

**WEEKLY MARKET  
OUTLOOK**

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# Policy Pivots

The Federal Reserve will announce that it is accelerating its tapering process at the December meeting of the Federal Open Market Committee, unless the Omicron variant of COVID-19 becomes a clear threat to the outlook or there is a meaningful risk that the U.S. could temporarily breach the debt ceiling.

The risks that the Fed would increase the amount by which it reduces its monthly asset purchases had risen noticeably since the October consumer price index. The CPI likely altered the central bank's near-term forecast for inflation. The Fed had warned that an adjustment to the outlook could warrant a change to the tapering process. Our assumption was that the Fed would increase the size of the taper by \$10 billion to \$25 billion per month, but risks are weighted toward a more aggressive move following Fed Chairman Jerome Powell's Tuesday testimony before Congress.

Powell was less dovish in his comments and in his responses during a Q&A. Powell said he thought it was appropriate for the central bank to discuss at the December meeting whether or not to wrap up its monthly asset purchases a few months earlier than previously expected. Though the Fed has divorced its balance sheet policies from its interest-rate moves, markets think the divorce isn't official. After Powell's comments, stock prices dropped and the short-term Treasury yields rose, causing the yield curve to flatten. Bond market volatility continues to climb, and high-yield U.S. corporate bond spreads widened.

Powell also said it is time to stop using "transitory" to describe inflation. This is a not-so-subtle hawkish shift from Powell, signaling that the December post-meeting statement will strike a similar tone. He described the economy as strong and inflation as high. He also gave a heightened sense of urgency to reducing the Fed's asset purchases quicker, noting that each additional dollar of asset purchases increases policy accommodation, something he doesn't believe the economy needs now.

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The theme from Powell on Tuesday was that the Fed will preemptively fight any further deterioration in its price-stability mandate as opposed to preemptively supporting growth and the labor market. In other words, further acceleration in inflation will trump downside surprises in growth or the labor market. This change in the weight in its reaction function is a noticeably hawkish shift.

Our December baseline forecast will likely bring the first increase in the target range for the fed funds rate forward, from December 2022 to September 2022. We don't like to be whipsawed by changing the forecast for the path of interest rates, but odds are that another change may be needed in the January 2022 baseline. The key will be the December meeting. If the Fed doubles the pace of accommodation, that will noticeably increase the odds of a first rate hike next June, since asset purchases would be at zero by the end of March or early April.

### Will poor liquidity be an issue?

Though the Fed appears to be prepping financial markets for an acceleration in its tapering, there are some concerns about liquidity in the Treasury market. Liquidity conditions have deteriorated recently. Based on the Bloomberg Treasury liquidity index, conditions are the worst since the depth of the pandemic recession. Excluding that period, liquidity conditions haven't been this poor since 2018. Also, conditions are unlikely to improve over the next several weeks, overlapping the December meeting of the FOMC. This will likely lead to limited market depth and elevated bond market volatility.

While the Fed is aware that liquidity isn't as ample as it was earlier this year, that may not stop the central bank from tapering faster. In fact, liquidity conditions are similar today to when the Fed tapered its \$85 billion in monthly asset purchases in 2014.

One option for the Fed to address the liquidity issues is to alter the supplementary leverage ratio, which measures a bank's ability to absorb losses. The SLR formula measures tier 1 capital, which consists mostly of common and preferred stock, as a percent of total leverage exposure. In early 2020, during the initial stages of the pandemic, the Fed said it would temporarily exclude U.S. Treasuries and Fed deposits from its SLR formula, which improved banks' ability to take on risk. That exemption expired earlier this year, but the central bank has not proposed any rule changes.

By not shifting the SLR, banks still have less incentive to invest in Treasuries and this could be contributing to some of the recent poor liquidity conditions as the Fed has already begun to drain liquidity from the financial system. The Fed could alter the SLR to help address the liquidity issues in the

Treasury market and help accelerate the tapering without causing significant disruptions to financial market conditions.

The Fed appears spooked by the prospect that inflation could be higher for longer. With its outlook for inflation changing, a change in tapering appears justified. But the binding constraint from the SLR could be an issue, unless the Fed is ready to roll out changes to the SLR later this month. It seems likely to do so; the SLR is a political lightning rod and Powell faces a renomination hearing soon. Therefore, it seems the Fed will accelerate tapering and hope for the best.

### An unfortunate trade policy shift

The Biden administration's decision to double the tariff on Canadian softwood lumber is the opposite of trade policy it should be pursuing now. Tariffs usually make more political sense than economic sense.

The tariff on the Canadian import, which accounts for more than 80% of U.S. softwood lumber imports, is increasing from 9% to 17.9%. The increase appears to be due to the administration's preliminary antidumping duty review, which recommended the increase. That work determined that the producers/exporters subject to the analysis made sales of subject merchandise at less-than-normal value. The increase is below the 20% tariff implemented by the Trump administration but is still costly. Tariffs are a bad idea. They have unintended consequences such as preventing a country from reaping the benefits of specialization, disrupting the movement of goods and services, and causing a misallocation of resources.

Also, consumers and producers often pay higher prices when tariffs are implemented. When former President Trump increased the tariff on Canadian softwood lumber in April 2017, lumber was \$395.10 per 1,000 board feet. But it ended the year at \$453, an increase of 14.7%. Of course, there were other factors that likely contributed to the increase, but the tariff played a role.

The current increase in the tariff on Canadian softwood lumber will be passed on to consumers, increasing the cost of home improvements and new homes. This occurs at a time when other construction costs remain elevated and housing affordability is declining. The tariff increase could also exacerbate supply-chain issues. Increasing tariffs is the opposite of the trade policy that the Biden administration, which has been stressing the importance of addressing inflation, should pursue. Tariffs are inflationary. The former Trump administration raised tariffs on imported washing machines, for example, and the CPI for washing machines jumped. Though the exact inflationary impact of the rise in tariffs on Canadian lumber is unclear, it sends an odd

message when the administration is attempting to find ways to tame inflation.

Remember, the spat between the U.S. and Canada isn't new. The discord over softwood lumber is one of the longest-running trade disputes between the U.S. and Canada. The trade of softwood lumber was not covered under NAFTA. Instead, a series of separate agreements has governed the terms of trade, the most recent of which expired in 2015. NAFTA did include dispute panels that allowed appeals when the U.S. Department of Commerce levied countervailing and antidumping duties on Canada. These panels are still part of the United States-Mexico-Canada Agreement, which replaced NAFTA.

### U.S. Production Has Slipped Recently

U.S. industrial production sawmills, 2017=100



Sources: Federal Reserve, Moody's Analytics

The argument for a tariff is that it will boost domestic production, which did occur when Trump raised the tariff, although the boost was modest. Even if production by U.S. wood product manufacturers rose, any increase is unlikely to be sufficient to meet demand in the near term, and the regional economic boost will be concentrated in a few states. Meanwhile, the U.S. may be forced to import wood from other countries. U.S. sawmill industrial production has been declining recently.

Tariffs aside, lumber prices will likely move higher over the next couple of months because of weather-related production cuts and supply-chain issues in Canada. This will magnify the imbalance between supply and demand.

Flooding in British Columbia, which produces 14% of North America's lumber and is Canada's biggest exporter to the U.S., has led sawmills in the region to cut production and reduce shipments. This has contributed to the recent increase in lumber futures prices, which have risen over the past couple of trading sessions and are at their highest since June. The floods could amplify the supply-chain issues and are a reminder that climate change poses both near- and long-term risks to global supply chains.

# Thanksgiving Travel Revival

BY ADAM KAMINS

Although this year's Thanksgiving did not quite resemble those from before 2020, it looked far more normal than it did last November. From crowded airports to major cities filled with parade watchers, the holiday had a distinct [pre-pandemic](#) flavor.

Travel data, including [airport security screenings](#) compiled by the Transportation Security Administration, support this notion. According to the TSA, airport security screenings in the week leading up to Thanksgiving more than doubled compared with last year and were over 90% of the way back to 2019 levels. Vehicle traffic was also significantly higher than it was a year ago as more Americans ventured out to celebrate with family and friends.

The encouraging national picture reflects a universal story of improvement compared with a year ago. But a deeper dive into regional patterns, using daily data on searches for driving directions compiled by Apple Maps, provides additional detail about what drove this year's improvement and where it was most pronounced.

## State winners and losers

The Apple data are far from a perfect proxy for movement, as not all travelers search for directions, many use other services like Waze and Google, and some seasonality is embedded in the figures, which are indexed to January 13, 2020. But using the average of the index for the 10-day period spanning the Friday before Thanksgiving to the Sunday after provides a useful view into the extent to which travel patterns have shifted since last year.

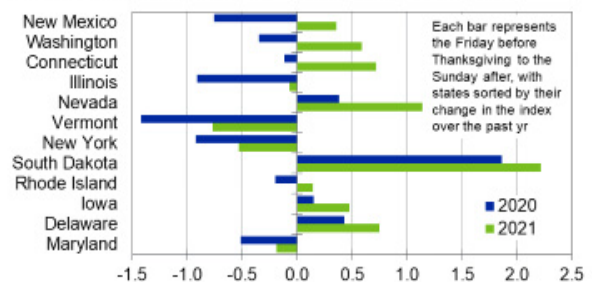
All states appear to have experienced a pickup in driving relative to January 2020, before the pandemic hit. While this hardly seems noteworthy, it matters more when considering that 11 states failed to match even that modest benchmark last year; in other words, less daily driving occurred in those places on Thanksgiving week than on a random pre-pandemic winter Monday.

In fact, Hawaii, easily this year's weakest performer with driving directions only about 20% higher than in mid-January 2020, would have ranked just outside the top 10 states if it posted similar numbers a year ago. This highlights the effect that an improved public health situation, with plentiful vaccines and better treatments, has had on all corners of the U.S.

At a state level, many of the largest increases in driving occurred in states that struggled most a year ago. New Mexico experienced the biggest gain, which comes as little surprise given that last year's partial lockdown in November suppressed travel in 2020. More broadly, the Northeast and Midwest dominated the list of largest improvements. This likely reflects both the depths from which states like Connecticut and New York needed to emerge this year, as well as the severe outbreaks that took place in portions of the Upper Midwest.

## Biggest Gains Were in Struggling States

Driving directions searches vs. Jan 13, 2020, std dev from mean



Sources: Apple, Moody's Analytics

Still, a pickup compared with last year hardly signals that once-struggling areas have gained the upper hand. In fact, of the seven states with the most rapid improvements this year, the only one to post an above-average result last Thanksgiving was Nevada. Further, the 20 most-improved states this year are cumulatively about in line with the national average, reflecting the fact that they have emerged from a deep hole.

While gains occurred everywhere, they were least pronounced in states that were relatively strong a year ago. The least impressive upticks were reserved for places with significant recent outbreaks, including Alaska and Wyoming.

## Drivers

To more precisely quantify the factors underlying a pickup in mobility, we considered a few structural factors. Higher vaccination rates, of course, are linked to greater improvement from Thanksgiving 2020 to this year. But so is population density, signaling that perhaps larger, more urban areas that had been more cautious a year ago were simply experiencing a natural rebound.

To better understand these two effects, we ran two regressions. The first involves the change from last year in driving directions searches regressed against vaccination rates and density. While the equation on the whole is a poor fit, it suggests that vaccination rates were about four times as influential as density in driving improvement in 2021 after controlling for the magnitude of each variable.

Similarly, in order to better understand the impact of existing advantages coming into this year, we ran a second regression in which searches this Thanksgiving season were compared with last year's figure and the current vaccination rate. Though this makes it clear that the starting point matters a lot, vaccination rates retain a significant role even after controlling for that.

<b>Determinants of Apple Maps Driving Directions Searches vs. Jan 13, 2020, by State</b>			
Based on 10 days spanning Friday before Thanksgiving to the following Sunday			
<b>Difference, 2020 to 2021</b>		<b>Level, 2022</b>	
<b>Independent variable</b>	<b>Coefficient</b>	<b>Independent variable</b>	<b>Coefficient</b>
Vaccination rate, %	0.723*** (0.017)	Vaccination rate, %	0.476*** (0.046)
Residents per sq mile, this	-0.007* (0.004)	Level, 2020	1.150*** (0.030)
N	50	N	50
Adj. R2	-0.078	Adj. R2	0.841

\*\*\* denotes significance at the 1% level; \* denotes significance at the 10% level.  
Sources: Apple, Census Bureau, CDC, Moody's Analytics

All told, these results show that improvement is occurring more rapidly in areas where vaccinations have made residents more comfortable with social gatherings and mitigated concern around travel. While the Apple data measure vehicle traffic, of course, increased searches for driving directions also reflect some travelers arriving by plane and renting a car in these places, a year after many deemed those activities too risky.

City and county data from Apple provide a more detailed window into geographic patterns. Among the more than 200 cities tracked, improvement was most pronounced in those with more suburban characteristics that are located near a big city. In California, Victorville and Santa Clarita, both a day trip from Los Angeles, as well as Monterey, just south of the Bay Area, improved dramatically. So did Bridgeport CT on the East Coast, which is within easy commuting distance of New York City.

Improvement was least pronounced in the southern cities. Again, this likely owes to a combination of a high starting point and low vaccination rates.

At a county level, there was a weaker link between density and improvement than took place nationally, owing in part to small counties with an elevated starting point. But underneath the noise of more than 2,000 counties' data, some of the most pronounced improvement took place in Manhattan, Boston and Seattle, each of which gained significant ground following a very weak 2020. This suggests that anecdotal improvement in cities over the holiday weekend is backed up by data.

Among the 20 counties with the least impressive gains, there were also common themes. Many are extremely rural, with near-universal below-average density. For most of those counties, the pandemic made far less of a dent in 2020 than it did elsewhere, leaving less room for growth.

Elsewhere, areas that are popular with wealthy tourists and owners of second homes barely improved. These include the counties that are home to Aspen CO, Jackson Hole WY, and Martha's Vineyard MA. With some wealthy individuals retreating to those destinations a year ago but returning to more traditional celebrations this year, improvement was slight. Calcasieu Parish LA was also relatively flat, but that owes to the residual impact of Hurricane Ida.

### Implications

The fact that more Americans traveled during the unofficial start of the holiday season bodes well for the coming month. Consumer spending stands to benefit if domestic leisure travel remains healthy, even with the Omicron variant potentially undermining optimism.

Recent developments represent especially good news in parts of the country that have been more hesitant, typically "blue" states in the Northeast and on the West Coast. The relationship between vaccination rates and improvement in mobility suggests that the reassurance associated with boosters and the ability to inoculate school-age children could sustain recent gains this winter.

But it is important not to overstate differences among regional economies. That driving picked up everywhere over the past year is telling, with areas that are largely unvaccinated or that struggled with the virus also moving decisively in the right direction. So, while some additional convergence across states is likely, those with an existing lead should have little trouble maintaining their edge.

# The Week Ahead in the Global Economy

## U.S.

It's another busy week on the U.S. economic data front with all eyes on the consumer price index. The November CPI will post another strong gain as energy prices rose and supply-constraints continued to put upward pressure on goods prices. Another hot print on the CPI will likely seal the deal for the Fed to accelerate its tapering process at the December meeting of the Federal Open Market Committee.

Elsewhere, revisions to nonfarm productivity and unit labor costs will be released. Also, the October trade deficit will likely have implications for our high-frequency GDP model's tracking estimate of fourth-quarter GDP, currently at 8.5% at an annualized rate. Initial claims for unemployment insurance benefits for the week ended December 4 will be released, but claims can be volatile this time of year because of seasonal adjustment issues, making it difficult to separate the signal from the noise. The preliminary University of Michigan consumer sentiment index for December will help assess whether news of the Omicron variant of the COVID-19 virus is weighing on confidence.

## Europe

Euro zone third-quarter GDP will top headlines next week. We expect the currency bloc's GDP rose 2.2% q/q, adding to the 2.1% rebound registered in the second quarter. This release will carry a detailed GDP breakdown. We expect private consumption was the major driver of growth, along with some activity in investments. That said, supply issues that led to lean stocks of inputs and held up production at factories, particularly of motor vehicles, will weigh on fixed and inventory investments. Exports will also have taken a hit, but the resumption of some tourism flows this summer will have helped service exports.

The U.K.'s GDP is expected to have increased 0.3% m/m in October, slowing from a 0.6% rise in September. The recovery likely progressed as the services sector continued to benefit from people returning to a more normal pace of life post pandemic. Unfortunately, the subsequent worsening of the pandemic will hurt prospects in the final months of the year. Surging electricity prices also walloped firms and will begin to eat into household consumption.

Industrial production likely grew in most euro zone countries. For example, we are expecting a 0.5% October rebound in Germany after September's 1.1% drop. Output

has been weak due to global supply shortages and has led to some volatile readings. Italy has had a better go of it, being less exposed to global shortages, and likely eked out another month of growth. Spain too.

Russia's inflation problems likely persisted into November, with the inflation rate speeding to 8.5% y/y from October's 8.1%. Tightening by the central bank has helped support the currency, despite some weakening in November, but commodity prices are high globally. Meanwhile, a desperate rush to fill up on natural gas and oil in Europe and Asia likely drove the Russian trade surplus even higher in October.

Germany's final reading of the CPI will come in as well. We aren't expecting a change from the preliminary forecast of 5.2% y/y. Energy prices are causing the CPI to balloon, and core prices are also charged by global supply dynamics. That said, Germany's year-on-year inflation rate is also pumped up by significant base effects from the country's temporary 3-ppt VAT cut during the latter half of 2020.

## Asia-Pacific

The Reserve Bank of Australia's monetary policy announcement will be the highlight on the economic calendar. The RBA is forecast to keep the cash rate at the record low 0.1% and maintain the parameters of its bond purchases at A\$4 billion per week. Inflation pressures including higher fuel and raw material prices and supply-chain disruptions are intensifying, though demand-driven pressures remain under control. As the recovery gathers steam, the central bank is expected to prioritise the spending and labour market recovery over these inflation pressures, leaving the policy rate unchanged.

Similarly, we expect India's central bank to keep the benchmark repo rate at 4% in its December announcement. The central bank's focus is on ensuring a stable and accommodative monetary policy setting to lend support to the domestic demand revival over the next two quarters.

China's producer prices are likely to have risen again in November, up 14% in yearly terms, following a 13.5% increase in October. This will reflect the upward pressure from higher energy and raw material costs. China's annual inflation is also likely to have inched up to 1.6% in November from 1.5% in October, reflecting an uptick in transportation, fuel and utilities, and communication costs.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
Nov/Dec	WTO	12th WTO Ministerial Conference (Nov 30-Dec 3)	Medium	Low
19-Dec	Hong Kong	Legislative Council elections	Low	Medium
19-Dec	Chile	Second round presidential elections	Medium	Low
1-Jan-22	APAC	Regional Comprehensive Economic Partnership enters into force	Medium	Low
17-Jan-22	Switzerland	World Economic Forum annual meeting	Medium	Low
9-Mar-22	South Korea	Presidential election	Medium	Medium
27-Mar-22	Hong Kong	Chief Executive election	Low	Low
10-Apr-22	France	General elections	Medium	Medium
9-May-22	Philippines	Presidential election	Low	Low
29-May-22	Colombia	Presidential elections	Medium	Low
Jun/Jul-22	PNG	National general election	Low	Low
2-Oct-22	Brazil	Presidential and congressional elections	High	Medium
Oct/Nov-22	China	National Party Congress	High	Medium
7-Nov-22	U.N.	U.N. Climate Change Conference 2022 (COP 27)	Medium	Low

# Powell Renomination Is Key

BY RYAN SWEET

## CREDIT SPREADS

Moody's long-term average corporate bond spread is 118 basis points, 4 bps wider than just before the Thanksgiving holiday. This is a new high over the past 12 months during which the low was 95 bps. Concern about the Omicron variant of the COVID-19 virus appear to have rattle both the corporate and Treasury bond markets. Still, this spread will likely end the year wider than we had previously anticipated, possibly around 125 bps compared with the prior expectation of 117 bps. The long-term average industrial corporate bond spread widened from 149 bps prior to Thanksgiving to 153 bps. This is the a new high over the past 12 months.

The long-term investment grade corporate bond spread was 150 basis points, compared with 148 bps last Wednesday. The spread now matches its recent high. Investment-grade industrial corporate bond spreads widened 4 bps to 149.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 317 basis points is 9 bps tighter than at this point last week. The Bloomberg Barclays high-yield option adjusted spread widened 16 bps to 296 bps, keeping it within the range seen since the beginning of the second quarter and among the tightest since 2007. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread but are tighter than that implied by the VIX, which is around 18.

## Defaults

Defaults remain very low. The latest Moody's monthly default report showed the trailing 12-month global speculative-grade default rate came in at 2.14% at the end of October, down from 2.51% in September and the lowest since 2015. The trailing 12-month global speculative-grade default rate fell from 2.59% in September to 2.31% in October.

In light of our expectation of a continued economic recovery and accommodative funding conditions in the coming year, Moody's Credit Transition Model projects that the global default rate will fall to 1.7% at the end of this year. Our model further indicates that the global rate will then stabilize in the 1.6%-1.8% range in the first half of 2022 and gradually rise thereafter, reaching 2.2% by the end of October 2022.

## U.S. Corporate Bond Issuance

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.

First-quarter 2021's worldwide offerings of corporate bonds revealed an annual decline of 4% for IG and an annual advance of 57% for high-yield, wherein US\$-denominated offerings sank 9% for IG and advanced 64% for high yield.

Issuance weakened in the second quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 35% for investment grade. High-yield issuance fared noticeably better in the second quarter.

Issuance softened in the third quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 5% for investment grade. U.S. denominated corporate bond issuance also fell, dropping 16% on a year-ago basis. High-yield issuance fared noticeably better in the third quarter.

In the week ended November 30, US\$-denominated high-yield issuance totaled \$3.6 billion, bringing the year-to-date total to \$607.7 billion. Investment-grade bond issuance rose \$3.85 billion in the current week bringing its year-to-date total to \$1.572 trillion. Issuance normally is extremely light around Thanksgiving.



## U.S. ECONOMIC OUTLOOK

We made some changes to our November U.S. baseline forecast with the key adjustments including an earlier rate hike by the Fed, a smaller budget reconciliation package, and the assumption that future waves of COVID-19 cut less into growth because of vaccines for those 5 to 11 years old being approved.

Besides the bipartisan infrastructure deal, we're no longer assuming Democrats pass \$2.5 trillion in new spending and tax breaks via budget reconciliation to fund an array of social initiatives. Rather, we anticipate \$1.75 trillion in the November baseline forecast. Of this lower amount, \$555 billion will be for clean-energy funding and climate-change mitigation; \$400 billion in childcare and preschool investments; \$315 billion in healthcare funding; and \$150 billion in housing investments, among others. The reconciliation package will be fully paid for by higher taxes on corporations and wealthy households, as well as the repeal of the Trump administration's prescription drug rebate rule.

Real GDP growth would average 3.2% per annum during Biden's term and 2.2% over the next decade, compared with less than 2.8% and 2.1% per annum if the bipartisan infrastructure deal and the \$1.75 trillion package fail to become law. In terms of employment, under the infrastructure deal and reconciliation package, there are 2.4 million more jobs at the peak of the employment impact by mid-decade, and unemployment is a full percentage point lower. Labor force participation is also higher, although the full boost to participation occurs after the 10-year budget horizon. Finally, consumer price inflation is a few tenths of a percentage point higher next year and in 2023 because of the stronger growth and faster return to full employment. But inflation quickly settles near the Federal Reserve's target of just over 2% per annum.

## COVID-19 assumptions

We adjusted our epidemiological assumptions to anticipate that total confirmed COVID-19 cases in the U.S. will be 49.12 million, compared with 47.49 million in the October baseline. The seven-day moving average of daily confirmed cases has stabilized recently, which has contributed to the rise in our estimate of confirmed cases.

The date for abatement of the pandemic changed slightly and is now December 19, around a month later than in the prior baseline. Herd resiliency, which is a 65%-or-greater share of the adult population being fully vaccinated or previously infected, was achieved on August 30. The forecast assumes that COVID-19 will be endemic and seasonal.

There has been some good news recently regarding vaccinations for children, and the discovery of effective therapies that can either prevent or cure infection should further weaken the linkage between COVID-19 infections, consumer confidence, and economic activity. This will likely reduce the future economic costs from waves of COVID-19.

## Getting its groove back

The Delta variant of COVID-19 weighed more on the economy in the third quarter than previously anticipated, but the economy has begun to bounce back and will end this year on a positive note. The October baseline forecast includes the Bureau of Economic Analysis advance estimate of third-quarter GDP growth, which showed a 2% annualized rate. This was weaker than the 3.4% in the baseline forecast. It was clear that the Delta variant played a significant role along with supply-chain issues. Vehicles subtracted 2 percentage points from third-quarter GDP.

In the November baseline, we nudged our forecast of fourth-quarter GDP growth higher, and we now look for it to rise 6.6% at an annualized rate, compared with 6.2% in the prior baseline. Risk bias, or the difference between our high-frequency GDP model's estimate of fourth-quarter GDP growth and our official forecast, is 1.1 percentage points. Therefore, the risks are that fourth-quarter GDP growth comes in better than we expect.

We finalized the November baseline the same day that the U.S. relaxed its travel restrictions. The relaxed travel restrictions will help services spending and U.S. employment. Employment in scheduled air transportation is still 14% below its pre-pandemic peak. This includes both passenger and freight air transportation.

However, the biggest impact will be in net travel services, and the impact could be immediate because of the release of pent-up demand. Net travel services, or the difference between exports and imported travel, ran a deficit for the first time since the inception of the data in 1999. The deficit occurred as the increase in U.S. travelers abroad noticeably exceeded the inflow of foreign travelers. This gap should close fairly quickly and return to a net surplus early next year.

The relaxing of travel restrictions doesn't alter our near-term forecast for U.S. GDP growth, but it lends a little upside. Returning to a surplus in net travel services would add a few tenths of a percentage point to GDP growth, but it is unlikely that the surplus will return to its pre-pandemic level any time soon.

For all of 2021, we now look for GDP to rise 5.6%, a little lower than the 5.8% in the October baseline and in line with the Bloomberg consensus of 5.7%. We look for GDP to rise

4.6% in 2022, up from 4.3% in the October baseline and stronger than the Bloomberg consensus of 4%. GDP growth will continue to moderate in 2023, rising 2.8%. This is stronger than the 2.4% forecast for 2023 in the prior baseline and identical to the consensus expectation.

Global supply-chain issues remain a downside risk to the near-term forecast. There haven't been signs of improvement, according to our U.S. Supply-Chain Stress Index. The SCSI increased to 135.9 in August from July's reading of 131.1. Early indications point to a subsequent rise in September, driven by a sharp rise in the cost components of the SCSI. Therefore, it looks like there will be little improvement in the index soon. Separately, in the Fed's October Beige Book, "supply chain" was mentioned 37 times, compared with 33 times in September and 28 in July.

Easing of the supply-chain bottlenecks are key to our near-term forecast for U.S. manufacturing production, inventory replenishing, and easing of inflationary pressures. Volatility in prices and supply-chain issues could lead to mistakes either in over- or under-building inventories. We looked at the five-year rolling correlation between the contribution of each component to GDP and total GDP growth. This is then multiplied by the five-year rolling standard deviation of the components' contribution to GDP divided by the rolling standard deviation in GDP growth. This would imply that inventories are contributing little to the volatility in GDP growth. But, if we cut the sample down to the past two years to include the pandemic, inventories are contributing more to the volatility of GDP growth. This isn't surprising, but as we learned in the third quarter, inventories can make the difference between a positive, flat or negative GDP print.

Inventories will add more than 3 percentage points to fourth-quarter GDP growth and around 1 percentage point in the first three months of next year. Inventories are forecast to subtract modestly from GDP growth in the second half of next year and in 2023.

### Business investment and housing

There was a small downward revision to the forecast for real business equipment investment this year, but it is still booming. We now look for real business equipment spending to increase 13.4% this year, compared with 14.5% in the October baseline. Growth in equipment spending was revised a touch lower next year to 9.3%, 0.3 percentage point lower than the September baseline. Equipment spending will remain strong in 2023, forecast to increase 4.4%.

Risks are roughly balanced to the forecast. Fundamentals, including supportive financial market conditions and better after-tax corporate profits as a share of nominal GDP, should continue to spur investment through the rest of this

year and into next. Also, banks are easing lending standards and corporate credit spreads are very tight, supporting investment-grade and high-yield corporate bond issuance.

Another favorable development for business investment is that the rate of new-business formations remains strong. The biggest downside risk is a sudden tightening in financial market conditions or a sudden and significant bout of economic policy uncertainty in the fourth quarter because of the threat of a partial government shutdown and decision about the debt ceiling.

The real nonresidential structures forecast was revised higher this year. It is forecast to drop 7.1%, more than the 6.2% decline in the October baseline. The revision is mostly attributed to the new historical data. We expect double-digit growth in real nonresidential structures investment in each of the next two years. There were not any material changes to the forecast for the commercial price index this year or in either 2022 or 2023.

New data for September and revisions to prior months led us to revise lower the forecast for housing starts. Housing starts are now forecast to rise 13.8% this year, compared with 14.2% in the October baseline. We revised the forecast higher for growth in housing starts next year by 0.5 percentage point to 9.9%. We didn't make big revisions to the forecast for new-home sales as they are still forecast to decline modestly this year before growth in excess of 20% next year as additional supply hits the market. This year will be a decent one for existing-home sales. They are now forecast to rise 7.7%, compared with 6.9% in the prior baseline. Existing-home sales will dip next year, since inventory is a bigger problem and there doesn't seem to be significant relief in the pipeline.

We had been steadily revising our forecast higher for house prices over the past several months, but we did not do so in November. We stuck with the forecast for the FHFA All-Transactions Home Price Index to increase 10.6% this year but look for it to moderate over the next two years, rising in the high-single digits in 2022 and low single-digits in 2023.

### Consumers will do their part

Consumer spending needed to get off to a good start this quarter, and it appears it will. Vehicle sales increased from 12.18 million annualized units in September to 12.99 million in October, noticeably better than either we or the consensus anticipated. This leaves vehicle sales 3% (not annualized) below their third-quarter average. Odds are that vehicles will be noticeably less of a drag on GDP this quarter than last, when they shaved around 2 percentage points off growth. Also, October retail sales should be strong, supported by early holiday shopping. The forecast is for real

consumer spending to rise 5.1% at an annualized rate in the fourth quarter.

One change to the baseline forecast is a more gradual normalization in the composition of consumer spending. Nominal services spending, as a share of total consumption, will gradually increase over the next several years but won't return to the level seen pre-pandemic, 69%, until late 2025.

### Job growth bounces back

The November baseline forecast incorporates the October employment report. Nonfarm employment was up 531,000, on net, in October—better than the 442,000 average during the prior three months. Once again, the revisions were significant and positive; the net revision over the prior two months was 235,000. Revisions often don't garner too much attention from financial markets, but they have been significant recently. Therefore, job growth in the third quarter was stronger than in the prior baseline. We look for around 530,000 average monthly job growth this year. Average monthly job growth next year is 340,000 and in 2023 it is 150,000, both little changed from the prior baseline.

The unemployment rate is forecast to average 4.5% in the fourth quarter of this year, compared with 4.6% in the prior baseline. The unemployment rate returns to that seen pre-pandemic in the third quarter of 2023, three months earlier than previously forecast. This doesn't mean the economy is back at full employment from the Fed's perspective. The Fed is putting more emphasis on the prime-age employment-to-population ratio. Our rule of thumb is that a prime-age employment-to-population ratio of 80% is consistent with an economy at full employment and our back-of-the-envelope forecast would have the economy hitting that threshold in the fourth quarter of next year.

Labor-supply issues remain binding but are set to ease, lending upside risk to the forecast for job growth. In October, 3.8 million people reported that they had been unable to work because their employer closed or lost business due to the pandemic; that is, they did not work at all or worked fewer hours at some point in the four weeks preceding the survey due to the pandemic. This measure is down from 5 million in September.

The number of people moving from not in the labor force to employment increased in October. However, those moving from not in the labor force to unemployed only ticked higher. Elsewhere, COVID-19 is still an issue for the labor supply. The number of people who are not in the labor force but want a job remains elevated. By reason of not being in the labor force, own illness fell only modestly in October. Another area where COVID-19 is clearly affecting the job market is in the number of people who are employed but

not at work because of their own illness, which was around 1.4 million in October. This has been north of 1 million since the pandemic began. The potential for long COVID-19 is emerging as a growing downside risk to our forecast, since it could take people a longer time to fully recover and delay returns to work.

### Inflation and the Fed

There were not any material changes to the forecast for growth in the core PCE deflator. The baseline still has it peaking this quarter, up 4% on a year-ago basis before moderating through next year and settling just above the Fed's 2% objective and consistent with its average flexible inflation targeting. However, risks are weighted toward transitory inflation peaking higher and lingering longer than anticipated because of the supply-chain issues and recent jump in energy prices, which will bleed into core prices via higher transportation costs.

The Fed could face a situation where higher consumer prices begin to weigh on consumer spending, reducing GDP growth. The pandemic has not repealed the law of demand, which states that, all else equal, a higher price of a good or service reduces the quantity demanded. This is playing out now and it is most visible in vehicles. The CPIs for new and used vehicles have surged this year as the global semiconductor shortage reduced production, depleted inventories, and caused prices to surge.

Demand for vehicles is elastic, meaning there is a significant change in quantity demanded when prices change. With prices soaring, quantity demand for vehicles has plunged. Unit vehicle sales peaked this year just north of 18 million annualized units but have since plunged to around 12 million. Vehicles are the prime example now, but demand for other elastic goods could suffer over the next several months as stress in U.S. supply chains remains significant.

Turning to monetary policy, as widely expected, the Federal Open Market Committee announced its plans to taper its monthly asset purchases by \$15 billion later this month and again in December. The Fed maintained flexibility as its post-FOMC-meeting statement noted that the central bank is prepared to adjust the pace of purchases if warranted by changes in the economic outlook. This creates a little uncertainty, as it is unclear what conditions would cause the Fed to either accelerate or slow its monthly asset purchases. We assume the Fed reduces its monthly asset purchases by \$15 billion per month, wrapping up the tapering process by mid-2022. After that the Fed will reinvest the proceeds from maturing assets to prevent its balance sheet from declining. The Fed isn't going to sell the assets on its balance sheet and its balance sheet, as a share of GDP, will be permanently higher.

We brought forward the first rate increase in the target range for the fed funds rate from early 2023 to the fourth quarter of 2022. This caused roughly a 25-basis point level shift in the path of the effective fed funds rate over the next several years. The fed funds rate now reaches its equilibrium rate in the first half of 2025, a touch above 2.5%. This is three months earlier than in the October baseline. Markets have adjusted their expectations for the pace of tightening, but their expectations are still more gradual than our baseline or that implied by the Fed's so-called dot plot.

The October baseline also incorporates the recent declines in the 10-year Treasury yield, which puts it around 1.4%. Overall, the path of the 10-year Treasury yield didn't change appreciably between the October and November baselines. The recent decline in the 10-year appears to be driven by the potential shakeup in the Fed's leadership.

President Biden's decision to renominate Fed Chairman Jerome Powell is key along with who he picks to fill the three open positions on the Federal Reserve Board. Powell deserves another term as Fed chair for his handling of the central bank's response to the pandemic. Also, there is some importance to financial markets in continuity. Keeping Powell would limit the amount of uncertainty about how the Fed views inflation and the timing of the first increase in the target range for the fed funds rate.

The forecast is that the Dow Jones Industrial Average increases this quarter and peaks in early 2022. However, the rest of the contours of the forecast didn't change. We expect the DJIA to steadily decline throughout 2022, but because it will now peak later than previously thought, the level of the DJIA will be higher at the end of next year and over the near-term forecast.

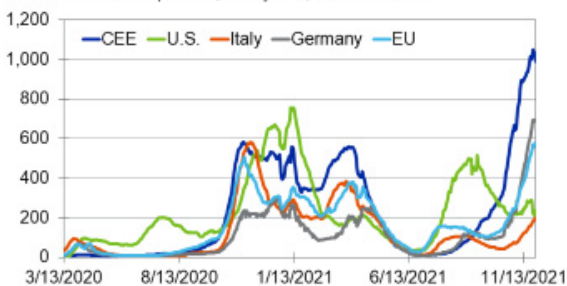
# Worst Wave Yet for Central and Eastern Europe

BY BRIDGET RYAN

Another wave of [COVID-19](#) cases has washed over Central and Eastern Europe, which in our forecast includes [Bulgaria](#), [Croatia](#), [Czechia](#), [Hungary](#), [Poland](#), [Romania](#), [Slovakia](#) and [Slovenia](#). Cases have surpassed or are closing in on previous peaks in countries across the region because of low vaccination rates and colder weather pushing people indoors.

## CEE's Severe Surge in Cases

COVID-19 cases per mil, 7-day MA, wk of 11/29/21



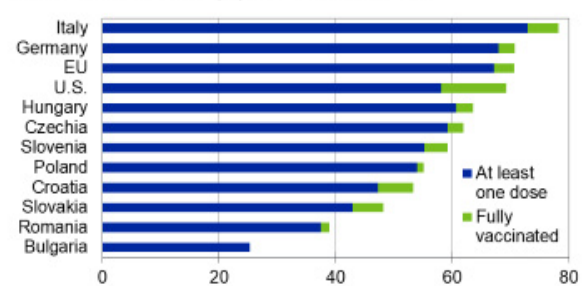
Sources: Our World in Data, Moody's Analytics

Demand for the vaccine has risen recently as the current wave intensifies, but vaccination rates in CEE are still well below the European Union average. In response to the severe uptick in cases, countries have reintroduced restrictions to limit the spread of the virus, and Slovakia has even reimposed a strict lockdown for residents. Czechia banned unvaccinated residents from most public events, hotels, hairdressers and pubs. Poland is extending quarantines for travelers and limiting restaurant capacity. Slovakia is the most extreme thus far and is following the example of Austria by enforcing a two-week lockdown for all residents, which will temporarily close restaurants and nonessential stores.

The region's below-average vaccination rate paired with the highly contagious Delta variant is driving the surge in cases. Healthcare systems, which were understaffed before the pandemic, are overwhelmed with the rise in critically ill patients. The number of hospitalized patients in Slovakia with suspected or confirmed COVID-19 infections tripled over the past month. Romania and Slovakia are even relying on hospitals abroad to manage their current patient loads.

## Below-Average Vaccination Rates in CEE

Vaccinated share of the population, as of 11/29/21



Sources: Our World in Data, Moody's Analytics

The Omicron variant is also blurring the outlook; however, it is too early to understand the magnitude of the risk. The economic impact will depend on the effectiveness of the vaccine against the new variant and rates of transmission, hospitalization and death. The economic outlook is still closely tied to the course of the virus, and widespread lockdowns in several countries through the end of the year and beginning of 2022 add significant downside risk to the forecast. Mitigation efforts will keep cases from rising much further in the near term, but the virus will continue to spread unless vaccination rates improve rapidly.

The effect on economic activity during this wave will be less severe than the sharp contraction in the spring of 2020, when the pandemic first hit. Although restrictions have been reimposed, these are still less encompassing than in 2020 or last spring. However, the measures in place will make a dent in consumer spending. Consumer-reliant industries will suffer over the winter as more residents shelter in place out of fear of contracting the virus. With vaccine-pass requirements or outright shutdowns, holiday markets, shops and restaurants will feel the brunt of pain.

## Another drag on growth

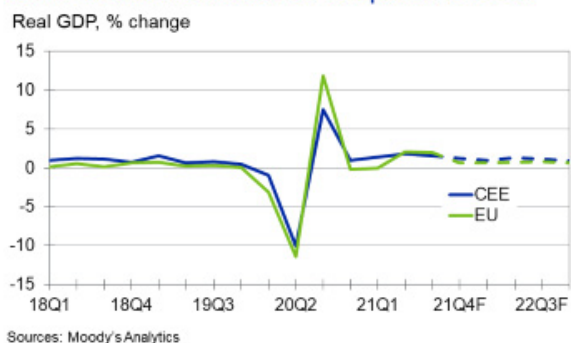
Meanwhile, persistent supply-chain issues will weigh on the outlook over the near term. CEE is especially exposed to supply-chain disruptions because of its reliance on manufacturing.

Making matters worse, the auto industry, one of the most exposed to the global semiconductor shortage, dominates in Slovakia, Czechia and Hungary. Hungary's automobile industry accounts for nearly one-third of the country's industrial output. Slovakia's top import is vehicle parts, and

the auto industry is one of its main employment drivers. All four major car manufacturers in Slovakia—Land Rover, Volkswagen, Kia and PSA—had to halt or limit production this year because of a shortage of inputs. There have been sporadic factory shutdowns in Hungary as well because of the lack of parts. Poland is less reliant on auto manufacturing, but a record high number of manufacturers in the country reported that material shortages have slowed production, and producers have been forced to pass along higher costs to consumers.

We expect we are near the peak of supply-chain bottlenecks, but they will not ease overnight. Production, specifically in the automotive sector, will remain depressed through the end of 2021 and beginning of 2022. Output will gradually recover to normal levels in the second half of 2022.

### CEE Growth Still Set to Outpace the EU



In light of the pandemic and persistent disruptions to the global supply chain, our forecast calls for real GDP growth to moderate over the next two quarters as pandemic restrictions limit consumption. We expect the CEE region to grow 1.2% quarter to quarter in the final three months of

2021 and 1% in the first quarter of 2022. Growth will still slightly outpace that of the EU, which is consistent with pre-pandemic history.

Amid supply shortages, the region's already-strong inflation dynamics have heated up. Inflation averaged 5.2% in October across the CEE countries, up from 1.6% a year earlier. CEE went into the crisis on a higher inflation path than the rest of Europe, and the prospects for price growth in the medium run also remain much stronger. The surge in prices is being driven by rising energy costs, supply-chain disruptions, tight labor markets, and strong consumer demand. As a result, central banks in the region have had to respond.

Specifically, Romania, Czechia, Hungary and Poland have all implemented early policy rate hikes to curb inflation, and high readings will put pressure on central banks to continue with rate hikes. Meanwhile, because Slovakia and Slovenia are members of the euro zone, monetary policy is controlled by the European Central Bank. We expect policy rates to remain at their current levels over the near term, and asset purchases under the PEPP program will continue until the scheduled end of the program in March.

### Down the road

The longer repercussions from the pandemic will be limited, mostly thanks to ample government support across CEE. Direct support in the form of wage subsidy programs has prevented employment from collapsing, even though the effect on smaller firms was only partially mitigated. As more residents get vaccinated the virus will transition to something akin to the seasonal flu and be less disruptive to the economy, and production will rebound next year as supply-chain disruptions ease.

# After Q3 Contraction, Australia Eyes Omicron

BY SHAHANA MUKHERJEE

The Australian economy shrank in the September quarter. Seasonally adjusted GDP contracted 1.9% from the prior three-month period. Moody's Analytics had forecast a 2.2% contraction after the economy's 0.7% expansion in the prior quarter. As expected, the severe Delta-led COVID-19 outbreaks that triggered large-scale movement restrictions across New South Wales and Victoria states dragged heavily on domestic demand.

Household consumption witnessed the sharpest correction. Spending plummeted 4.8% in quarterly terms, having grown 2% in the June quarter. Other expenditure components, however, provided some offset. Government expenditure rose by 3.6% in quarterly terms as federal, state and territory governments mobilised targeted fiscal support to impacted businesses, but gross fixed capital formation rose by a more modest 0.2%. Importantly, net trade contributed to growth; the combination of higher exports (up 1.2%) and lower imports (down 4%) added a full one percentage point to the quarterly change.

Although the severe resurgence undoubtedly disrupted Australia's recovery, it is worth noting that the economic costs inflicted could have been greater. For the most part, restrictions were limited to two of the largest states, and while this had a sizeable impact on services' spending, the strain on retail and other contact-sensitive segments was partially offset by comparatively less disruptive consumption and spending patterns in other states and territories. Accommodation and food services once again felt the brunt of the impact, with output contracting by a significant 2% over the quarter. Other segments such as wholesale and retail trade and other services recorded smaller contractions relative to those seen during the first wave back in June 2020.

The near-term outlook for the Australian economy has more upside than downside risks. On the domestic front, an accelerated vaccine rollout and the lifting of restrictions will facilitate the release of pent-up demand and provide a much-needed thrust to retail and wholesale industries. The process will gain due support from ongoing low borrowing costs as well as positive wealth effects for several

households. Achieving a robust employment revival remains top priority for policymakers. But while a sustained turnaround in spending momentum will support a broad-based recovery, returning to pre-pandemic levels of employment growth will depend on the resumption of international travel and how soon labour shortages in key industries such as construction and hospitality are addressed.

Consistent with other Asia-Pacific economies, higher inflation is a potential risk. As seen in recent months, a combination of higher energy prices, rising raw material costs, and supply-chain disruptions are pushing up producer prices across the region. In Australia, cost pressures are emerging from higher fuel prices and increasing construction costs. Although demand-driven price pressures are expected to build only gradually in coming months, one risk to the outlook is that cost pressures will intensify in the near-term, keep inflation above 3%, and weaken household purchasing power in the absence of meaningful wage growth.

How global trade evolves in the current economic setting will be equally important. A strong exports position buoyed by solid commodity earnings has lent invaluable support to the economy. Recovering global demand should continue to drive demand for top commodity exports such as coal and iron ore. However, China's steady growth, the broader weakness in its property market, the potential threat to global recovery from the Omicron variant, and geopolitical frictions could exacerbate the strain on iron ore and coal prices, moderating the net gains from trade for Australia.

An informed risk assessment of the potential economic costs posed by Omicron is crucial and will guide our forecasts as more information on transmissibility and virulence emerges. For now, assuming that no new infection wave emerges domestically, that Australian borders are fully reopened by mid-2022, and Asian economies continue to recover aided by improving vaccination rates, we expect the country's economic fundamentals to improve materially over the next few quarters, aided by a sustained pickup in demand for services. This would pave the way for a more robust employment revival.

# Upgrades Account for All the Latest Changes

BY STEVEN SHIELDS

U.S. corporate credit quality improved this past week with upgrades accounting for all three changes. MasTec Inc.'s senior unsecured rating was raised to Baa3 from Ba2, with the change impacting \$600 million in outstanding debt. The rating upgrade to investment grade reflects Moody's expectations that MasTec will maintain a conservative approach to balance sheet management and liquidity and exercise prudent financial policies with respect to tuck-in acquisitions, investments, and shareholder friendly activities. The upgrade also reflects the expectation of robust construction activity and the increase in U.S. construction spending after the multiyear infrastructure bill was signed into law.

Meanwhile, Moody's Investors Service upgraded building materials distribution company Installed Building Products Inc.'s corporate family rating to Ba2 from Ba3. The upgrade for IBP reflects Moody's expectation that the company will benefit from end-market dynamics that support growth. The

last rating issued in the period was to Certara Holdco Inc. with its senior secured rating lifted to B1 from B2.

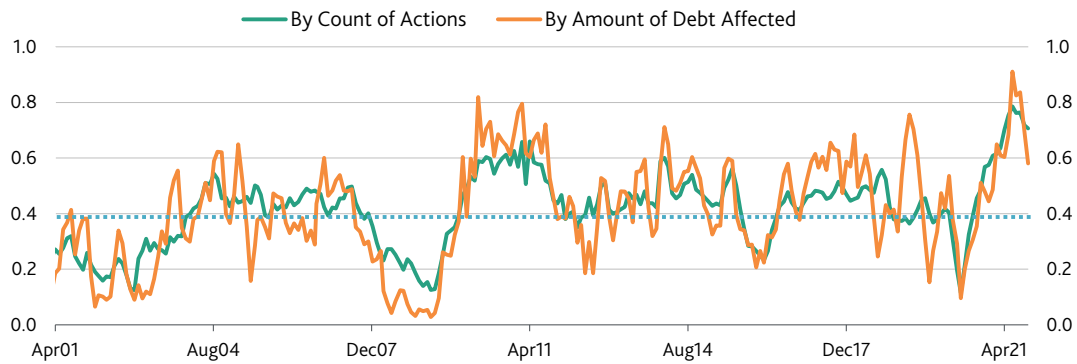
## Europe

European rating activity was also strongly positive in the period with upgrades comprising all four rating changes. Moody's Investors Service upgraded OCI N.V.'s corporate family and senior secured notes to Ba1 from Ba3 due to OCI's significant gross debt reduction during 2021 and expectations for further reductions in 2022. EuroChem Group AG's \$700 million backed senior unsecured notes were lifted to Ba2 from Ba3. The change reflects the company's substantially improved operating and financial performance underpinned by favorable fertilizer market conditions and its strengthened business profile, which also enhances the company's sustainability through the market cycles.



## RATINGS ROUND-UP

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



\* Trailing 3-month average

Source: Moody's

FIGURE 2  
Rating Key

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

FIGURE 3  
**Rating Changes: Corporate & Financial Institutions - US**

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
11/24/2021	MASTEC, INC.	Industrial	SrUnsec	600.0	U	Ba2	Baa3	SG
11/30/2021	INSTALLED BUILDING PRODUCTS INC.	Industrial	LTCFR/PDR		U	Ba3	Ba2	SG
11/30/2021	EQT AVATAR TOPCO, INC.-CERTARA HOLDCO, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG

Source: Moody's

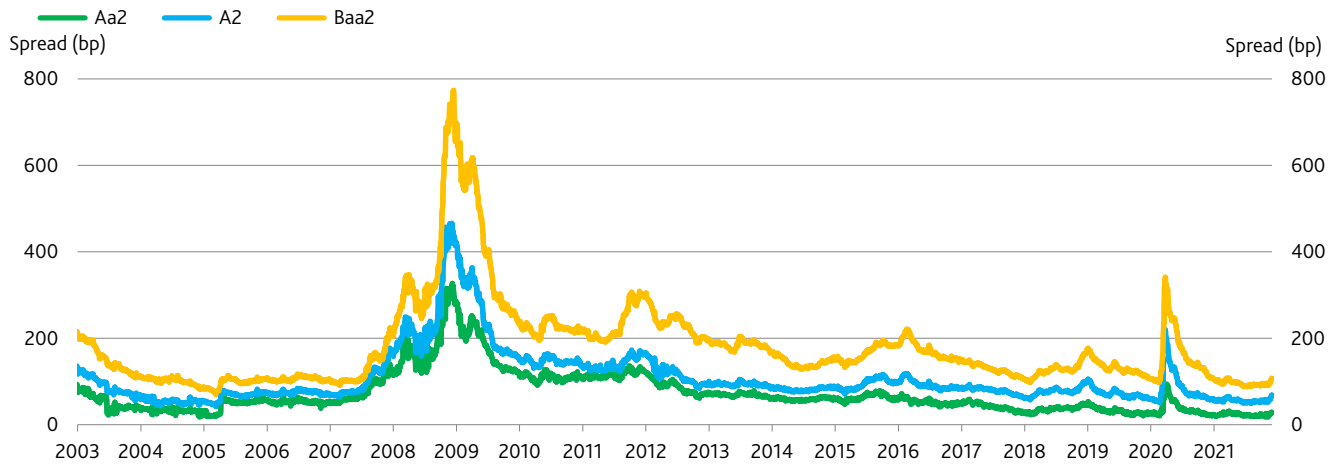
FIGURE 4  
**Rating Changes: Corporate & Financial Institutions - Europe**

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
11/24/2021	EUROCHEM GROUP AG	Industrial	SrUnsec/LTCFR/PDR	700.00	U	Ba3	Ba2	SG	SWITZERLAND
11/25/2021	OCI N.V.	Industrial	SrSec/LTCFR/PDR	3362.22	U	Ba3	Ba1	SG	NETHERLANDS
11/29/2021	PIOLIN II S.A.R.L	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG	SPAIN
11/30/2021	FAGE INTERNATIONAL S.A.	Industrial	SrUnsec/LTCFR/PDR	420.00	U	B2	B1	SG	LUXEMBOURG

Source: Moody's

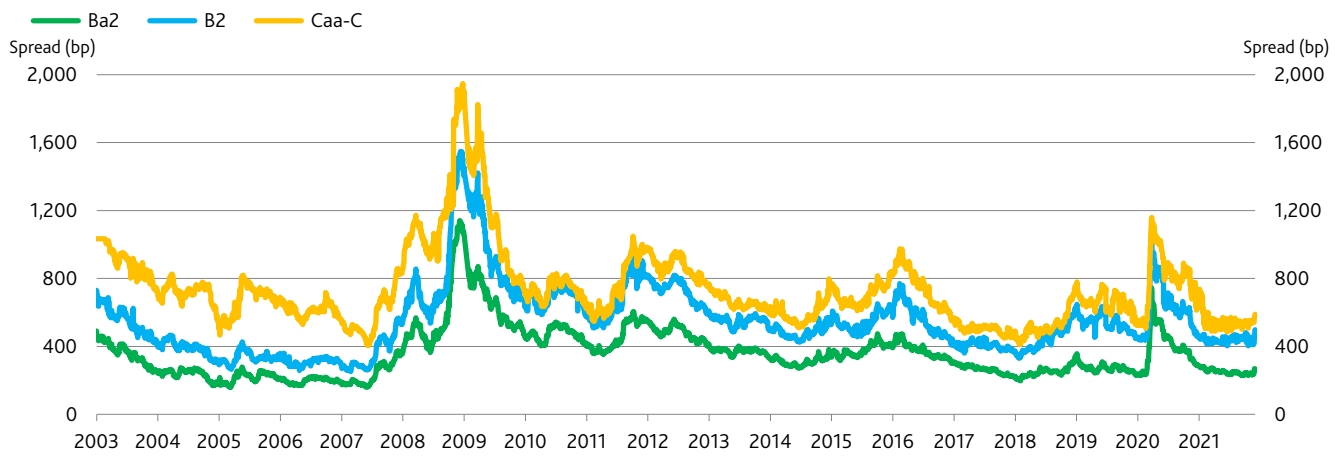
## MARKET DATA

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



Source: Moody's

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



Source: Moody's

## CDS MOVERS

Figure 3. CDS Movers - US (November 24, 2021 – December 1, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 1	Nov. 24	Senior Ratings
Consolidated Edison Company of New York, Inc.	Aa1	A2	Baa1
AutoNation, Inc.	Baa1	Baa3	Baa3
Procter & Gamble Company (The)	Aa1	Aa2	Aa3
CSC Holdings, LLC	B2	B3	B3
Eli Lilly and Company	Aa1	Aa2	A2
Becton, Dickinson and Company	Baa2	Baa3	Baa3
Cargill, Incorporated	Aa2	Aa3	A2
Abbott Laboratories	Aa3	A1	A2
NRG Energy, Inc.	Ba3	B1	Ba2
Conagra Brands, Inc.	Baa2	Baa3	Baa3

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 1	Nov. 24	Senior Ratings
Charles Schwab Corporation (The)	Baa2	A3	A2
ERAC USA Finance LLC	A3	A1	Baa1
American Airlines Group Inc.	Ca	Caa2	Caa1
JPMorgan Chase & Co.	Baa1	A3	A2
Wells Fargo & Company	Baa2	Baa1	A1
Bank of America Corporation	Baa2	Baa1	A2
American Express Credit Corporation	A3	A2	A2
Boeing Company (The)	Ba1	Baa3	Baa2
International Business Machines Corporation	A3	A2	A3
3M Company	A1	Aa3	A1

CDS Spread Increases	CDS Spreads			
	Senior Ratings	Dec. 1	Nov. 24	Spread Diff
American Airlines Group Inc.	Caa1	852	688	164
Nabors Industries, Inc.	Caa2	872	730	142
Staples, Inc.	Caa1	1,156	1,047	110
Carnival Corporation	B2	508	417	91
Royal Caribbean Cruises Ltd.	B2	464	376	88
Service Properties Trust	Ba2	286	222	64
Travel + Leisure Co.	B1	224	179	45
United Airlines, Inc.	Ba3	444	402	42
United Airlines Holdings, Inc.	Ba3	444	406	38
Rite Aid Corporation	Caa2	990	956	35

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Dec. 1	Nov. 24	Spread Diff
Talen Energy Supply, LLC	Caa1	1,842	2,039	-197
R.R. Donnelley & Sons Company	B3	159	184	-25
Macy's Retail Holdings, LLC	Ba3	213	231	-18
AutoNation, Inc.	Baa3	56	72	-16
Consolidated Edison Company of New York, Inc.	Baa1	27	41	-14
SITE Centers Corp.	Baa3	103	110	-6
TECO Energy, Inc.	Baa1	46	52	-6
WEC Energy Group, Inc.	Baa1	49	55	-5
Levi Strauss & Co.	Ba2	115	120	-5
DPL Inc.	Ba1	162	166	-5

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (November 24, 2021 – December 1, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 1	Nov. 24	Senior Ratings
Issuer			
CaixaBank, S.A.	A3	Baa1	Baa1
Svenska Handelsbanken AB	Aa1	Aa2	Aa2
Daimler AG	A3	Baa1	A3
Banco Comercial Portugues, S.A.	Ba2	Ba3	Ba1
Banca Monte dei Paschi di Siena S.p.A.	Ba3	B1	Caa1
Telecom Italia S.p.A.	Ba3	B1	Ba2
Renault S.A.	Ba2	Ba3	Ba2
NXP B.V.	Baa1	Baa2	Baa3
SSE plc	Baa1	Baa2	Baa1
HSBC Bank plc	A1	A2	A1

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 1	Nov. 24	Senior Ratings
Issuer			
RWE AG	A2	Aa3	Baa2
Royal Philips N.V.	A1	Aa2	Baa1
Alliander N.V.	A1	Aa2	Aa3
Banco Bilbao Vizcaya Argentaria, S.A.	A3	A2	A3
ABN AMRO Bank N.V.	A2	A1	A1
ING Bank N.V.	Aa2	Aa1	A1
Erste Group Bank AG	A2	A1	A2
UniCredit Bank AG	Aa2	Aa1	A2
Danske Bank A/S	A1	Aa3	A3
Orange	A1	Aa3	Baa1

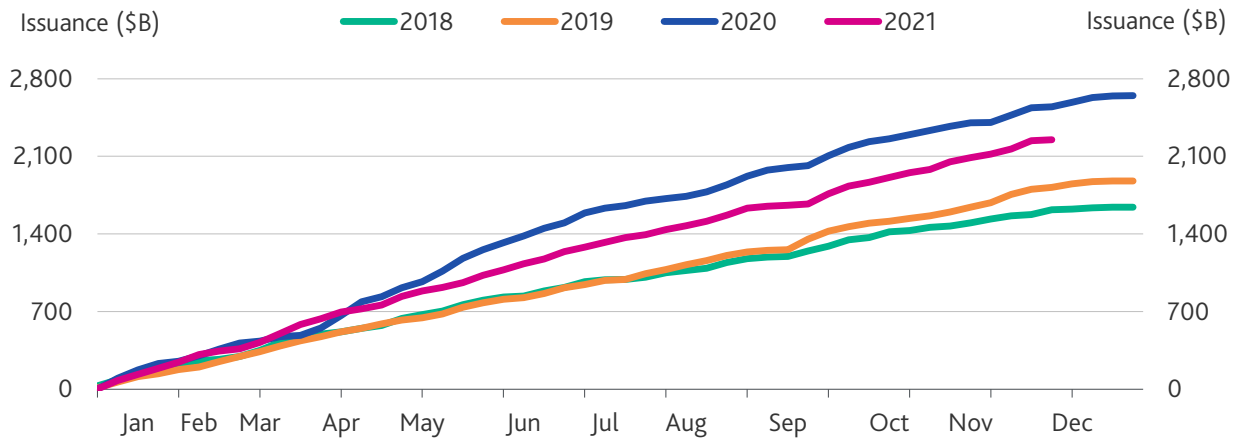
CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 1	Nov. 24	Spread Diff
Issuer				
Vedanta Resources Limited	B3	832	720	112
Deutsche Lufthansa Aktiengesellschaft	Ba2	294	253	40
Piraeus Financial Holdings S.A.	Caa2	614	577	37
Vue International Bidco plc	Ca	618	589	30
Rolls-Royce plc	Ba3	187	158	29
Premier Foods Finance plc	B3	248	221	26
National Bank of Greece S.A.	B3	271	253	18
CMA CGM S.A.	B2	314	297	17
Jaguar Land Rover Automotive Plc	B1	349	333	16
Eksportfinans ASA	Baa1	345	329	16

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 1	Nov. 24	Spread Diff
Issuer				
Boparan Finance plc	Caa1	1,298	1,446	-148
Novafives S.A.S.	Caa2	637	670	-33
Novo Banco, S.A.	Caa2	174	190	-16
Telecom Italia S.p.A.	Ba2	232	246	-14
Iceland Bondco plc	Caa2	602	612	-10
ASML Holding N.V.	A2	39	47	-8
NXP B.V.	Baa3	55	59	-4
Sappi Papier Holding GmbH	Ba2	342	345	-3
3i Group plc	Baa1	96	99	-3
Wm Morrison Supermarkets plc	Baa2	165	168	-2

Source: Moody's, CMA

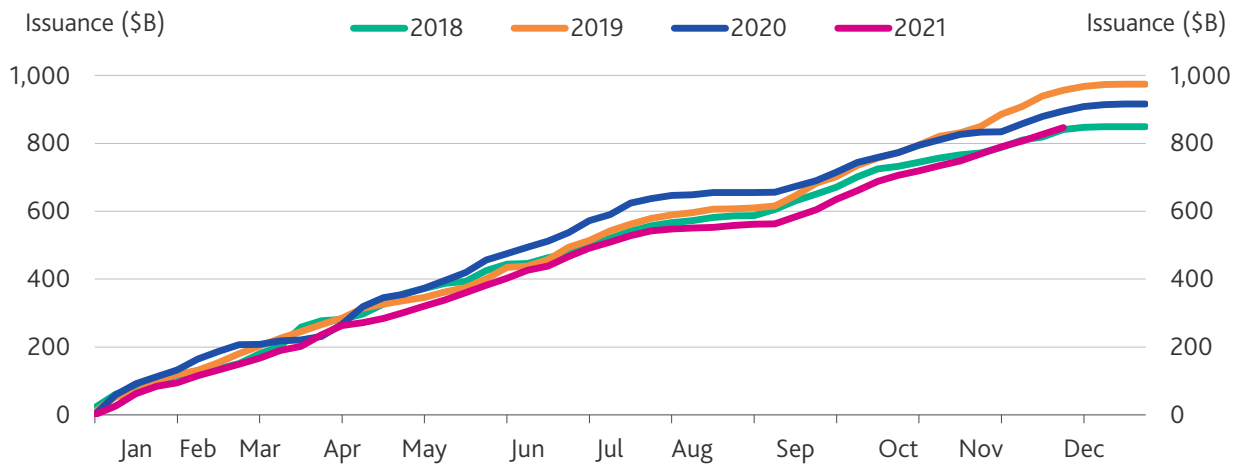
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

## ISSUANCE

**Figure 7. Issuance: Corporate & Financial Institutions**

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	3.850	3.600	7.780
Year-to-Date	1,572.313	607.711	2,248.668

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	18.057	1.046	19.395
Year-to-Date	669.263	155.616	846.158

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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