020's U.S. high-yield default rate of 8.3% was up from October 2019's 3.8% and may average 10.3% during 2021's first quarter.

US CORPORATE BOND ISSUANCE

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 43.7% for IG and grew 21.4% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 31% for high-yield, wherein US\$-denominated offerings increased 142% for IG and grew 45% for high yield.

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

For 2019, worldwide corporate bond offerings grew by 5.4% annually (to \$2.447 trillion) for IG and advanced by 49.2% for high yield (to \$561 billion). The projected annual percent increases for 2020's worldwide corporate bond offerings are a 17% for IG and 22% for high yield. The expected annual declines for 2021's worldwide rated corporate bond issuance are 15% for investment-grade and 7% for high-yield.

US ECONOMIC OUTLOOK

Unacceptably high unemployment and other low rates of resource utilization will rein in Treasury bond yields. As long as the global economy operates below trend, 1.00% will serve as the upper bound for the 10-year Treasury yield. Until COVID-19 risks fade substantially, wider credit spreads are possible. For now, the corporate credit market has priced in the widespread distribution of a COVID-19 vaccine by mid-2021.

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Europe

By Ross Cioffi of Moody's Analytics December 10, 2020

UNITED KINGDOM

Britain's output grew by 0.4% m/m in October, following 1.1% growth in September, as activity began slowing amid a resurgence of the COVID-19 pandemic. In yearly terms, output was still severely depressed, down 8.2% after the 8.4% decline in September; compared with the pre-pandemic February level, GDP was 7.9% lower. The weaker growth came from a slowdown in services and construction. The services sector grew by 0.2% m/m following a 1% increase in September, while construction output rose by 1.1% after a 2.9% gain in September. As expected, accommodation and food services drove the monthly slowdown in growth. The subsector shaved 0.4 percentage point from growth. Goods production, meanwhile, picked up to 1.3% m/m from 0.5% a month earlier.

The results are in line with our expectations, and unfortunately presage a fourth-quarter contraction. The current lockdown won't cause nearly as much damage as it did in the spring, but the second wave of infections has darkened the outlook for the already-battered economy.

EURO ZONE

In other news, the European Central Bank eased its policy stance by expanding its pandemic emergency purchase program by €500 billion and extending it to March 2022, as well as extending its program of targeted long-term refinancing operations. There was no change to its regular policy rates or to interest rates applied to TLTROs. We expect the current policy stance to hold for several more years, and it will be a while before the economic data warrant any discussion of tightening.

After weeks of nail-biting, Poland and Hungary and the rest of the EU-25 seem set to compromise on the Multiannual Financial Framework and the new rule-of-law conditionality member states voted to apply on EU disbursements. According to officials, the compromise will delay the implementation of conditionality by lengthening the deliberation process, and funding agreed on in previous budgets will also be exempt from conditionality. Without a recovery fund, and with only a bare-bones emergency budget, the EU would have taken a step closer towards a new debt crisis, so this agreement will be essential for the European recovery.

GERMANY

Despite Germany's light lockdown in November, signs point to continued growth in the country's manufacturing. Most recently, the German truck toll mileage data for November were published, showing that the mileage covered by trucks subject to toll charges on German motorways increased by 1% m/m in seasonally and calendar adjusted terms. In yearly terms, mileage was up 1.6%. There is historically a strong correlation between truck mileage and industrial production, making this a robust indicator for how manufacturing is performing in the country. The truck mileage data add to positive signs already coming from the strong November manufacturing PMI and solid factory orders growth in October.

Our upbeat view on German manufacturing is also shaped by Wednesday's foreign trade balance release. Germany's surplus widened to €18.2 billion in October from €17.6 billion in September, as exports rose by 0.8% m/m and imports by only 0.3%, though it's important to remember that trade flows are still largely depressed compared with last year. In yearly terms, exports even lagged imports, meaning the goods surplus tightened during the month.

The October trade release bodes well for German manufacturing, though, given the sector's export orientation. The release signals that demand from Asia, and China in particular, has so far held up, and we think this will be true in November as well. China's manufacturing PMI also increased in November, while industrial output and consumer confidence were going strong in October. All this points to continued export demand in November, and therefore to an extra push at a time when domestic demand from Europe may wilt.

Of course, a relatively good November does not mean that the second wave of COVID-19 is not having an effect. We expect that the effects of the second wave and lockdown, which threaten to tighten in Germany due to the persistence of new infections, will be felt more in December and January. Furthermore, although Germany is the largest euro zone economy, and often what is good for German manufacturing is good for much of the rest of Europe, we're not confident that other countries will have such upbeat November releases.

The Long View

Asia Pacific

By Shahana Mukherjee of Moody's Analytics December 10, 2020

IAPAN

Japan's economy returned to growth in the September quarter, as seasonally adjusted GDP rose by 5.3% on a quarterly basis, stronger than the initial estimate of a 5% rebound, and following a historic 8.2% plunge in the prior quarter. The revised figures showed some deviations from the preliminary estimate. The turnaround was anchored by a notable and marginally stronger revival in consumer spending and government support, which were up by 5.2% and 2.8% in quarterly terms, respectively, while imports declined by a narrower margin of 8.8%. Consistent with our expectations, nonresidential investment eased at a narrower rate, having shaved off 0.4 percentage point from the net increase, though much lesser than the 1 percentage point decrease estimated earlier.

The third quarter reading provides some solace that the economy is gradually emerging from the throes of the COVID-19 crisis. While the revival in consumer spending is encouraging (as it marked the return to growth after three consecutive quarters of contraction), the gains from an improved external position were misleading, since they resulted from a notable decline in imports, rather than significantly higher overseas sales.

Looking ahead, the downside risks to recovery remain elevated. Chief among these is the intensifying domestic third wave, which will cause households to retreat once again. Although some guidelines are in place to limit social gatherings, they lack the desired effectiveness to curtail movement and, eventually, transmission. The resistance to introducing strict social distancing rules is a serious concern and one that may necessitate more severe steps should the current acceleration persist. Retail sales showed a strong 6.4% yearly rebound in October, but this was largely due to a low-base effect from last October (when the introduction of the higher consumption tax rate caused sales to plummet). In monthly terms, however, sales rose by a more modest 0.4% in October, indicative of cautious spending decisions.

Compounding this challenge will be a moderation in Japan's trade recovery, which had gained momentum since August. Though the slowdown will not be as severe as seen in the June quarter downturn, the weakness in durable goods' consumption will hurt the automotives industry, which is yet to recover from the COVID19-induced contraction. The fear is that volatility in demand conditions is likely to disrupt the recent revival in manufacturing- and retail-sector jobs, induce another setback in services employment, and as a result keep unemployment levels elevated for the next few quarters.

The Suga government has responded to these pressures with a fresh package worth ¥73.6 trillion (US\$ 708 billion), comprising initiatives such as digital innovation and reduction in carbon emissions in addition to provisions for the extension of some existing subsidy schemes. In particular, the package includes cash handouts for single-parent families, has provisions for enhancing medical facilities and support for elderly homes and provides an extended furlough scheme. The forward-looking package tries to balance the short-term needs of businesses and households against the Suga government's longer-term objectives of enhancing the economy's potential in new growth areas. While some of the direct provisions will help partially offset the asymmetric strain on certain segments, fears are that the returns from these measures are likely to be short-lived, especially if the domestic third wave of the virus continues to intensify and fuel the uncertainty in investor sentiment.

Eventually, the extent of the slowdown in the near-term will depend on the severity of the domestic outbreak and the duration of renewed restrictions. We expect Japan's economy to contract by 5.3% in 2020, followed by a rebound of 3.4% in 2021, but another nationwide emergency or a suboptimal mix of fiscal support may well lead to a deeper decline in the near term and a slower revival through the first half of 2021.

Ratings Round-Up

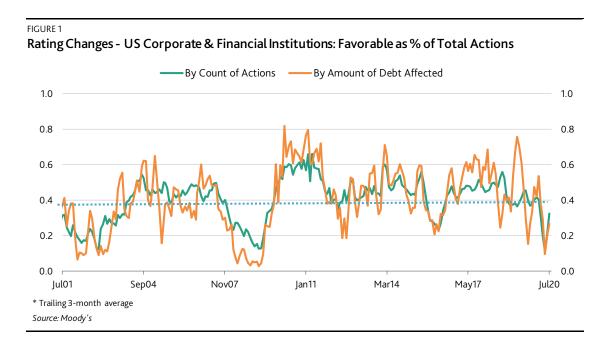
Ratings Round-Up

Upgrades Match Downgrades in U.S., Europe

By Steven Shields December 10, 2020

Fourteen U.S. credit rating changes were issued in the period ending December 8. Upgrades matched the number of downgrades in the period, but negative rating changes accounted for more than two-thirds of the total debt affected. The largest upgrade was made to Citrix Systems Inc. with Moody's Investors Service raising its senior unsecured debt rating to Baa3 from Ba1. The upgrade reflects Citrix's leading market positions in several segments of the virtualization, mobile application and network infrastructure markets and strong free cash flow. Seagate HDD Cayman experienced the sharpest downgrade in the period with its senior unsecured rating falling lowered from Baa3 to speculative-grade Ba1. The downgrade to the fallen angel reflects the technology hardware provider's increasingly aggressive shareholder-friendly financial policy and Moody's Investors Service's view that the company will operate at a higher financial leverage, and its cash balances will likely decline relative to debt over the next 12 to 24 months. The change affected approximately \$4.3 billion in outstanding debt. Meanwhile, on December 7 Moody's Investors Service lifted Meritage Homes Corp.'s corporate senior unsecured notes ratings to Ba1 from Ba2. The rating action echoes the progress Meritage has made in deleveraging through debt repayment and earnings growth, improvement in interest coverage, and an increase in revenue.

Like the United States, European rating activity was split down the middle between upgrades and downgrades. Of the four changes, downgrades accounted for 89% of the debt affected in the period. The bulk of the debt stemmed from the downgrade to Vedanta Resources Limited totaling approximately \$4.2 billion. VRL's senior unsecured notes were lowered to Caa1 from B3. The lower rating of the U.K. mining company's bond ratings reflects the holding company VRL's persistently weak liquidity and high refinancing needs amid growing signs of an aggressive risk appetite, with implications for the company's financial strategy and risk management. All ratings remain under further review for downgrades.



Ratings Round-Up

FIGURE 2 Rating Ke	У		
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

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	Old STD Rating		IG/SG
12/2/20	SEAGATE TECHNOLOGY PLC -SEAGATE HDD CAYMAN	Industrial	SrUnsec	4,334	D	Baa3	Ba1			IG
12/3/20	B&G FOODS, INC.	Industrial	SrSec/BCF		D	Ba1	Ba2			SG
12/3/20	ARCH RESOURCES, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2			SG
12/3/20	ASSUREDPARTNERS, INC	Financial	SrSec/BCF		U	B2	B1			SG
12/3/20	ITT INC.	Industrial	SrUnsec/BCF/CP		U	Baa3	Baa2	P-3	P-2	IG
12/3/20	AMERICAN TIRE DISTRIBUTORS, INC. (NEW)	Industrial	SrSec/BCF/LTCFR/PDR		U	Ca	Caa2			SG
12/4/20	ITRON, INC.	Industrial	SrUnsec/LTCFR/PDR	400	D	B2	В3			SG
12/4/20	CITRIX SYSTEMS, INC.	Industrial	SrUnsec	1,500	U	Ba1	Baa3			SG
12/4/20	RIVERBED PARENT, INC RIVERBED TECHNOLOGY, INC.	Industrial	SrUnsec/LTCFR/PDR	525	D	Caa2	Caa3			SG
12/4/20	SP PF BUYER LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa2	Caa1			SG
12/7/20	MERITAGE HOMES CORPORATION	Industrial	SrUnsec/LTCFR/PDR	1,000	U	Ba2	Ba1			SG
12/7/20	SOTERA HEALTH COMPANY- SOTERA HEALTH HOLDINGS LLC	Industrial	SrSec/BCF		U	B2	B1			SG
12/8/20	SUPERIOR ENERGY SERVICES, INCSESI, L.L.C.	Industrial	PDR		D	Ca	D			SG
12/8/20	TORTOISEECOFINBORROWER LLC	Financial	SrSec/BCF/LTCFR/PDR		D	Ba3	B1			SG

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	Old STD Rating	New STD Rating	IG/SC	G Country
12/3/20	VEDANTA RESOURCES LIMITED	Industrial	SrSec/LTCFR	4,170	D	В3	Caa1			SG	UNITED KINGDOM
12/3/20	B&M EUROPEAN VALUE RETAIL S.A.	Industrial	SrSec/LTCFR/PDR	539	U	Ba3	Ba2			SG	LUXEMBOURG
12/7/20	CINEWORLD GROUP PLC (GBP) -CROWN FINANCE US, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa3	Caa2			SG	UNITED KINGDOM
12/8/20	NEDBANK GROUP-NEDBANK PRIVATE WEALTH LIMITED	Financial	STD/LTD		D	Baa3	Ba1	P-3	NP	IG	ISLE OF MAN
Source: Mod	ody's										

Market Data

Spreads

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

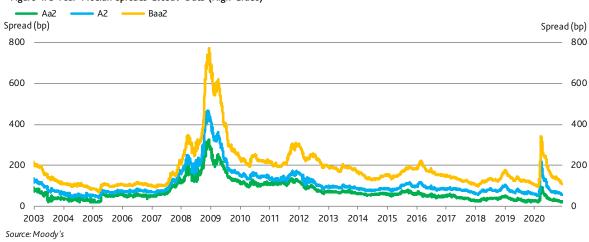
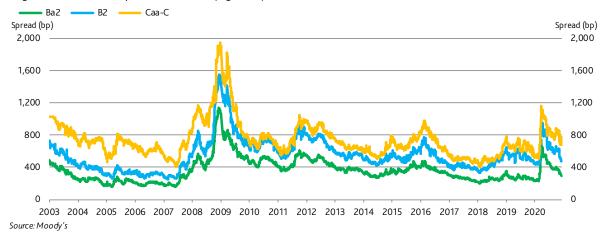


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS Movers

Figure 3. CDS Movers - US (December 2, 2020 – December 9, 2020)

CDS Implied Rating Rises	CDS Impli	_	
Issuer	Dec. 9	Dec. 2	Senior Ratings
Toyota Motor Credit Corporation	Aa1	Aa2	A1
John Deere Capital Corporation	Aa3	A1	A2
Exxon Mobil Corporation	A1	A2	Aa1
Coca-Cola Company (The)	Aa1	Aa2	A1
Intel Corporation	Aa3	A1	A1
Chevron Corporation	A1	A2	Aa2
Burlington Northern Santa Fe, LLC	Aa1	Aa2	A3
Eli Lilly and Company	Aa1	Aa2	A2
PNC Financial Services Group, Inc.	A2	A3	A3
Nissan Motor Acceptance Corporation	B1	B2	Baa3

CDS Implied Rating Declines	CDS Impli	_	
Issuer	Dec. 9	Dec. 2	Senior Ratings
Tyson Foods, Inc.	A2	Aa2	Baa2
Conagra Brands, Inc.	A3	Aa3	Baa3
Campbell Soup Company	A3	Aa3	Baa2
D.R. Horton, Inc.	A3	Aa3	Baa2
Pepco Holdings, LLC	A2	Aa2	Baa2
CVS Health	Baa2	A3	Baa2
Amgen Inc.	A2	Aa3	Baa1
Cox Communications, Inc.	A1	Aa2	Baa2
Carnival Corporation	Caa3	Caa1	B2
Kroger Co. (The)	Baa1	A2	Baa1

	_					
CDS Spread Increases	_		CDS Spreads			
Issuer	Senior Ratings	Dec. 9	Dec. 2	Spread Diff		
K. Hovnanian Enterprises, Inc.	Caa3	1,083	976	107		
Beazer Homes USA, Inc.	B3	314	279	35		
KB Home	Ba3	194	167	28		
R.R. Donnelley & Sons Company	В3	722	699	24		
Carnival Corporation	B2	531	510	22		
Gap, Inc. (The)	Ba3	192	170	22		
PulteGroup, Inc.	Baa3	95	74	21		
Royal Caribbean Cruises Ltd.	B2	641	621	20		
AutoNation, Inc.	Baa3	426	407	19		
L Brands, Inc.	B2	222	206	16		

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Dec. 9	Dec. 2	Spread Diff
Nabors Industries, Inc.	Caa2	1,882	2,418	-536
American Airlines Group Inc.	Caa1	1,170	1,484	-314
Talen Energy Supply, LLC	B3	1,142	1,326	-184
Rite Aid Corporation	Caa3	629	763	-133
United States Steel Corporation	Caa2	483	578	-95
United Airlines, Inc.	Ba3	523	603	-80
United Airlines Holdings, Inc.	Ba3	511	589	-79
Murphy Oil Corporation	Ba3	351	412	-61
Macy's Retail Holdings, LLC	B1	552	611	-59
Nissan Motor Acceptance Corporation	Baa3	270	323	-53

Source: Moody's, CMA

Figure 4. CDS Movers - Europe (December 2, 2020 – December 9, 2020)

CDS Implied Rating Rises	CDS Impli		
Issuer	Dec. 9	Dec. 2	Senior Ratings
Portugal, Government of	Aa2	A1	Baa3
HSBC Holdings plc	A1	A3	A2
Raiffeisen Bank International AG	A3	Baa2	A3
United Utilities Water Limited	Aa2	A1	A3
UPM-Kymmene	Aa2	A1	Baa1
Spain, Government of	A2	A3	Baa1
Societe Generale	Aa1	Aa2	A1
BNP Paribas	Aa1	Aa2	Aa3
ABN AMRO Bank N.V.	Aaa	Aa1	A1
ING Groep N.V.	Aa2	Aa3	Baa1

CDS Implied Rating Declines	CDS Impli		
Issuer	Dec. 9	Dec. 2	Senior Ratings
Banca Monte dei Paschi di Siena S.p.A.	Ba3	Ba2	Caa1
Alpha Bank AE	Caa1	В3	Caa1
Casino Guichard-Perrachon SA	Ca	Caa3	Caa1
Piraeus Bank S.A.	Caa3	Caa2	Caa2
Bayer AG	Baa3	Baa2	Baa1
Bank of Scotland plc	Baa3	Baa2	A1
Novo Banco, S.A.	В3	B2	Caa2
Ardagh Packaging Finance plc	Ba3	Ba2	Caa1
Jaguar Land Rover Automotive Plc	Caa3	Caa2	B1
Eksportfinans ASA	Caa1	В3	Baa1

DS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Dec. 9	Dec. 2	Spread Diff
Vedanta Resources Limited	Caa1	1,887	1,628	259
Banca Monte dei Paschi di Siena S.p.A.	Caa1	198	167	31
TUI AG	Caa1	585	556	29
Permanent tsb p.l.c.	Baa2	220	209	10
EWE AG	Baa1	111	105	6
Bayerische Landesbank	Aa3	61	56	5
Bank of Scotland plc	A1	66	61	5
Nationwide Building Society	A1	38	34	4
Electrabel SA	Baa1	79	74	4
Smiths Group plc	Baa2	80	76	4

OS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Dec. 9	Dec. 2	Spread Diff
Piraeus Bank S.A.	Caa2	564	614	-49
Stena AB	Caa1	500	543	-43
Casino Guichard-Perrachon SA	Caa1	644	686	-42
CMA CGM S.A.	Caa1	442	480	-38
Novafives S.A.S.	Caa2	693	730	-37
Rolls-Royce plc	Ba3	242	274	-32
Hammerson Plc	Baa3	296	323	-26
Deutsche Lufthansa Aktiengesellschaft	Ba2	239	262	-24
Vue International Bidco plc	Ca	663	684	-21
thyssenkrupp AG	B1	225	244	-19

Source: Moody's, CMA

CAPITAL MARKETS RESEARCH

Market Data

Issuance

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

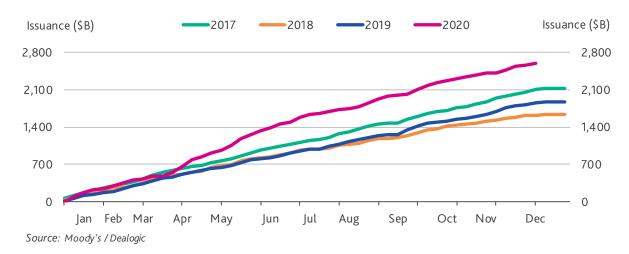


Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated

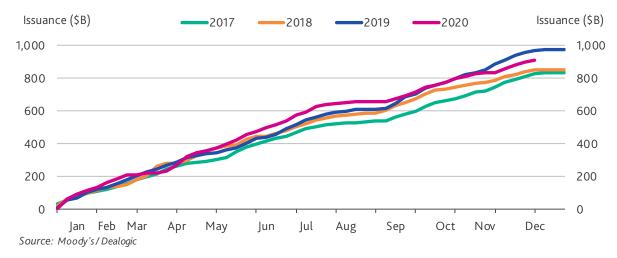


Figure 7. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	23.566	12.470	38.436
Year-to-Date	1,969.887	529.994	2,584.859

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	6.716	4.022	13.212
Year-to-Date	750.722	118.234	908.152

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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