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MOODY'S

WEEKLY MARKET OUTLOOK

Moody's Analytics Research

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Replay of the Inflationary 1970s Is Unlikely

Credit Markets Review and Outlook by John Lonski

Replay of the Inflationary 1970s Is Unlikely

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The Week Ahead

We preview economic reports and forecasts from the U.S., Europe and Asia/Pacific regions.

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The Long View

Full updated stories and key credit market metrics: First-quarter 2021's record-high issuance of US\$-denominated highyield bonds advanced more than 55% yearly.

Credit Spreads	bond spread may top its recent 101 basis points. High Yield: A composite high-yield spread may exceed its recent 344 bp by year-end 2021.
Defaults	<u>US HY default rate</u> : According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped from February 2020's 4.5% to February 2021's 7.9% and may average only 4.7% for 2021's final quarter, according to Moody's Investors Service.
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 58% to \$440 billion. In 2020, US\$-denominated corporate bond issuance soared 54% for IG to a record \$2.012 trillion, while high-yield advanced 30% to a record-high \$570 billion. For 2021, US\$-denominated corporate bond offerings may decline 22% (to \$1.57 trillion) for IG and drop 2% (to \$560 billion) for high-yield, where both forecasts top their respective annual averages for the five years ended 2020 of

\$1.494 trillion for IG and \$410 billion for high-yield.

Investment Crade: Vear-and 2021's average investment grade

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Ratings Round-Up

U.S. Corporate Credit Quality Weakens

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Credit spreads, CDS movers, issuance.

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

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Credit Markets Review and Outlook

Credit Markets Review and Outlook

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

Replay of the Inflationary 1970s Is Unlikely

Monetary and fiscal stimuli seem to be surfacing here, there, and everywhere. However, possible tax hikes have been downplayed for now. Perhaps, markets realize that getting increased spending through Congress will be far easier than approving tax hikes, especially if a very accommodative monetary policy limits the increase in interest rates resulting from increases in deficit-financed federal spending.

Stock prices have soared in anticipation of a 25% annual advance by the earnings per share of S&P 500 member companies. Some market commentators voice concern about the seeming impossibility of a broadly diversified equity portfolio of suffering deep and protracted losses.

Thin Spreads Reflect Confidence in Fed's Suppression of Treasury Yields

Expectations of deleveraging via very rapid profits growth have narrowed corporate bond yield spreads substantially. Confidence in the Fed's continued suppression of Treasury bond yields has abetted the compression of corporate bond yield spreads.

Following the Great Recession, corporate bond yield spreads were slow to narrow in response to the deleveraging that accompanied rapid profits growth mostly because investors feared a return by Treasury bond yields to their averages that held during the 2002-2007 business cycle upturn.

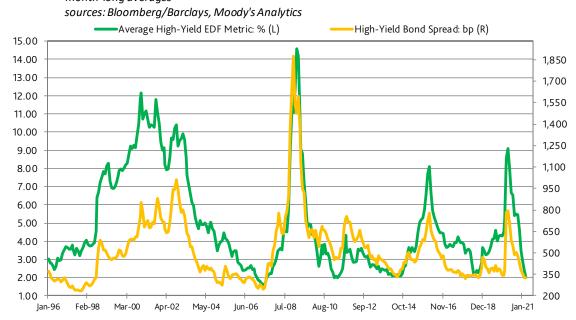
For example, the 3.37% average of Moody's Analytics expected default frequency metric of 2010—the first full calendar year of 2010-2019's business cycle upturn—is statistically associated with a 418 basis point midpoint for the Barclays high-yield bond spread. Instead, yearlong 2010's actual high-yield bond spread averaged a much wider 617 bp. Also note that 2010's core pretax profits of U.S. nonfinancial corporations expanded by 36.5% year-over-year, while the net high-yield downgrades of U.S. high-yield companies averaged what is still a record low -39 per quarter.

In 2010, investors bid cautiously for corporate bonds not because they feared another pronounced contraction of corporate earnings, but rather because they believed that 2010's 3.21% average for the 10-year Treasury yield would quickly return to its 4.45% average of 2002-2007. Much to the contrary, the 10-year Treasury yield would decline to 2.32%, on average, during 2011-2019.

And as fears of a lasting return by the 10-year Treasury yield to a range of 3% or higher faded, the month-long average of the high-yield bond spread eventually bottomed at January 2018's 320 bp, which happens to exceed the 310 bp of March 31, 2021. The latest high-yield bond spread is less than each of its prior month-long averages going back to June 2007's 256 bp. Once investors are convinced that profits will grow rapidly enough to facilitate widespread deleveraging, the high-yield bond spread will break under 300 bp. Nevertheless, a thinner than 300 bp high-yield bond spread will not occur if expectations of substantially higher Treasury bond yields take hold.

Credit Markets Review and Outlook

Figure 1: High-Yield EDF and High-Yield Bond Spread Approach Historical Lows month-long averages



Consensus May Continue to Underestimate Treasury Bond Yields

After plummeting from an October 2018 peak of 3.15% to a July 2020 bottom of 0.62%, the 10-year Treasury yield's month-long average subsequently rose to March 2021's 1.60%. On April 1, the 10-year Treasury was at 1.68%. Provided that COVID-19 risks do not rise, April's 10-year Treasury yield should average at least 1.7%.

Early March's Blue Chip consensus forecast of a 1.5% average for second-quarter 2021's 10-year Treasury yield seems too low as do each of the subsequent quarterly consensus projections ranging from 1.6% for the second-quarter, 1.7% for the final quarter and 1.8% for the first two quarters of 2022.

What may prove to be more accurate are the averages of the 10 highest Treasury yield forecasts submitted to early-March's Blue Chip survey. Here, the 1.7% projection for the second-quarter's average 10-year Treasury yield was followed by estimates of 1.8% for the third quarter, 1.9% for the fourth quarter and a 2.2% average for 2022's first half.

After including first-quarter 2021's actual 1.30% average, early March's 10 highest forecasts for the 10-year Treasury yield supply average annual predictions of 1.68% for 2021 and 2.25% for 2022, both of which are extraordinarily low when compared with the consensus forecasts for nominal GDP growth of 7.9% for 2021 and 6.1% for 2022. The deficiency of the highest 10-year Treasury yield projections become even deeper when compared with the averages of the 10-highest forecasts for nominal GDP growth, which are 9.1% for 2021 and 7.5% for 2022.

Even the Highest Forecasts for Treasury Yields Assume the Fed Will Cap Yields if Needed

Obviously, even the highest predictions of the 10-year Treasury yield reflect both a great deal of confidence in the Fed's ability to rein in Treasury bond yields. Moreover, the highest Treasury yield projections reflect the anticipation of nominal GDP growth quickly returning to its expected underlying long-term pace of 3.75% to 4% after 2022.

Perhaps it is worth repeating that the Federal Reserve plans to increase its holdings of U.S. Treasury securities by at least \$80 billion per month and its holdings of federal-agency mortgage backed securities by at least \$40 billion per month. Thus, over a 12-month span, Fed holdings of Treasuries may increase by at least \$960 billion and mortgages by at least \$480 billion.

If the goal of reaching full employment amid well-anchored long-term inflation expectations of 2% is endangered, markets feel confident that the Fed will step up its net purchases of Treasuries. Markets sense the Fed will allow Treasury bond yields to rise until higher interest rates threaten to materially reduce business activity.

Credit Markets Review and Outlook

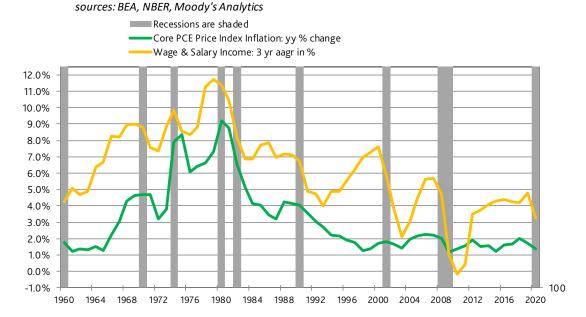
Recurring Climb by Price Inflation Requires Recurring Acceleration by Employment Income

Apparently, few currently worry about a recurring climb by consumer price inflation that would eventually drive the 10-year Treasury yield well above the 2010-2019 recovery's month-long average high of 3.15%. Yes, consumer price inflation may rise, but its ascent is expected to be short-lived. In turn, the long-term average of the 10-year Treasury yield may not differ much from its 2010-2019 mean of 2.41%.

A return of the runaway price inflation that was common to the 1970s requires a rate of wage and salary growth that is rapid enough to allow consumers to readily absorb price hikes. Affordability is critical to sustaining an ever-increasing rise by price inflation. Otherwise, widespread price hikes lead to an unwanted accumulation of inventories that ultimately trigger price discounting.

The way for the 1970s escalation of price inflation was cleared earlier by an increase in the average annualized three-year rate of growth for employment income from the 4.2% of the span-ended 1960 to the 9.0% of the span-ended 1969. In response, the annual rate of core PCE price index inflation rose from 1960's 1.8% (which wasn't much different from 2010-2019's 1.6% average) to 1969's 4.7%, where the latter would be intolerable by today's standards. When the annual rate of core PCE price index inflation peaked at 1980's 9.2%, employment income had soared higher at an average annualized rate of 11.4% during the three years ended 1980

Figure 2: Reaching 1970s' Style Core PCE Price Inflation May Require a Three-Year Average Annual Growth Rate for Wages & Salaries of At Least 8%



Today's World Hardly Resembles the Inflation-Prone 1970s

Less competition from low-cost emerging market countries was one reason wage and salary income grew at a breakneck pace during the 1970s. Back then China was largely isolated from the world economy, while the offshoring of computer programming and other services to India had yet to occur.

In addition, both the U.S. population and workforce were much younger during the 1970s. Compared with 2020's 39 years, the median age of the U.S. population averaged a much younger 29 years during the 1970s. For purposes of comparison, India's median age is now 29 years.

In general, both the real growth and price inflation of advanced economies are reined in by historically high median ages. Japan's median age of 49 years tops all major economies. The European Union's median of 44 years includes medians of 48 years for Germany and 47 years for Italy. The U.K.'s median age is a relatively young 41 years for Western Europe. For some time, very low inflation and slow economic growth have been common to Japan and Western Europe.

Credit Markets Review and Outlook

Figure 3: Selected Countries by Median Age and Percent of Population At Least 65 Years of Age as of 2020/2019 sources: CIA, World Bank, Moody's Analytics

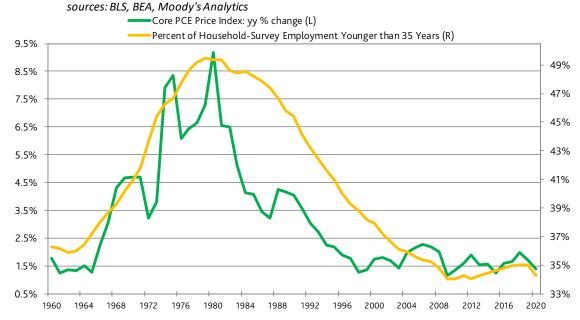
		% of Population 65			% of Population 65
Country Name	Median Age	Years and Older	Country Name	Median Age	Years and Older
	1	2		1	2
Japan	49	27	Turkey	32	9.0
Germany	48	22	Vietnam	32	8.0
Italy	47	23	Iran	32	6.0
European Union	44	20	Indonesia	31	6.0
South Korea	43	15	Saudi Arabia	31	3.0
Taiwan	42	n/a	World	30	8.7
Canada	42	18	Mexico	29	7.0
France	42	20	India	29	6.0
United Kingdom	41	19	South Africa	28	5.0
Russia	40	15	Philippines	24	5.0
United States	39	16	Iraq	21	3.0
China	38	11	Afghanistan	20	3.0
Brazil	33	9	Nigeria	19	3.0

Core Inflation Slows as Workforces Age

It is worth recalling that the runaway price inflation of the 1970s occurred amid an unprecedented surge in the percent of U.S. employment less than 35 years of age. The climb by the percent of employed Americans less than 35 years of age from 1962's 35.9% to 1979's record high 49.5% overlapped the lift-off by the annual rate of core PCE price inflation from a 1961 low of 1.2% to 1980's 9.2% apex. Completing the symmetry was the drop by the average annual rate of core PCE price inflation to 2010-2019's 1.6% average that was accompanied by a drop in the average share of employment aged less than 35 years to 34.5%.

Since 1959, the annual rate of core PCE price inflation shows a high correlation of 0.84 with the percent of employment aged less than 35 years. As far as explaining core inflation, no other metric generates a correlation close to 0.84%.

Figure 4: Percent of U.S. Employment Younger than 35 Years of Age Shows High 0.84 Correlation with Core PCE Price Inflation



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

THE U.S.

By Mark Zandi, Chief Economist of Moody's Analytics

Has the Crisis Cleared the Way for Talk of the Big Problems We Can Only Solve Together?

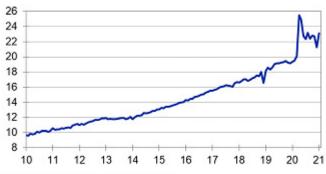
The U.S. jobs report for March, due this Friday, will clearly show the economy kicking into gear one year after the <u>pandemic</u> struck and caused one of the most severe downturns in the nation's history. We expect that employment increased by 800,000 jobs this month. The big gain is partly due to a bounce back from the awful winter weather in February, when Texas all but shut down for a few days. More business reopenings across the country also lifted employment, especially at restaurants and bars, and more in-person schooling increased education-related employment. Passage of the American Rescue Plan didn't occur early enough in the month to provide much of a boost to March job numbers. That's coming. Employment is expected to increase by close to 7 million jobs over the coming year, and the economy should recover the jobs lost during the pandemic recession last March and April by the end of 2022.

With the fast-improving economy, concern is fading that there will be a significant increase in foreclosures, rental evictions, and other credit problems once government support ends. That support has been substantial and continues. The moratorium on foreclosures for government-backed mortgage loans is in place until the end of June, and the eviction moratorium, which is set to expire in a few days, will surely be extended for another few months. Mortgage and student loan borrowers with government loans are still receiving forbearance, and many will continue to do so for the rest of this year. The American Rescue Plan and last December's COVID-19 relief plan also provide close to \$50 billion in assistance to lower-income households behind on their rent payments. This is roughly equal to the back rent, utilities and late fees we estimate were due at the start of this year by all delinquent renters. By the time the moratorium and forbearance end and the assistance is distributed, there should be a lot more jobs and much lower unemployment. House prices, which have been rising quickly, will be even higher, helping homeowners to build equity. This will ensure that the increase in foreclosures, evictions and defaults that will occur next year is largely about working through the backlog of credit problems that happen in typical times but weren't resolved during the pandemic.

While the economic recovery from the pandemic is in full swing, its impact will be long-lasting. Most obviously, COVID-19 has forced us way up the online learning curve. Fast. Prior to the pandemic, buying an airline or concert ticket on the internet was commonplace, and many of us did our banking online. But how many of us shopped online for groceries or a home? We do now. According to the Census Bureau, one-fifth of nonauto-related retail sales are done online, up from one-sixth just prior to the pandemic. And an astounding 60% of homebuyers in recent months have made offers to purchase a home they haven't seen in person. Of course, the move online was happening long before the pandemic, but the pandemic put this switch into hyperdrive.

Up the Online Learning Curve

Online retail sales as % of nonauto-related retail sales

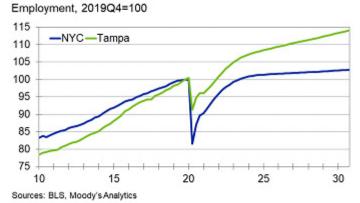


Sources: Census Bureau, Moody's Analytics

The economic benefits of moving online are substantial, although the fallout on brick-and-mortar retailers and former store workers has been devastating. Vacant stores are ubiquitous, and the number of people working in stores has fallen to where it was a quarter-century ago. Retailers will figure out new ways to get people back through their doors, but that will take time.

The move online has also been propelled by the seeming instantaneous mass adoption of work-from-anywhere policies when the pandemic hit. Less than one-tenth of the workforce worked consistently from home prior to the pandemic, according to the Bureau of Labor Statistics. As of early this year, well over one-fifth of us are doing so. There is sure to be some reversal as businesses and offices reopen, but there is no going back to the way things were. Work-from-anywhere is a fundamental shift in the way we live and work and will become even more prevalent as companies resolve the niggling human resource constraints. For example, what if someone working for a firm in New York City and being paid New York wages decides to move and work from Tampa for that city's lower living costs and taxes and shorter, if any, commute? Should that worker keep New York City wages or get Tampa wages instead? Probably Tampa wages. It will be tricky to navigate such a change, but HR departments will figure it out, and work-from-anywhere will be off and running.

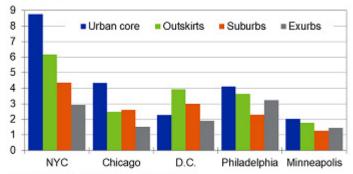
Work-From-Anywhere Diminishes NYC



The implications are enormous. Households unfettered from the company office are moving, particularly higher-income households renting in the big cities. Very large high-cost urban areas such as New York City and San Francisco are likely to be permanently diminished. Suburbs, exurbs, and smaller cities and towns will get a boost.

Pandemic Impact on Cities

Unemployment rate, %, diff from 2020Q1 to 2020Q4



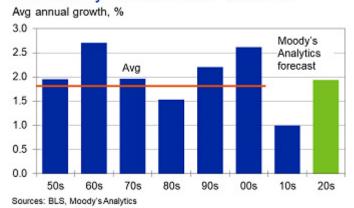
Sources: BLS, Census Bureau, Moody's Analytics

Travel has also been fundamentally changed by the pandemic. Tourism will bounce back, though not immediately; with vaccinations ramped up, the U.S. will soon get beyond the pandemic, but it could be years before much of the rest of the world is inoculated. Until then, there won't be as many tourists from the rest of the world visiting here. Business travel is not coming fully back, at least not in my lifetime. Doing business via Zoom-like platforms is just too easy and effective. Businesses have learned they can manage global workforces and close most deals from their PCs and don't need to bear the expense and hassle of airports and hotels. There will still be in-person business conventions—virtual gatherings just aren't the same and it's hard to imagine they ever will be—but not nearly as many.

Not obvious is whether COVID-19 will have a long-lasting impact on productivity growth. Productivity received a jolt from the pandemic, with nonfarm business productivity increasing 2.5% last year, the strongest gain since the aftermath of the financial crisis in 2010. In part, this is simply compositional, since the pandemic crushed lower-value-added industries such as brick-and-mortar retail and travel and lifted higher-value-added online and technology businesses. Companies may have also used the crisis caused by the pandemic, some as a matter of survival and others because it provided convenient cover, to more fully adopt labor-saving technologies that they had invested in during the previous expansion. Implementing these technologies involves wrenching changes such as large reorganizations and layoffs, which are difficult to do when things are going well.

But last year's increase in productivity seems also to reflect a more persistent revival in trend productivity growth. Trend productivity growth was stuck in the post-financial crisis expansion at just over 1% per annum, almost a percentage point below the 2% growth experienced in the previous 60 years since World War II. Indeed, we expect trend productivity growth to reaccelerate post-pandemic given the accelerated move online, more judicious business travel, and work-from-anywhere. We are also counting on a more fulsome adoption of promising labor-saving technologies such as machine learning, cloud computing, lidar and drones that have long been percolating. The long-running drag on trend productivity from the aging of the population should soon be easing, and an anticipated large infrastructure program, up next on the Biden administration's economic policy agenda, will also add to productivity.

Productivity Revival Post-Pandemic



This anticipated acceleration in trend productivity growth will be needed to help pay for the pandemic's extraordinary costs, which we will be paying for a long time. The Trump and Biden administrations have had no choice but to respond to the crisis with massive financial support to households and businesses. If they had not, the economy would have crumbled, and the costs would have been even greater. But the nation's debt load—publicly traded federal government debt to GDP—is as heavy as it has ever been, firmly over 100% and quickly rising. Once the economy is back in full swing and unemployment is back where it was before the pandemic, we will need to pivot and address our long-term fiscal problems. This means tax increases for corporations and the well-to-do who, for the most part, have navigated the pandemic gracefully, and it also means government spending restraint.

Coming to terms on addressing our long-term fiscal problems could daunt us given how discordant our politics have become. But perhaps the pandemic has changed this too. The crisis appears to have cleared the way for us to begin talking about the big problems we can only solve together, like climate change, income and wealth inequality, and our infrastructure needs. The pandemic has been a nightmare that we will not forget. Hopefully it has also startled us out of our collective stupor.

Next Week

The U.S. labor market appears to have had a strong March. When the Labor Department releases numbers tomorrow, we look for nonfarm employment to have risen by a net 965,000 for the month, compared with the consensus for a 650,000 increase. We expect private employment to have risen by 910,000, compared with the consensus for a 640,000 increase. The unemployment rate likely fell from 6.2% in February to 6% in March. Next week, we'll see the ISM nonmanufacturing index, factor orders, the California manufacturing survey, and international and wholesale trade numbers. Housing data will include the CoreLogic home price index. The producer price index will add new inflation data.

EUROPE

By Ross Cioffi of Moody's Analytics

Euro Zone Unemployment Rate Likely Unchanged

The euro zone unemployment release and various industrial production releases will be the big news next week. On the unemployment front, we aren't expecting any surprises. The unemployment rate likely was unchanged at 8.1% in February. Despite an expected uptick in Italy, estimates of unemployment that have been released so far have been tame. This is because workers are either protected by short-time work schemes or are temporarily stepping out of the labor force. In other words, it's important to remember that stability in the euro zone's unemployment rate is not yet a sign of recovery.

However, we are penciling in some gains in industrial production in February. Germany's industrial output likely rose 1.9% m/m and France's likely rose 1.5%. PMI surveys have been very promising with the manufacturing index edging ever higher since the start of the year. Still, Germany's closely correlated truck toll mileage index took a dip at the start of the month, which presents some downside risks. Nonetheless we would argue that manufacturing in the euro zone is well positioned, benefitting from ongoing export demand and domestic consumption of goods.

Finally, we expect retail sales in Italy to have increased 1.8% in February. Lockdown measures had eased during much of the month, which in other countries has resulted promptly in retail rebounds. Such gains will be short lived, however, as the country has since had to tighten measures amid stubbornly high infection rates.

	Key indicators	Units	Moody's Analytics	Last
Tues @ 10:00 a.m.	Italy: Unemployment for February	%	9.2	9.0
Tues @ 11:00 a.m.	Euro Zone: Unemployment for February	%	8.1	8.1
Fri @ 8:00 a.m.	Germany: Industrial Production for February	% change	1.9	-2.5
Fri @ 8:45 a.m.	France: Industrial Production for February	% change	1.5	3.3
Fri @ 9:00 a.m.	Spain: Industrial Production for February	% change yr ago	-1.4	-2.2
Fri @ 10:00 a.m.	Italy: Retail Sales for February	% change	1.8	-3.0
Thur @ 2:00 p.m.	Russia: Foreign Trade for February	\$ bil	9.4	8.9

Asia-Pacific

By Shahana Mukherjee of Moody's Analytics

Australia's growth momentum should hold up over next few quarters

The Reserve Bank of Australia is expected to keep the cash rate and the target on the three-year government bond yield steady at 0.1% in its April announcement. The parameters of the Term Funding Facility are also expected to be maintained.

The Australian economy has continued to see a strong recovery in domestic demand, anchored by the substantial expansionary fiscal and monetary support which have been in place for a year. Addressing the fragility in the labour market caused by the pandemic continues to be top priority for the apex bank, and in recent months there have been stronger than expected gains on this front; the unemployment rate dropped to 5.8% in February, with increasingly more full-time positions being created. This trend may well have some reversal in the short term, with the withdrawal of the government's JobKeeper scheme in the last week of March. However, the growth momentum should largely hold up over the next few quarters and further consolidate the domestic revival.

The RBA plans to keep rate hikes on hold until 2024. But this target will be challenged by the sharp increase in house prices, which is fuelling concerns regarding overheating asset prices and reaching unsustainable levels of household debt. Our expectations remain that the RBA will respond with tighter lending standards through the implementation of macroprudential measures rather than a rate hike, and this may happen as early as the second half of 2021 if the current acceleration continues.

The Reserve Bank of India is expected to keep its benchmark repo rate unchanged at 4% in its April announcement. India's economy has been on a recovery course since the easing of the stringent restrictions from June 2020. The December quarter recorded a stronger than expected 0.4% yearly rebound, aided by improving demand and declining domestic cases. The strong resurgence of COVID-19 in recent weeks, however, has renewed the uncertainty over near-term prospects, with important states recording sharp spikes in daily new cases. Inflation pressures driven by food and fuel prices also remain pertinent. Under these circumstances, the RBI is expected to maintain the status quo but retain space for further easing when a rate cut can gain more traction in stimulating demand.

Prices in China may show some revival. China's consumer prices are likely to have increased by 0.2% in yearly terms in March, following a 0.2% decline in February. Similarly, producer prices are likely to have increased by 2% in yearly terms, following a 1.7% increase in February. We expect continued revival in domestic consumption, weaker impact from easing food prices, and improving industrial activity to largely drive the monthly improvement.

	Key indicators	Units	Moody's Analytics	Confidence	e Risk	Last
Tues @ 3:30 p.m.	Australia Monetary Policy for April	%	0.1	4	(0.1
Wed @ 3:30 p.m.	India Monetary Policy for April	%	4	4	+	4
Thur @4:00 p.m.	Japan Consumer Confidence for March	Index	35	3	•	34
Fri @ 12:30 p.m.	China CPI for March	% change yr ago	0.2	3	•	-0.2
Fri @ 12:30 p.m.	China PPI for March	% change yr ago	2.0	3	•	1.7
Fri @ 3:00 p.m.	Malaysia Industrial Production for February	% change yr ago	0.5	3		1.2

The Long View

The Long View

First-quarter 2021's record-high issuance of US\$-denominated high-yield bonds advanced more than 55% yearly.

By John Lonski, Chief Capital Markets Economist, Moody's Capital Markets Research April 1, 2021

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 101 basis points was less than its 116 basis-point median of the 30 years ended 2019. This spread may be no wider than 110 bp by year-end 2021.

The recent composite high-yield bond spread of 344 bp approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread of 137 bp but is much narrower than what might be inferred from the recent VIX of 17.4 points. The latter has been historically associated with a 500-bp midpoint for a composite high-yield bond spread.

DEFAULTS

February 2021's U.S. high-yield default rate of 7.9% was up from February 2020's 4.5%. The recent average high-yield EDF metric of 2.0% portend a less-than-3% default rate by 2021's final quarter.

U.S. CORPORATE BOND ISSUANCE

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

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

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

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

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

For 2019, worldwide corporate bond offerings grew 5.8% annually (to \$2.456 trillion) for IG and advanced 51.6% for high yield (to \$570 billion). The annual percent increases for 2020's worldwide corporate bond offerings are 19.7% (to \$2.940 trillion) for IG and 23.9% (to \$706 billion) for high yield. The expected annual declines for 2021's worldwide rated corporate bond issuance are 14% for investment-grade and 2% for high-yield.

U.S. ECONOMIC OUTLOOK

Unacceptably high unemployment and other low rates of resource utilization will rein in Treasury bond yields. A now-rising global economy, as well as forthcoming fiscal and monetary stimulus suggest the upper bound for the 10-year Treasury yield will be 2%. The corporate credit market has priced in the widespread distribution of a COVID-19 vaccine by mid-2021.

The Long View

Europe

By Ross Cioffi of Moody's Analytics April 1, 2021

FRANCE

With cases and hospitalizations stubbornly high, France has declared its third lockdown. As of April 3, all nonessential businesses will be shut, and citizens will not be allowed to travel further than 10 km from their homes. The measures will last for four weeks, though President Macron has promised a gradual reopening starting in mid-May. France's job support scheme has already been extended until year's end, but with businesses once again forced to close doors, new supports may be called for.

GERMANY

German retail sales recovered some lost ground in February after dropping in January. The headline index, excluding sales of motor vehicles, rose 1.2% m/m after January's downwardly revised 6.5% decline. With lockdowns persisting through the month, retailers had little air to breathe. Sales survived thanks to online outlets, which allowed for some rebound in spending on clothing, furniture and appliances, and ICT equipment. Nonetheless, after sharp declines in the previous two months, however, sales are still lagging deeply in year-ago terms.

Lockdowns began to ease in the first weeks of March, which raised hopes for better sales figures in March. However, cases of COVID-19 started to trend upwards again, forcing states to delay reopening further. As a result, we're expecting little room for growth in March, especially with Easter falling in April this year.

SWITZERLAND

Swiss retail sales dropped by 5.2% m/m in February, adding to the 6.4% decline in the previous month. Sales of most subcategories declined in February, with clothing and footwear seeing the steepest drop in sales. One of the few bright spots in February's retail sales data was information and communication equipment, which increased in monthly and yearly terms. This subcategory of goods has seen strong year-on-year sales throughout the crisis, with many people opting to work from home and socialize over Zoom.

We're forecasting a contraction in Swiss GDP in the first quarter driven in part by weak household consumption. Growth in the second quarter will be dependent on the extension of lockdown measures. As lockdown measures ease, the glut of savings built up over the crisis should start diverting more and more into consumption of goods and services.

EURO ZONE

The euro zone's March manufacturing PMI surged to a record 62.5 from 57.9 in February. The rise is the latest in the recent upward trend that has benefitted nearly all euro zone economies. The survey results showed that output and demand improved with new orders at home and abroad increasing, as well as firms own purchasing activity.

As has been the case in recent months, gains were strongest among investment and intermediate goods. These are the categories most exposed to international demand and currently least effected by the pandemic. This is because despite ongoing infections and lockdowns, the drive to vaccinate the population is putting an end date on the horizon to the pandemic. This is allowing firms to invest and start planning for a post-lockdown economy. The situation for consumer goods did improve according to the survey, but we suspect they are still struggling as households' opportunities to consume remain limited amid ongoing lockdowns.

Accompanying these improvements were supply disruptions that have caused input costs to skyrocket. These supply constraints are constant across countries as well. Inputs such as plastics, semiconductors and steel are in short supply due to constraints on production capacity while at the same time international shipping and logistics is under pressure. The blockage at the Suez Canal which hit in the final days of the month only compounded these issues and will have knock-on effects that might be felt for weeks to come. The result of all these supply side disruptions has been higher costs and longer lead and delivery times. The survey reported that manufacturers hiked their prices in turn, which was reflected by the strong 2.2% m/m increase in core goods prices that was reported in this week's preliminary inflation estimate for the euro zone.

The Long View

Asia Pacific

By Shahana Mukherjee of Moody's Analytics April 1, 2021

IAPAN

Japan's labour market remained soft in February, as the seasonally adjusted unemployment rate held steady at 2.9%, consistent with our expectations. However, the headline jobless rate masked subtle shifts across segments, with some important industries faring worse than the aggregate change implied.

Despite the slight uptick in the labour force participation rate to 61.9%, only 30,000 new positions were created in February, compared with a more substantial 100,000 new jobs added to the market in January. As a result, even though unemployment levels declined by a narrower margin of 22% over the year, aggregate conditions reflected further weakening, as the jobs-to-applicant ratio inched down over the month to 1.09 in February.

As before, the strain on some key industries persisted through February. The largest yearly declines were once again in the pandemic-struck accommodation and restaurant industries, where employment plunged by 11.4%, while construction also came under some pressure in February, with a 3% decline.

Positive news

There was some positive news for the employment-generating wholesale and retail sectors. Domestic spending picked up, with retail sales rising by 3% over the month. Services such as real estate and medical and healthcare continued to increase recruitment, with employment in these industries up by 9% and 2.8% over the year, respectively. However, these gains were largely countered by the strain on the crucial manufacturing sector, which remained most acutely impacted by the prolonged hit to overseas demand. Employment was at a worrying 2.3% below levels seen a year ago, or equivalently, the sector shed 240,000 jobs from a year ago.

The near-term prospects have taken a turn for the worse. Not only are rising COVID-19 infection rates in Europe likely to weigh on the overseas demand revival in the months ahead, but domestic cases also are once again on an upward trend, and a slow domestic vaccine rollout is likely to impede efforts further. Moreover, the short-term disruptions caused by the Suez Canal blockage and the chip shortage affecting the auto industry may cause production or delivery delays in some segments. While it is early to gauge the sensitivity of domestic production to the latest disruptions, current conditions may well cause the expected catch-up in aggregate demand to be delayed by at least a few months, until vaccination rollouts at home and abroad pick up meaningfully.

In view of the staggered recovery in demand expected in the near-term, we expect any significant gains in total employment to be relatively muted. We look for the unemployment rate to settle near 3% over the next couple of months.

Ratings Round-Up

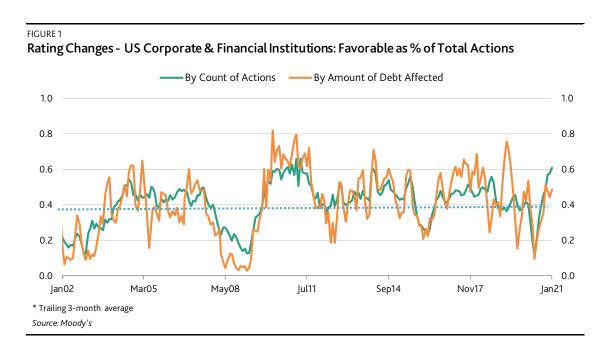
Ratings Round-Up

U.S. Corporate Credit Quality Weakens

By Michael Ferlez April 1, 2021

U.S. corporate credit quality weakened in the latest period. For the week ended March 30, upgrades accounted for 38% of rating changes and 22% of affected debt. Most rating changes were made to speculative grade companies, but two of the week's most notable changes were to investment-grade companies. Moody's Investors Service downgrade of Duke Energy Corp. accounted for the bulk of the affected debt last week. As part of its rating action, Moody's Investors Service downgraded Duke's issuer rating to Baa2 from Baa1. Duke's largest subsidiary, Duke Energy Carolinas LLC, was also downgraded, with its senior secured shelf and senior unsecured shelf downgraded to Aa3 and A2, respectively. In Moody's Investors Service rating action, Vice President—Senior Credit Officer Laura Schumacher was cited saying the Duke downgrade "reflects the company's weaker balance sheet strength objectives, which include targeting a ratio of cash flow from operations excluding changes in working capital (CFO pre-WC) to debt of 14%, lower than its previous target of 15%." The largest upgrade based on affected debt was to VEREIT Operating Partnership L.P. The U.S. REIT saw its senior unsecured credit rating upgraded to Baa2 from Baa3. The upgrade affected \$4.65 billion in debt. Despite last week's weakness, the overall trend in rating change activity remains positive, with upgrades consistently outnumbering downgrades since September.

Rating change activity in Western Europe was mixed. Despite accounting for 56% of total rating changes in the latest period, upgrades accounted for only 8% of the affected debt. The United Kingdom led all countries with three rating actions, followed by Spain with two. The most notable rating change last week was to Total SE. The French firm saw its senior unsecured rating and its junior subordinated rating downgraded to A1 and A3, respectively. In Moody's Investors Service rating action, Martin Fujerik, lead analyst for Total, was cited saying, "Today's rating action reflects our expectation that Total is unlikely to sustainably restore its credit metrics to the levels commensurate with an Aa3 rating over the next two to three years, such as Moody's adjusted retained cash flow (RCF)/net debt above 30%."



Ratings Round-Up

FIGURE 2 Rating Ke	v		
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	Old STD Rating	New STD Rating	Old LGD	New LGD	IG/SG
3/24/21	MACOM TECHNOLOGY SOLUTION HOLDINGS, INC.	Industrial	SrSec/BCF /LTCFR/PDR		U	В3	Ba2	SGL-3	SGL-2	LGD-3	LGD-2	SG
3/24/21	CORECIVIC, INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR	850	D	Ba1	Ba2					SG
3/24/21	GEO GROUP, INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR	1,150	D	B1	B2					SG
3/24/21	TRIPOLIS HOLDINGS SARL -BIOPLAN USA, INC.	Industrial	PDR		D	Caa2	D					SG
3/25/21	NOV INC.	Industrial	SrUnsec	1,783	D	Baa1	Baa2					IG
3/25/21	PATTERSON-UTI ENERGY INC.	Industrial	SrUnsec	860	D	Baa2	Baa3					IG
3/25/21	DIVERSEY HOLDINGS, INC. -DIAMOND (BC) B.V.	Industrial	SrUnsec/SrSec /BCF/LTCFR/PDR	531	U	Caa2	Caa1			LGD-3	LGD-2	SG
3/25/21	VEREIT, INCVEREIT OPERATING PARTNERSHIP, L.P.	Industrial	SrUnsec	4,650	U	Baa3	Baa2					IG
3/25/21	TESLA, INC.	Industrial	SrUnsec/LTCFR/PD	1,800	U	В3	B1	SGL-2	SGL-1			SG
3/26/21	DUKE ENERGY CORPORATION	Utility	SrSec/SrUnsec/BCF /LTIR/JrSub/PS	26,538	D	Aa2	Aa3					IG
3/26/21	LKQ CORPORATION	Industrial	SrUnsec /LTCFR/PDR	1,770	U	Ba3	Ba2	SGL-2	SGL-1			SG
3/26/21	OAK HOLDINGS, LLC -OAK PARENT, INC.	Industrial	SrSec/BCF /LTCFR/PDR		D	B2	В3					SG
3/26/21	INSTALLED BUILDING PRODUCTS INC.	Industrial	SrUnsec/SrSec /BCF/LTCFR/PDR	300	U	В3	B1					SG
3/29/21	BELFOR HOLDINGS, INC.	Industrial	SrSec/BCF		D	Ba3	B1					SG
3/30/21	TRIPOLIS HOLDINGS SARL -BIOPLAN USA, INC.	Industrial	PDR		D	Caa2						SG
3/30/21	EPIC Y-GRADE, LP-EPIC Y-GRADE SERVICES, LP	Industrial	SrSec/BCF /LTCFR/PDR		D	Caa2	Caa3					SG
Source: Mo	ody's											

Ratings Round-Up

FIGURE 4
Rating Changes: Corporate & Financial Institutions – Europe

	<u> </u>												
Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	Old STD Rating	New STD Rating	Old LGD	New LGD	IG/S G	Country
3/24/21	TOTAL SE	Industrial	SrUnsec/JrSub/MTN	63,761	D	Aa3	A1					IG	FRANCE
3/24/21	PARK LUXCO 3 S.C.A.	Industrial	SrSec/BCF /LTCFR/PDR		D	В2	В3			LGD-3	LGD-4	SG	LUXEMBOURG
3/25/21	MABEL MEZZCO LIMITED	Industrial	SrSec/LTCFR/PDR	310	U	В2	B1					SG	UNITED KINGDOM
3/25/21	BURFORD CAPITAL LIMITED	Financial	SrUnsec/LTCFR	683	U	Ba3	Ba2					SG	UNITED KINGDOM
3/28/21	GENESIS CARE PTY LIMITED- GENESIS SPECIALIST CARE FINANCE UK LIMITED	Industrial	SrSec/BCF/LTCFR		D	B1	В2					SG	UNITED KINGDOM
3/29/21	BFA TENEDORA DE ACCIONES, S.A.U. -BANKIA, S.A.	Financial	SrUnsec/JrSrUnsec /LTD/MTN/PS/CP	3,238	U	Baa3	Baa1	P-3	P-2			IG	SPAIN
3/30/21	3I GROUP PLC-PEER HOLDING III B.V.	Industrial	SrSec/BCF /LTCFR/PDR		U	B1	Ba3					SG	NETHERLANDS
3/30/21	NH HOTEL GROUP S.A.	Industrial	PDR		D	В3	Caa1					SG	SPAIN
3/30/21	KIRK BEAUTY TWO GMBH- DOUGLAS GMBH	Industrial	SrSec/BCF	1,540	U	В3	В2					SG	GERMANY
Source: Moo	dy's												

Market Data

Spreads

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

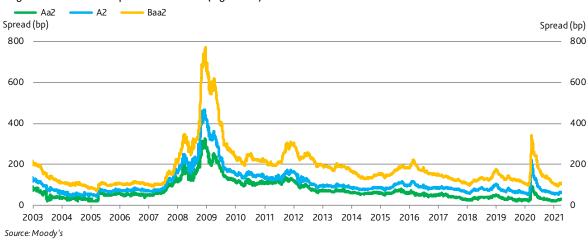
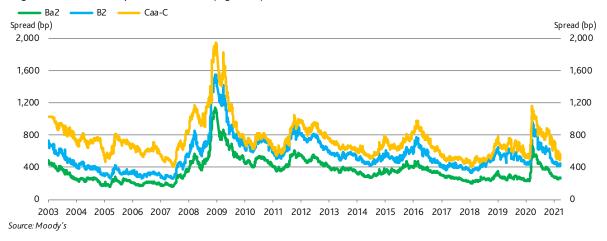


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS Movers

Figure 3. CDS Movers - US (March 24, 2021 – March 31, 2021)

CDS Implied Rating Rises	CDS Impli	ed Ratings	_
Issuer	Mar. 31	Mar. 24	Senior Ratings
DPL Inc.	Ba1	B2	Ba1
Cargill, Incorporated	A3	Baa3	A2
Archer-Daniels-Midland Company	A3	Baa3	A2
Air Products and Chemicals, Inc.	Aa2	A2	A2
Philip Morris International Inc.	A3	Baa2	A2
Amgen Inc.	Aa2	A1	Baa1
American Tower Corporation	Baa3	Ba2	Baa3
Dominion Energy, Inc.	Aa2	A1	Baa2
Republic Services, Inc.	Baa1	Baa3	Baa2
Texas Instruments, Incorporated	Baa1	Baa3	A1

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Mar. 31	Mar. 24	Senior Ratings
WEC Energy Group, Inc.	Baa2	A1	Baa1
Rite Aid Corporation	C	Caa3	Caa3
Macy's Retail Holdings, LLC	Caa2	B3	B1
Liberty Interactive LLC	Caa2	B3	B2
RPM International Inc.	Baa1	A2	Baa3
Mack-Cali Realty, L.P.	Caa2	B3	B1
JPMorgan Chase & Co.	A3	A2	A2
Goldman Sachs Group, Inc. (The)	Baa2	Baa1	A2
Morgan Stanley	Baa2	Baa1	A1
JPMorgan Chase Bank, N.A.	A1	Aa3	Aa2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Mar. 31	Mar. 24	Spread Diff
Rite Aid Corporation	Caa3	726	630	95
Talen Energy Supply, LLC	B3	1,259	1,192	67
Macy's Retail Holdings, LLC	B1	446	390	56
R.R. Donnelley & Sons Company	B3	588	542	46
Service Properties Trust	Ba2	203	174	29
United Airlines, Inc.	Ba3	441	417	24
Credit Suisse (USA), Inc.	Aa3	98	74	24
United Airlines Holdings, Inc.	Ba3	436	418	18
Pitney Bowes Inc.	B1	479	465	15
Nordstrom, Inc.	Baa3	234	220	15

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Mar. 31	Mar. 24	Spread Diff
DPL Inc.	Ba1	137	349	-212
Univision Communications Inc.	Caa2	374	476	-102
American Tower Corporation	Baa3	83	180	-97
Smithfield Foods, Inc.	Ba1	108	168	-60
Texas Instruments, Incorporated	A1	53	96	-43
United States Cellular Corporation	Ba1	135	179	-43
United States Steel Corporation	Caa2	396	438	-42
Sysco Corporation	Baa1	86	126	-40
iStar Inc.	Ba3	331	366	-34
Duke Realty Limited Partnership	Baa1	71	100	-29

Source: Moody's, CMA

Figure 4. CDS Movers - Europe (March 24, 2021 – March 31, 2021)

CDS Implied Rating Rises	CDS Impli		
Issuer	Mar. 31	Mar. 24	Senior Ratings
Alliander N.V.	Aa3	A3	Aa2
Atlas Copco AB	A2	Baa2	A2
KBC Group N.V.	Baa1	Baa3	Baa1
National Grid plc	Aa3	A2	Baa2
Societe Generale	Aa1	Aa2	A1
ABN AMRO Bank N.V.	Aaa	Aa1	A1
Lloyds Bank plc	Aa1	Aa2	A1
UniCredit Bank AG	Aaa	Aa1	A2
Vodafone Group Plc	A3	Baa1	Baa2
Bayerische Motoren Werke Aktiengesellschaft	Aa3	A1	A2

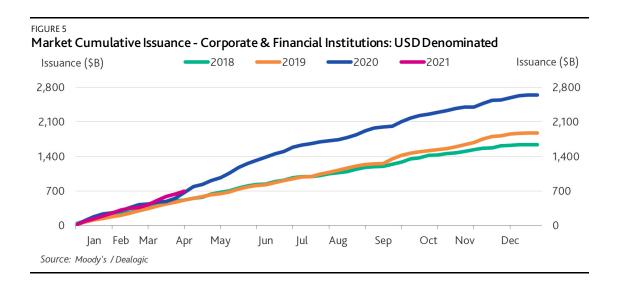
CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings	
Issuer	Mar. 31	Mar. 24	Senior Ratings
Credit Suisse Group AG	Baa2	A3	Baa1
Credit Suisse AG	Baa2	A3	Aa3
Nordea Bank Abp	Aa1	Aaa	Aa3
Commerzbank AG	A3	A2	A1
Landesbank Hessen-Thueringen GZ	Baa2	Baa1	Aa3
Norddeutsche Landesbank GZ	Baa3	Baa2	A3
Bank of Ireland	Baa1	A3	A2
National Grid Electricity Transmission plc	A1	Aa3	Baa1
Autoroutes du Sud de la France (ASF)	Aa3	Aa2	A3
National Bank of Greece S.A.	Ba3	Ba2	Caa1

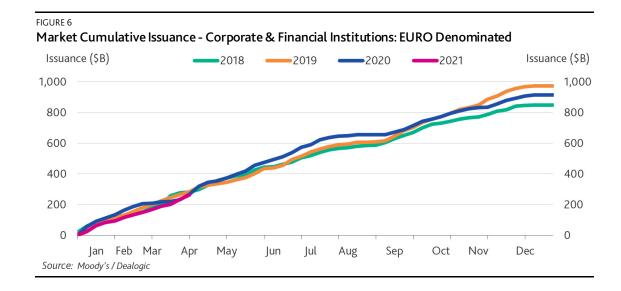
CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Mar. 31	Mar. 24	Spread Diff
Vedanta Resources Limited	Caa1	939	834	105
TUI AG	Caa1	790	770	20
Credit Suisse Group AG	Baa1	69	51	17
Credit Suisse AG	Aa3	63	48	16
National Bank of Greece S.A.	Caa1	212	200	12
Banco Sabadell, S.A.	Baa3	93	86	7
Unione di Banche Italiane S.p.A.	Baa1	67	60	7
Wienerberger AG	Ba1	125	118	7
Stagecoach Group Plc	Baa3	91	84	6
Landesbank Hessen-Thueringen GZ	Aa3	61	57	4

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Mar. 31	Mar. 24	Spread Diff
Novafives S.A.S.	Caa2	704	840	-137
Alpha Bank AE	Caa1	379	423	-44
Boparan Finance plc	Caa1	711	750	-40
Stena AB	Caa1	583	609	-27
CMA CGM S.A.	В3	404	427	-24
KBC Group N.V.	Baa1	52	75	-23
Atlas Copco AB	A2	44	60	-17
Ardagh Packaging Finance plc	Caa1	218	234	-16
Smiths Group plc	Baa2	74	91	-16
Marks & Spencer p.l.c.	Ba1	195	211	-16

Source: Moody's, CMA

Issuance





		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	43.575	14.250	58.411
Year-to-Date	477.209	199.410	693.027
		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	18.047	5.667	27.598
Year-to-Date	210.577	42.157	263.025

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