

The Weekly Market Outlook will not publish on December 23. Publication will resume on December 30.

**WEEKLY MARKET
OUTLOOK**

DECEMBER 16, 2021

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Hawks Fly at FOMC Meeting

The December meeting of the Federal Open Market Committee concluded with the decision to double the pace of Fed tapering from \$15 billion to \$30 billion monthly. This will wrap up the tapering process by mid-March, three months earlier than previously thought, and opens the door for the Fed to begin raising the target range for the fed funds rate around the middle of the year, if deemed necessary.

Fed Chair Jerome Powell, during his post-meeting presser, said that the Fed could raise interest rates before the economy reaches full employment. We may need to pull forward our expectation for the first rate hike, currently September, to May. We had assumed, based on Fed guidance, that full employment was one of the three conditions needed to be met before raising interest rates. Also, Powell said there was a risk of higher inflation becoming entrenched.

There were some inconsistencies during Powell's question-and-answer session. He said that the current inflation acceleration has nothing to do with the tightness of the labor market. However, he pointed to the strong gain in the Employment Cost Index during the third quarter as the reason for the recent hawkish shift by the Fed.

In the post-meeting statement, another hawkish change was in the forward guidance. No longer does the statement note that the Fed will aim to achieve inflation moderately above 2% for some time—a recognition that its mandate has been met. The deviation in inflation from the target this year was made up for by the past few years, when inflation was below its target. The statement suggests the Fed is now aiming to get inflation to 2% rather than aiming slightly north of that.

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The so-called dot plot showed 10 of 18 FOMC participants anticipated three rate hikes in 2022 while two were looking for four hikes. This is noticeable and a hawkish shift from September. The median projection has three 25-basis point rate hikes in 2022 and the same in 2023.

The Fed's hawkish shift has caused short-term Treasury yields to jump, flattening the yield curve. The flattening in the yield curve could limit how much the Fed raises the target range for the fed funds rate, since it will not want the yield curve to invert. The Fed has options. It could opt to allow the balance sheet to decline, which is a form of monetary policy tightening, and would put upward pressure on long-term rates.

Though tapering will end sooner, the Fed is still going to reinvest the proceeds from maturing assets to ensure the balance sheet doesn't decline. In 2014 the Fed preferred raising the target range for the fed funds rate before it allowed the balance sheet to decline outright. However, that decline didn't last long, and the Fed may not be able to best that performance this time around.

Yield curve continues to flatten

Hawkish rhetoric by the Fed has flattened the U.S. yield curve, or the difference between long-term Treasury yields and short-term yields. The shape of the yield curve garners a ton of attention and raised a number of questions. When the yield curve flattens, concerns about the economy's near-term prospects increase. Some of the questions we have been asked about the flattening in the yield curve include what is behind it and will it tie the Fed's hands in raising interest rates.

The yield curve is flattening because the Fed has turned hawkish, driving short-term rates higher. To assess what is driving changes in long-term rates, it's useful to decompose the 10-year Treasury yield into consumer price inflation expectations, the term premium, and expected real, or after inflation, short-term interest rates. Inflation expectations are what investors believe inflation will be over the 10-year period that they own the Treasury bond.

The term premium is what investors need to be compensated for the risks involved in investing in a long-term bond over a short-term security. And expected real short-term rates are where investors believe short-term rates are headed, which is highly dependent on the thrust of monetary policy. This decomposition isn't straightforward, so any precision in our estimates should be appropriately discounted.

A decline in the term premium is behind a good chunk of the recent decline in long-term rates. At the same time,

short-term rates are on the rise, particularly the two-year Treasury yield, because of the hawkish rhetoric from the Fed.

Long-term rates are being weighed down by the market's low expectations for how much the Fed will do during this tightening cycle. Financial markets are pricing in the fed funds rate to rise to only about 1.5% by the end of 2024. This is well below our estimate. Don't read too much into market expectations about where the Fed's tightening cycle ends. Market expectations don't reflect expectations about the path of the policy rate but of the term premium.

A probabilistic forecasting approach, which is based on the subjective probabilities of a fed hike versus a cut, has the target for the fed funds rate peaking at 2% this cycle, less than our baseline but around 50 basis points higher than market expectations.

Also, the flattening in the yield curve could limit how much the Fed raises the target range for the fed fund rate, since it will not want to invert the yield curve. The Fed has options. It could opt to allow the balance to decline, which is a form of monetary policy tightening, and would put upward pressure on long-term rates.

Odds are that the yield curve will narrow next year, but worries about the state of economy should be low.

Supply-chain pressure eases a little

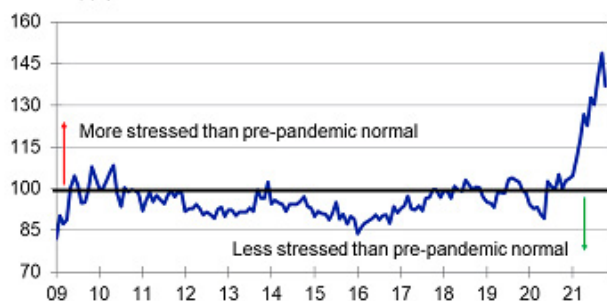
Our U.S. Supply-Chain Stress Index declined from 148.9 in September to a reading of 137 in October, which offers a temporary sign that stress is easing but remains substantial. The concern is that the improvement is temporary since the Omicron variant of COVID-19 could delay further improvement or cause conditions to deteriorate, particularly if the Asia-Pacific region is hit hard by the new variant.

The issues with U.S. supply chains are both supply- and demand-related. On the demand front, wealth effects associated with rising asset prices, unprecedented fiscal stimulus, and fewer opportunities to spend on services, led to an enormous increase in consumer goods spending. Control retail sales—total sales excluding autos, gasoline, building materials and restaurants—is 8.3% above what would have been if the pre-pandemic trend had continued.

This has magnified the issues with U.S. supply chains. However, October's SCSi update offers hope that autumn will represent the apex in the U.S. economy's struggle to calibrate constrained production with pandemic-altered demand.

Stress Reduction

U.S. Supply-Chain Stress Index, 2019Q4=100



Sources: Multiple statistical offices, Moody's Analytics

One of the primary drivers in the SCSI's reduction is the decline in shipping costs. The Baltic Dry Index has nearly been halved from its peak in early October. Elsewhere, manufacturing production showed signs of improvement, with capacity utilization ticking up. An ongoing expansion in productive capacity and the reduction in distribution costs are encouraging, but the labor market remains a challenge.

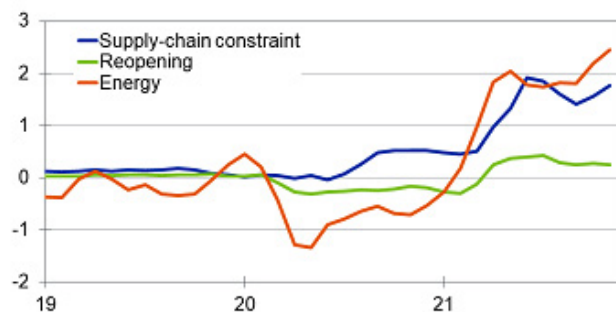
The SCSI also factors in pandemic-related labor supply issues. October was another near-record high month for job openings as employers in the U.S. reported 11 million unfilled positions. While headline job growth disappointed in November, the household survey showed the largest monthly increase in the labor force in more than a year. The influx of job seekers will be needed to fill open positions, a crucial supply-side constraint today.

Also encouraging, hiring in manufacturing and transportation/warehousing outpaced the private-sector average in November. However, we remain focused on global production and distribution lines because they are central to inflation and the rebuilding of U.S. inventories.

Semiconductor production in the Asia-Pacific region is picking up. This should eventually put downward pressure on U.S. new- and used-car prices, with the latter contributing the most to our supply-chain constrained CPI index.

Shortages & Energy Drive Inflation

Contribution to y/y growth in U.S. CPI, ppt



Sources: BLS, Moody's Analytics

Our baseline forecast calls for inflation to begin moderating in 2022. Energy prices, which have been a major inflationary force of late, have historically proven to be temporary and are beginning to cool. The upward pressure on prices generated by today's supply constraints will ease as capacity enhancements, driven by the promise of heady profits, boost production and help to restock inventories. Familiarity with the virus means that businesses, as well as consumers, will be increasingly adept at navigating successive waves of infections and can be reasonably expected to alter behavior less drastically as the pandemic becomes endemic. Predictability, a word unused for nearly two years, will steady supply chains and usher further supply-chain stress reductions.

Arrow Points Up for U.S. Regional Economies

BY ADAM KAMINS

The official start of winter may be days away, but another season of sorts kicked off earlier this month. With the release of the Quarterly Census of Employment and Wages for the second quarter, the period of the year in which upcoming revisions can be more meaningfully anticipated has begun.

A peek inside the QCEW suggests that when the Bureau of Labor Statistics completes its benchmarking process this coming spring, payroll growth will look more robust than it does today. While this is hardly enough to fundamentally alter the trajectory of most economies, there are a few themes that emerge when comparing QCEW growth for the first half of this year with that of preliminary payroll estimates.

Encouraging trends

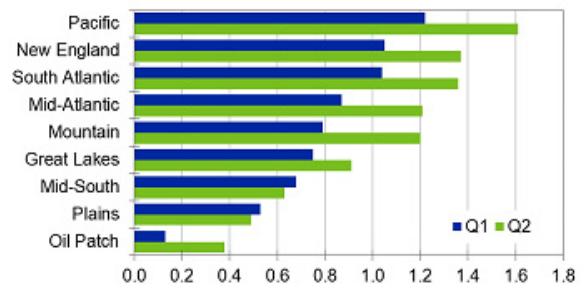
Estimates from the BLS's Current Employment Statistics remain the most widely used and timely data on the state of regional labor markets. But each spring, more complete figures from the QCEW, which are compiled from state unemployment insurance tax records, are used as the basis for sometimes-sizable benchmark revisions. However, given the universe of data being collected and processed, the QCEW lags the CES by about six months.

With half of 2021 now available, perhaps the most striking difference from a year ago involves upward revisions across the nation. The 2020 benchmark revisions were slightly unfavorable, suggesting that a reversal is in store if the pattern from the first half of this year holds. That would suggest that employment is a bit farther along than otherwise believed in many regions.

The expected upward revisions appear more concentrated in the second quarter and along the coasts. The Pacific Coast looks poised to be painted in a more favorable light, led by California and Hawaii. After that, gains are most concentrated along the East Coast, spanning New England, the Mid-Atlantic and the Southeast.

Upward Revisions Are Likely on Coasts

Payroll employment, QCEW vs. CES, % change yr ago



Sources: BLS, Moody's Analytics

All nine census divisions appear poised for favorable changes. Only the West South Central is likely to see a first-half growth rate increase of less than half a percentage point, according to the QCEW. This owes primarily to Texas, which appears poised for one of the nation's smallest revisions.

Good news abounds

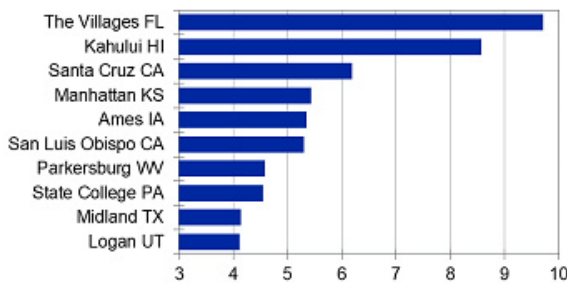
The broad upward revisions extend to more granular geographies, with nearly all states and more than 60% of metro areas looking better in the QCEW data. Among those places that are best positioned, there are a few common threads. Perhaps most notable is a reliance on consumer spending, with tourism and retirees propelling Hawaii and Florida into the top five for most favorable expected changes. At a metro-area level, this is even more pronounced, with Kahului HI and The Villages FL—two economies that depend almost entirely on tourism and retirees, respectively—in the top spots.

The impact of upward revisions to consumer industry employment is also apparent in the large metro area that is poised for the most favorable revision, with Orlando now looking far better on a year-over-year basis. A summer pickup in tourism and confidence should provide further fuel, although the impact of the Delta variant of the virus causing [COVID-19](#) may make the more favorable trajectory difficult to sustain.

College towns will also be painted in a more favorable light come spring, as they appear to have been severely undercounted in the initial estimates. Upward revisions should await university-dependent portions of all regions, and span both private and public education. Among the metro areas with the 10 largest expected revisions, more than half are college towns. These include Santa Cruz and San Luis Obispo CA, home to UC-Santa Cruz and Cal Polytechnic. Ames IA, Manhattan KS, State College PA, and Bloomington IN—each home to a very large university—are also going to look better come spring.

College Towns Will Soon Look Better

Payroll employment, QCEW vs. CES, % chg 2021H1 vs. 2020



Sources: BLS, Moody's Analytics

The upward revisions may owe in part to the formation of new businesses to replace some that closed during the pandemic. Because the CES can be slow to pick up the impact of firm births and deaths in its initial estimates, it may be missing increased entrepreneurship in tourism hubs and college towns.

Pockets of weakness

The positive story does not extend to all regional economies. Mining employment looks better nationally, but revisions will be mixed, with Texas and North Dakota among a handful for which a material upward change is unlikely. This may show up in spillover to support services and consumer spending due to a lack of drilling, rather than in the direct mining employment number. Other states in the middle of the country are also at a disadvantage when it comes to expected revisions.

Middle of U.S. Looks Least Favorable

Payroll employment, QCEW vs. CES, % chg yr ago, avg for 2021H1



Source: BLS, Moody's Analytics

While there are far fewer downward revisions expected for metro areas, the expected changes to Ocean City NJ stand out. This small beach-dependent economy saw private services fall compared with preliminary estimates, with leisure/hospitality shouldering most of the blame. This may suggest more widespread firm closures than initially indicated in the data. Despite this, growth for the first half of the year remains comfortably perched near the top of the list among metro areas.

Other downward revisions are concentrated in smaller places where construction may come in weaker than expected. Sierra Vista AZ and Beaumont TX are two examples of this, pushing them to the second and third spots on the list of metro areas that are poised for downward revisions.

Among larger economies, western New York faces two of the steepest declines. Interestingly, however, the drivers in Buffalo and Rochester are quite different. For the former, white-collar employment is less favorable than it seemed, with financial services employment somewhat overstated in the initial estimates. In Rochester, manufacturing looks far weaker in the QCEW. This is consistent with unusually large swings in those areas in the past, including gains being largely wiped out in Buffalo in 2014 and intra-year volatility disappearing in 2017. A fundamental change in the narrative for those places is unlikely this year, but there inevitably will be some significant shifts once the final revisions are in place.

The Week Ahead in the Global Economy

U.S.

The holiday shortened week will be busy. Among the key data to be released are nominal personal income and spending, PCE deflators, the Conference Board's consumer confidence index, initial claims for unemployment insurance benefits, durable goods orders and new-home sales.

Most of the attention will be on the headline and core PCE deflators. 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. The core PCE deflator was likely up 4.5% on a year-ago basis in November.

Initial claims for unemployment insurance benefits have been volatile recently, which is normal this time of year because of difficulty getting the seasonal adjustment correct around holidays. The new data will include the December payroll reference period, but given the volatility we will be putting more emphasis in the four-week moving average, which is the lowest since the late 1960s.

Europe

The next two weeks will be quiet in Europe, but there will be important Russian releases at the end of the month. Retail sales in November are expected to have been 3.8% higher than a year earlier, as this time last year the country was suffering under a new outbreak of COVID-19. The outbreak this November is worse, but the domestic economy is livelier given the increase in business from abroad. For that reason we see unemployment stable at 4.3% in November, from the previous month. The resource extraction industry is having a blowout season with buyers in Europe rushing to build up inventories ahead of the cold season. This will also be reflected by the 7.4% y/y rise in November's industrial production figures. Given higher growth at home and abroad, global supply disruptions, and a still-weak ruble, inflation has been on the rise. Interest rate hikes by the central bank have been supporting the ruble and mitigating inflationary pressures, but we still see the inflation rate accelerating to 8.6% y/y in November, up from 8.4% in October.

All that said, GDP likely rose 4.3% y/y in the three months to September, following the 10.5% increase in the second quarter. This is because in this period the Delta variant broke out in the country, and initial measures to curb it caused a slowdown in activity. The frenzy in the energy market was not yet on the horizon, so mostly Russia was struggling with the pandemic at home and the worsening price situation.

Meanwhile, we are expecting Spain's GDP to pick up by 2.2% q/q in the third quarter, adding to the 1.1% rise in the second. A wave of tourists boosted activity over the summer. Domestic demand remains modest though, and tourism still is a fraction of what it was prior to the pandemic. Indeed, we expect no change in retail sales in November following the previous month's 0.1% decline.

We expect the number of job seekers in France to tick down, though at a slower pace, in November to around 3.1 million from 3.14 million in October. Gains in the labor market will slow this winter with the reemergence of the COVID-19 pandemic in Europe and the negative effect this will have on the services sector and tourism flows.

Asia-Pacific

Japan's core CPI likely lifted to 0.3% y/y in November, from 0.1% in October. The lift is coming from higher energy and import prices. But fundamental price momentum remains subdued. Core readings are also being depressed because of recent base year and weighting revisions by the Japanese Statistics Bureau. These changes amplified the impact of lower mobile communication prices that followed a government-led push for a reduction in charges, which are high by international comparison. In other data, Japan's retail trade will remain on an improving trend in November thanks to higher vaccination and lower case numbers, but it will remain choppy due to the rotation in spending toward services.

On the policy front, the Bank of Thailand will keep the policy rate steady at 0.5% in December. The central bank is expected to remain on the sidelines in 2022, allowing the economic recovery to gather steam. The arrival of the Omicron variant of the virus causing COVID-19 increases near-term uncertainty and downside risk for the recovery of Thailand's important tourism sector, which has largely been in hibernation for almost two years.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
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

2022 Rate-Hike Outlook

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 113 basis points, 4 bps wider than this time last week. This is a new high over the past 12 months, during which the low was 95 bps. 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 also widened by 48 bps to 103 bps.

The long-term investment grade corporate bond spread was 144 basis points, compared with 142 bps last Wednesday. Investment-grade industrial corporate bond spreads widened from 140 to 147 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread widened from 316 basis points to 333 bps. The Bloomberg Barclays high-yield option adjusted spread widened by 12 bps to 306 bps. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and are roughly consistent with a VIX of 20.

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 December 15, US\$-denominated high-yield issuance totaled \$9.025 billion, bringing the year-to-date total to \$618.2 billion. Investment-grade bond issuance rose \$40.9 billion in the current week bringing its year-to-date total to \$1.643 trillion.

U.S. ECONOMIC OUTLOOK

There were some tweaks to our U.S. baseline forecast in December, including bringing forward the timing of the first rate hike by the Federal Reserve. Changes to GDP growth this year and next were modest, but the Omicron variant of COVID-19 lends downside risk. Our assumption that each passing wave of COVID-19 will have smaller economic costs will be tested with Omicron. We didn't significantly alter the forecast because of the new variant, as it's unclear how much of an effect it will have. We should have more

information on how infectious it is soon and what this means for hospitalizations.

Turning to fiscal policy, we maintained our assumption of a \$1.75 trillion social safety net and climate spending bill, which would be almost fully paid for by higher taxes on corporations and well-to-do households. The bill, known as the Build Back Better Act, is assumed to pass in late December, with implementation starting in early 2022. Under current law, the monthly Child Tax Credit advances will end after December, which will force Democrats to act.

Moreover, we believe the top-line \$1.75 trillion figure is a compromise framework that will be amenable to key moderate senators, who are balking at the House-passed BBBA that packs more than \$2 trillion in spending and tax breaks. As opposed to the House-passed legislation, the BBBA, assumed in our forecast, does not include immigration funding, paid-leave investments, nor an increase to the existing limit on the state and local tax deduction. All told, the contours of our \$1.75 trillion assumption are largely the same as in November. Clean-energy and climate provisions will amount to nearly \$600 billion; childcare and preschool investments will total nearly \$400 billion; and more than \$300 billion will fund an expansion of healthcare coverage. Other measures include extending the expanded Child and Earned Income Tax Credits, investing in affordable housing, and boosting other social safety net programs.

COVID-19 assumptions

We adjusted our epidemiological assumptions to anticipate that total confirmed COVID-19 cases in the U.S. will be 57.2 million, compared with 49.12 million in the November baseline. The seven-day moving average of daily confirmed cases has declined recently, but this could be misleading because of reporting issues around the Thanksgiving holiday. Also, there have been reported cases of the Omicron variant in the U.S., which we will be watching closely, as it would warrant additional changes to our COVID-19 assumptions next month.

The date for abatement of the pandemic changed slightly; it is now February 13, a couple of months 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, which 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. Waves won't be avoidable, particularly in the winter. There is a strong correlation between average temperatures and the number of COVID-19 cases. Therefore, odds are high that a wave will occur this winter.

Another solid year ahead

The Delta wave that hit this summer did significant damage to the recovery—hurting growth and juicing up inflation. As Delta has receded, growth has quickly rebounded, and inflation is near a peak. Of course, the next wave appears to be forming on the fast-spreading Omicron variant of the virus. We assume this wave will be less disruptive to the healthcare system and economy than Delta, but this is a tenuous assumption. The next few weeks will tell.

In the December baseline, we kept our forecast for GDP growth this year at 5.6%, identical to the prior baseline. We look for GDP growth to be 4.4% next year, 0.2 of a percentage point lighter than in the November baseline. We nudged our forecast for growth in 2023 higher, from 2.8% to 2.9%.

Inventories should add a lot to growth this quarter and in the first half of next year but could cause problems down the road. The volatility in consumer and producer prices today could set the stage for the cobweb theorem, which normally plagues agriculture, to affect other industries. The cobweb model describes cyclical supply and demand in markets where the amount of supply tends to be determined before prices are fully observed. This has typically applied to agriculture, as farmers need to decide what crop to produce and how much before the market price is set. This agriculture model applies to an economy emerging from a pandemic, where there is uncertainty that prices today will hold in a few months and the effect will be mitigated or magnified by the price elasticity of demand.

Volatility in prices will lead to mistakes, either in over- or underbuilding 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. However, 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.

Global supply-chain issues remain a downside risk to the near-term forecast. There has been a little improvement recently, according to our U.S. Supply-Chain Stress Index.

The Omicron variant could unwind this or delay further improvement.

Business investment and housing

There was a small upward revision to the forecast for real business equipment investment next year, as it is forecast to increase 9.9%, compared with the 9.2% in the prior baseline. We nudged the forecast for 2023 lower; we now expect real business equipment investment to increase 4.6%.

Risks are roughly balanced to the forecast, as 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 not revised significantly over the next few years. New data and revisions to prior months led us to revise lower the forecast for housing starts. Housing starts are now forecast to rise 12.4% this year, compared with 13.8% in the November baseline. We revised the forecast higher for growth in housing starts next year from 9.9% to 12.4%. Lower construction costs, additional labor supply, and strong demand will be supportive for residential construction next year.

We had been steadily revising our forecast higher for house prices during the past several months. We boosted the forecast for the FHFA All-Transactions House Price Index to increase 12.9% this year, stronger than the 10.6% in the November baseline. House price growth is also stronger because of the imbalance between supply and demand; in 2022, we look for prices to rise 8.7%, compared with the 6.7% in the November baseline.

Tale of two surveys

U.S. job growth fell well short of expectations in November, but this won't deter the Federal Reserve from announcing that it is doubling the amount by which it is tapering monthly asset purchases, with the change taking effect in January. Don't fixate on the headline increase in nonfarm employment, because the details elsewhere were noticeably stronger.

For example, the prime-age employment-to-population ratio jumped from 78.3% to 78.8%. Historically, a prime-age employment-to-population ratio of 80% is consistent with an economy at full employment. With the labor market quickly approaching that threshold, the Fed will want the flexibility to raise the target range for the fed funds rate next year. Also, the unemployment rate is on track to drop below 4% early next year. Add to this mix that inflation will remain elevated, and the November employment report won't alter the Fed's hawkish shift.

The labor market added only 210,000 jobs for November, and the revisions to September and October were modest, adding 82,000 more positions. The gain fell well short of our and the consensus expectation but is far from a dud. The increase in November was stronger than average monthly job growth during the last expansion.

Declines in retail trade and government and weak gains in leisure/hospitality pulled down the top line. However, technical factors were at play that weighed on job growth in November. For retail, it was an earlier payroll reference period, and this reduced the number of seasonal hires who were counted for the holiday shopping season. Also, the seasonal adjustment factor was significantly less favorable than we had anticipated. In fact, the difference between the change in not seasonally and seasonally adjusted employment was more than 500,000, the largest reduction for any November on record.

It was difficult to find anything bad in the household survey. Adjusted household employment was up 1.9 million in November. The adjusted household employment series is calculated by subtracting from total employment agriculture and related employment, the unincorporated self-employed, unpaid family and private household workers, and workers absent without pay from their jobs, and then adding nonagricultural wage and salary multiple jobholders. This makes it a more apples-to-apples comparison with the establishment survey. Given the small survey sample, this measure is also more volatile than the payroll estimate. Still, cumulative increases in the establishment and adjusted household survey are 6.1 million this year. Therefore, underlying job growth is running at 555,000.

We look for average monthly job growth next year to be 352,000, stronger than the 340,000 in the November baseline. Job growth will moderate further in 2023, with average job growth of 145,000, a touch weaker than the 150,000 in November.

The unemployment rate is forecast to average 4.3% this quarter, compared with the 4.5% in the prior baseline. This incorporates the new data on the unemployment rate for November. The unemployment rate will average 3.5% at

the end of next year, in line with the prior baseline. 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.

The Fed's hawkish pivot

There were some material changes to the forecast for growth in the core PCE deflator. Year-over-year growth in core inflation is now expected to be north of 4% this quarter and next before it decelerates and ends next year just north of 2%. The core CPI follows a similar pattern.

Something that isn't getting enough attention is the sheer amount by which supply-chain stress is boosting the U.S. CPI. Building off of our prior work on estimating the reopening effect on the CPI, we created a supply-chain constrained CPI. In October, our supply-chain constrained CPI added 1.6 percentage points to year-over-year growth in the headline CPI and has boosted it by at least a full percentage point since April. Therefore, absent stress in the U.S. supply chain, year-over-year growth in the CPI in October would have been 4.6%, still the strongest since 2008, when energy prices were spiking. Higher global energy prices, which have been proven to have a temporary effect on the CPI, added 2.2 percentage points to year-over-year growth in the CPI in October. Excluding supply-chain constrained components and energy, the CPI would have been up only 2.4%, near the Fed's 2% objective.

The Federal Reserve announced that it is accelerating its tapering process at the December meeting of the Federal Open Market Committee. The risks that the Fed would

increase the amount by which it reduces its monthly asset purchases had risen noticeably after the October CPI, which 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. The Fed decided to increase the monthly taper by \$15 billion to \$30 billion.

Our December baseline forecast brought 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 another change is likely for the January 2022 baseline. Doubling the pace of accommodation increases the odds of the first rate hike next June, as asset purchases would be zero by the end of March. A probabilistic forecasting approach based on the subjective probabilities of a fed hike versus a cut would have the first hike occurring earlier than next September.

There were no significant changes to the 10-year Treasury yield. 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 did not change, as we expect the Dow to steadily decline throughout 2022. The decline in stock prices is forecast to be orderly, but it could turn into something worse. One potential catalyst would be an explosion in the value of margin accounts at brokers and dealers, which amounted to \$595 billion in the second quarter, nearly double the pre-pandemic level. A drop in stock prices could trigger margin calls. These occur when the equity in your investing account drops to a certain level and you owe money to your brokerage firm. If there is no money, investors have to sell other assets.

Migrant Worker Outflows Weigh on Russia and the U.K.

BY OLGA KURANOVA

As the global labour shortage pushes on, some economies are facing additional challenges due to their reliance on migrant labour. Although otherwise very different, Russia and the United Kingdom share this problem: United Nations statistics show that Russia ranked fourth amongst destinations for international migrant workers in 2019; the U.K. was fifth. In both countries, pandemic-induced labour shortages have been exacerbated by an exodus of foreign workers, leaving employers scrambling.

Russia tries to woo back economic migrants

Amongst big emerging markets, Russia is one of few countries facing acute labour shortages. Russia has long relied on migrant workers from Central Asia to staff a range of industries, including construction, agriculture, and leisure and hospitality. Unfortunately, more than a million migrant workers left the country when it closed its borders in 2020 due to pandemic restrictions; few have returned. Coupled with low vaccine uptake and the world's highest per capita excess death rate from COVID-19, this has created jarring labour shortages that are stifling Russia's recovery.

Russia's unemployment rate held steady at 4.3% in October. Although it was still a touch below pre-pandemic figures, it was the first break in an 11-month streak of declines. Demand for workers is growing in a wide range of industries, but growth in construction, agriculture, and several other industries is constrained by low unemployment, labour shortages, and cross-sectoral labour outflows. The number of foreign-born workers in Russia has dwindled to 3 million from a pre-pandemic count of 4.5 million, according to the latest estimates. And the labour force has shrunk for the first time in several months. Wages are starting to reflect the tightness: Jobs in IT, finance, trade, hospitality and construction are all paying at least 10% more than before the pandemic. This is being translated into inflation, which reached 8.1% in October, the highest rate in more than five years.

Lawmakers are being forced to step in to encourage the return of foreign workers. Russia is working on undoing travel restrictions previously imposed in response to the pandemic. The nation is also lifting previously enacted "entry bans" for more than 300,000 individuals that were implemented due to two consecutive administrative offenses (covering a range of possible infractions). This will

not be enough. As the labour shortage worsens, the country is pursuing other measures. Russia and Uzbekistan are piloting a program to recruit construction workers and streamline the process for obtaining work permits.

We expect that industries such as hotels, public food services, trade, and construction will experience worker shortages throughout 2022. These shortages will persist until the pandemic situation improves and migrants start returning to Russia—no earlier than the second half of 2022. Unfortunately, this will not solve all that ails Russia's labour market given the nation's labour force is set to shrink due to an ageing population, out-migration, and the declining number of workers aged under 40.

Brexit rears its ugly head

Within the U.K., the pace of growth appears to be slowing, and some downside surprises are emerging, including the effects of labour shortages spurred by the pandemic and exacerbated by Brexit.

The labour market is on solid ground overall, but several risks are on the horizon. The U.K. unemployment rate declined to 4.3% in the three months to September, down from 4.7% in the previous stanza. The Coronavirus Job Retention Scheme expired at the end of September. Thanks to its previous extension, the economy is in better shape, but the absorption of idle workers will take time due to skill and geographic mismatches. Anecdotally, the largest issue facing many employers is maintaining staff levels and recruiting low-skilled workers from abroad under the U.K.'s new visa regime. As a result, job vacancies reached a record high of 1,172,000 between August and October.

Much like in Russia, the U.K. migrant shortage is most starkly felt in large cities such as London. Reduced cross-border movement for EU citizens post-Brexit and amidst COVID-19 fears is keeping many potential workers out of the labour force in London, a city that traditionally relied on EU workers. The biggest labour shortages have so far been in low-paid manual and service sector roles. Many consumer industries are in a bind, as reopening happened faster than labour force recovery. White-collar firms are seeing a dearth of talent. A spike in the need for tech workers, coupled with

a rise in resignations and a marked absence of foreign talent, has left the industry understaffed.

The U.K.'s hospitality industry, the third-largest private sector employer, has been hit the hardest by the post-Brexit outflow. Despite increased spending per customer since pandemic restrictions eased over the summer, the industry is struggling: Thousands of European workers have left because of Brexit, and others have sought work in more stable sectors. Although many were covered by the government's furlough scheme, this did not include tips, leaving many workers with significantly lower earnings.

Acute labour shortages in industries such as truck transportation and the meat industry are unlikely to abate in time for the holiday season. The government announced a temporary visa scheme for 10,500 lorry drivers and 5,500 poultry workers in October. However, recruiting, submitting the necessary paperwork, and approving visas takes time. Also, many foreign workers may be less inclined to relocate for a temporary contract. Skills and geographic mismatches could prove more challenging than anticipated, slowing the reallocation of labour and adding to pressure on industries already dealing with labour shortages. The energy crisis and Brexit-related effects add extra uncertainty. For these reasons, the unemployment rate is expected to rise, peaking at 6.5% in the second quarter of 2022 before gradually falling again.

China's Tough November

BY CHRISTINA ZHU, XIAO CHUN XU, HERON LIM and KATRINA ELL

The suite of China's activity data for November, show the economy continues to navigate significant challenges heading into 2022. Consumer spending was a particular weak point. China's retail sales yearly growth moderated to 3.9%, the second lowest reading since the beginning of the year. Lingering virus outbreaks suppressed demand while rising consumer prices and slowing income growth further dampened household spending. Real retail sales growth, which looks through price effects, rose only 0.5% y/y, slowing from the 1.9% posted in October.

An early start to the Double 11, or Singles Day, shopping festival, boosted October's retail sales figures but turned into a drag in November. Demand for durable goods such as mobile phones, jewellery and home appliances was partly satiated in October as consumers brought forward their shopping to catch the early start this year of promotional campaigns. As a result, sales growth for those items from last November retreated substantially compared with October's year-on-year performance.

Sporadic COVID-19 outbreaks and China's strict virus control measures continued to hold back any services recovery, particularly around travel and hospitality. Catering sales fell 2.7% y/y, reversing from a 2% increase in the prior month. This was the second year-over-year contraction this year. The smaller decline in auto sales in November year on year versus October reflected an easing of chip shortages and supply bottlenecks. The surge in food and energy prices pushed up living costs and inflated related sales in November.

The country's retail sales are expected to remain volatile in the near term. Repeated virus flare-ups and the government's stringent zero-COVID-19 policy will suppress domestic demand. Rising consumer prices and supply bottlenecks could further discourage spending. And the property market chill will weigh on furniture and construction material sales. Nevertheless, we remain upbeat about the longer-term outlook as regulators ramp up monetary and fiscal support for the economy.

Fixed asset investment also disappointed

China is struggling to find its spark again after a difficult year of industrial reforms, a crackdown on the property development sector, and disruptive COVID-19 outbreaks. Fixed asset investment slowed to 5.2% y/y in January-November, from 6.1% in January-October. Rising oil prices, elevated commodity prices, and heightened investment uncertainty add to the barriers to recovery.

Investment has been on long-term downward trend due to a shrinking working population and slower growth. Public investment has taken a backward step this year as the central government sought to control its bloated debt. Investment in infrastructure grew by a measly 0.5% y/y YTD.

Some gains in industrial production

The headline gain in industrial production was a rare bright spot. Industrial production rose 3.8% over the year in November, from 3.5% previously. Output in mining and utilities increased measurably as an emphatic policy response to the shortages of coal, other commodities and electric power experienced in the third quarter delivered results.

Manufacturers are gearing up production once again, suggesting that the key binding constraint that some industries faced was a simple lack of electricity. This appears to be the case with respect to medical products and electronic goods, where output increased in November year over year. Although auto manufacturing decreased over the year, the pace of decline slowed for a third consecutive month. The semiconductor shortage remains a hindrance to production, but the low base in 2021 should mean that a partial recovery is on the cards in 2022.

Ongoing policy support in 2022

Beijing will step up monetary and fiscal support to offset the immediate weakness. The central bank has already cut the reserve requirement ratio by 0.5 percentage point, the second cut of the year, releasing another CNY1.2 trillion into the economy, which roughly coincides with Evergrande's recent bond default. In the first half of 2022, we expect China to step up its public investment and targeted fiscal spending.

Upgrade for United States Steel

BY STEVEN SHIELDS

U.S.

U.S. rating change activity was overwhelmingly positive in the latest period, with upgrades accounting for all but two rating actions and all the affected debt. The past week's performance mirrors the positive trend in rating activity over the past year and a half. Rating changes were spread across numerous industries, with speculative grade companies accounting for all seven changes.

The largest upgrade in terms of affected debt was issued to United States Steel Corp. On December 9, Moody's Investors Service upgraded U.S. Steel's senior secured rating to Ba2 from Ba3. Moody's Investors Service also made several other changes including upgrading U.S. Steel's corporate family rating to Bae from B1, its Probability of Default rating to Ba3-PD from B1-PD, and its senior unsecured debt rating to B1 from B3. In the rating action, Moody's Investors Service cited the company's inconsistent historical operating performance due to its exposure to cyclical end markets and volatile steel prices. However, the company's large scale and strong market position as a leading U.S. flat-rolled steel producer and increased diversification in Central Europe serve as strengths as well as an expectation for moderate financial leverage and ample interest coverage in a normalized steel price environment due to significant debt reduction in 2021. Furthermore, Moody's expects an historically strong operating performance through 2022 that will result in near term

metrics that are strong for the rating but are not likely sustainable as steel prices return to a more normalized level.

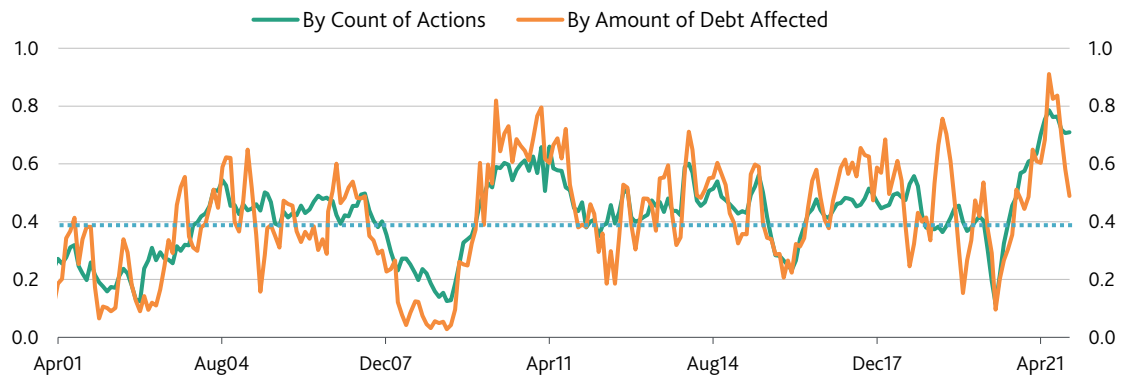
Meanwhile Peabody Energy Corp. was upgraded to B3 from Caa1 in the period, impacting nearly \$1.4 billion in outstanding debt. The firm's substantially improved near-term operating environment stems from the notable rise in coal prices, improved liquidity, and debt reduction in 2021. Additionally, expected free cash flow and further debt reduction in 2022 were listed as reasons behind the upgrade.

Europe

Corporate credit quality across Europe was mixed with upgrades comprising the bulk of changes, but only 11% of the debt affected. Last week's changes were headlined by the Moody's Investors Service downgrade of Wm Morrison Supermarkets plc, which saw its senior unsecured rating reduced to Ba1 from Baa2. The two-notch downgrade was triggered by the acquisition of Clayton Dubilier & Rice for an enterprise value of approximately £9.7 billion. The acquisition was financed through a combination of equity capital, including ordinary and preference shares, and credit facilities that are expected to be refinanced through long-term debt. Moody's considers that the acquisition of the company by CD&R has now been completed. However, the downgrade to Ba1 does not reflect the final financing structure for the acquisition and, as a result, Morrison's ratings remain under review.

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

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

FIGURE 3

Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
12/8/2021	NAVITAS MIDSTREAM MIDLAND BASIN, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
12/9/2021	UNITED STATES STEEL CORPORATION	Industrial	SrSec/SrUnsec/LTCFR/PDR	2890.0	U	Ba3	Ba2	SG
12/10/2021	CALERES, INC.	Industrial	SrUnsec/LTCFR/PDR	200.0	U	B2	B1	SG
12/10/2021	PEABODY ENERGY CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR	1389.0	U	Caa1	B3	SG
12/10/2021	CHASSIX HOLDINGS, INC.-ALUDYNE, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
12/13/2021	TRANSACT HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
12/14/2021	99 CENTS ONLY STORES LLC	Industrial	SrSec/LTCFR/PDR	350.0	D	Caa1	Caa2	SG

Source: Moody's

FIGURE 4

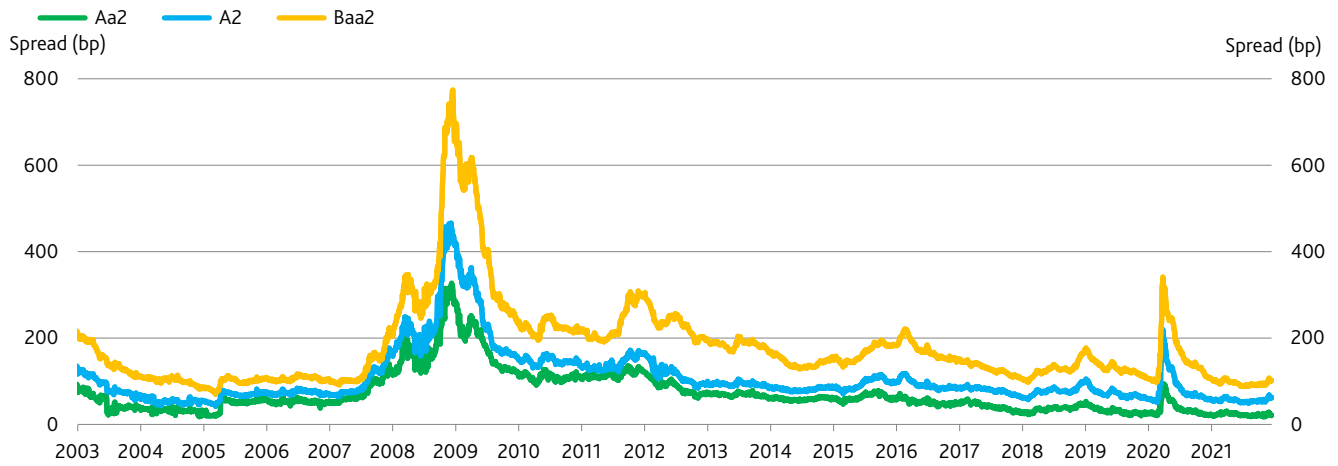
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
12/8/2021	SK SPICE HOLDINGS SARL (ARCHROMA)-ARCHROMA HOLDINGS SARL THE CO-OPERATIVE BANK HOLDINGS	Industrial	LTCFR/PDR		U	B3	B2	SG	LUXEMBOURG
12/9/2021	LIMITED-THE CO-OPERATIVE BANK FINANCE P.L.C	Financial	SrUnsec/LTIR/LTD	275.45	U	B3	B1	SG	UNITED KINGDOM
12/10/2021	SAFARI BETEILIGUNGS GMBH	Industrial	SrSec/LTCFR/PDR	407.63	D	Caa1	Caa3	SG	GERMANY
12/10/2021	BME GROUP HOLDING B.V.	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG	NETHERLANDS
12/13/2021	INTERNATIONAL PARK HOLDINGS B.V.	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG	NETHERLANDS
12/13/2021	LERNEN BONDCO PLC-LERNEN BIDCO LIMITED	Industrial	LTCFR/PDR		U	Caa1	B3	SG	UNITED KINGDOM
12/13/2021	MARKET HOLDCO 3 LIMITED-WM MORRISON SUPERMARKETS PLC	Industrial	SrUnsec/MTN	1926.32	D	Baa2	Ba1	IG	UNITED KINGDOM

Source: Moody's

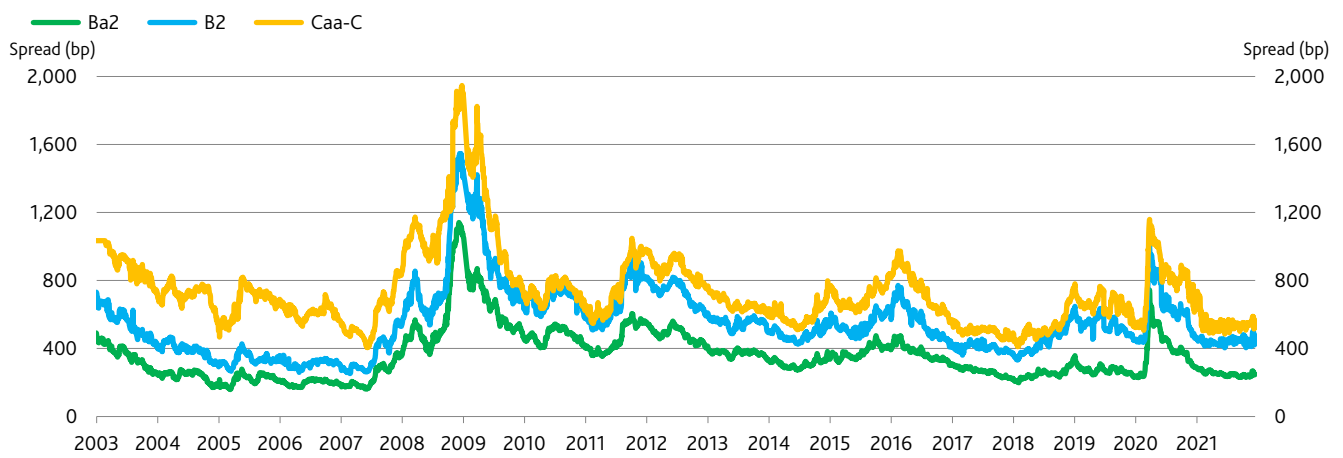
MARKET DATA

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 (December 8, 2021 – December 15, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
Archer-Daniels-Midland Company	Aa2	A2	A2
Chevron Corporation	Aa2	A1	Aa2
PNC Financial Services Group, Inc.	Aa3	A2	A3
Air Products and Chemicals, Inc.	Aa2	A1	A2
Oracle Corporation	Aa3	A1	Baa2
PepsiCo, Inc.	A1	A2	A1
Amgen Inc.	A1	A2	Baa1
NextEra Energy Capital Holdings, Inc.	A2	A3	Baa1
Charles Schwab Corporation (The)	Baa1	Baa2	A2
Bank of New York Mellon Corporation (The)	A2	A3	A1

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
CenterPoint Energy, Inc.	Baa2	A3	Baa2
PepsiCo, Inc.	A2	A1	A1
Philip Morris International Inc.	A2	A1	A2
General Electric Company	Baa3	Baa2	Baa1
Eli Lilly and Company	Aa2	Aa1	A2
FirstEnergy Corp.	Baa3	Baa2	Ba1
Emerson Electric Company	Baa1	A3	A2
Danaher Corporation	A3	A2	Baa1
Archer-Daniels-Midland Company	A2	A1	A2
United Rentals (North America), Inc.	Ba2	Ba1	Ba2

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 15	Dec. 8	Spread Diff
Talen Energy Supply, LLC	Caa1	2,976	2,909	67
Nabors Industries, Inc.	Caa2	812	748	64
American Airlines Group Inc.	Caa1	796	739	57
United Airlines Holdings, Inc.	Ba3	445	407	38
Pitney Bowes Inc.	B1	470	437	33
Carnival Corporation	B2	498	469	30
Nordstrom, Inc.	Ba1	331	301	30
Service Properties Trust	Ba2	284	255	29
Rite Aid Corporation	Caa2	1,001	974	27
Gap, Inc. (The)	Ba3	228	208	21

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 15	Dec. 8	Spread Diff
K. Hovnanian Enterprises, Inc.	Caa3	636	751	-115
R.R. Donnelley & Sons Company	B3	109	133	-23
TEGNA Inc.	Ba3	398	414	-16
The Terminix Company, LLC	B1	201	216	-16
Vornado Realty L.P.	Baa2	120	134	-14
United States Steel Corporation	B1	333	346	-13
Corning Incorporated	Baa1	75	87	-12
Juniper Networks, Inc.	Baa2	93	102	-9
PNC Financial Services Group, Inc.	A3	34	41	-7
Eaton Corporation	Baa1	46	53	-7

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (December 8, 2021 – December 15, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
Spain, Government of	Aa2	Aa3	Baa1
Banco Santander S.A. (Spain)	A1	A2	A2
ABN AMRO Bank N.V.	A1	A2	A1
Banco Bilbao Vizcaya Argentaria, S.A.	A2	A3	A3
HSBC Holdings plc	A3	Baa1	A3
ING Bank N.V.	Aa1	Aa2	A1
ING Groep N.V.	A1	A2	Baa1
Natixis	A1	A2	A1
Lloyds Bank plc	Aa3	A1	A1
Danske Bank A/S	Aa3	A1	A3

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
KBC Bank N.V.	A2	Aa3	A1
Erste Group Bank AG	A2	A1	A2
Investor AB	A3	A2	Aa3
United Kingdom, Government of	Aaa	Aaa	Aa3
Italy, Government of	Baa3	Baa3	Baa3
France, Government of	Aa1	Aa1	Aa2
Germany, Government of	Aaa	Aaa	Aaa
Rabobank	Aa1	Aa1	Aa2
Belgium, Government of	Aaa	Aaa	Aa3
Austria, Government of	Aaa	Aaa	Aa1

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 15	Dec. 8	Spread Diff
Boparan Finance plc	Caa1	1,305	1,258	47
Deutsche Lufthansa Aktiengesellschaft	Ba2	278	263	14
KBC Group N.V.	Baa1	69	59	10
Vedanta Resources Limited	B3	704	694	9
Sappi Papier Holding GmbH	Ba2	336	327	9
Avon Products, Inc.	Ba3	261	252	9
Novafives S.A.S.	Caa2	609	602	7
KBC Bank N.V.	A1	41	35	6
3i Group plc	Baa1	95	89	6
Electrabel SA	Baa1	77	73	4

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 15	Dec. 8	Spread Diff
Piraeus Financial Holdings S.A.	Caa2	547	595	-49
Casino Guichard-Perrachon SA	Caa1	585	616	-31
Iceland Bondco plc	Caa2	550	570	-20
Vue International Bidco plc	Ca	582	597	-15
Alpha Services and Holdings S.A.	Caa1	301	314	-13
Premier Foods Finance plc	B3	205	216	-11
Greece, Government of	Ba3	105	115	-10
Rexel SA	Ba3	140	150	-10
British Telecommunications Plc	Baa2	110	119	-9
CMA CGM S.A.	B2	299	308	-9

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (December 8, 2021 – December 15, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
China, Government of	A2	A3	A1
Commonwealth Bank of Australia	Aa2	Aa3	Aa3
National Australia Bank Limited	Aa2	Aa3	Aa3
Malaysia, Government of	A3	Baa1	A3
Export-Import Bank of China (The)	A2	A3	A1
China Development Bank	Baa1	Baa2	A1
JFE Holdings, Inc.	A1	A2	Baa3
Japan Tobacco Inc.	Aaa	Aa1	A2
Development Bank of Kazakhstan	Ba1	Ba2	Baa2
POSCO	Aa3	A1	Baa1

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 15	Dec. 8	Senior Ratings
Japan, Government of	Aaa	Aaa	A1
Australia, Government of	Aaa	Aaa	Aaa
India, Government of	Baa3	Baa3	Baa3
Indonesia, Government of	Baa3	Baa3	Baa2
Korea, Government of	Aa1	Aa1	Aa2
Westpac Banking Corporation	A2	A2	Aa3
Sumitomo Mitsui Banking Corporation	Aa1	Aa1	A1
Philippines, Government of	Baa2	Baa2	Baa2
Thailand, Government of	Aa2	Aa2	Baa1
Korea Development Bank	Aa1	Aa1	Aa2

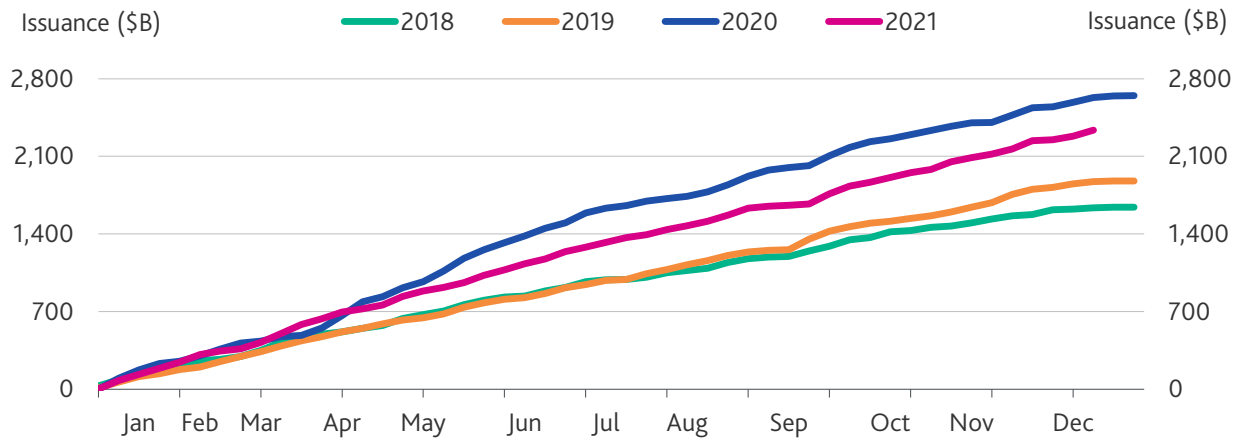
CDS Spread Increases	CDS Spreads			
	Senior Ratings	Dec. 15	Dec. 8	Spread Diff
Tata Motors Limited	B1	255	235	20
Pakistan, Government of	B3	365	360	5
Qantas Airways Ltd.	Baa2	154	152	2
Chorus Limited	Baa2	73	72	2
Halyk Savings Bank of Kazakhstan	Ba2	289	286	2
Mitsubishi Electric Corporation	A2	31	29	2
Westpac Banking Corporation	Aa3	40	39	1
Sumitomo Mitsui Banking Corporation	A1	26	25	1
Kansai Electric Power Company, Incorporated	A3	26	25	1
Daiwa Securities Group Inc.	Baa1	60	59	1

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Dec. 15	Dec. 8	Spread Diff
SoftBank Group Corp.	Ba3	255	282	-27
Tenaga Nasional Berhad	A3	44	52	-8
Petroleum Nasional Berhad	A2	54	62	-8
Telekom Malaysia Berhad	A3	43	51	-8
China Development Bank	A1	54	61	-7
Malayan Banking Berhad	A3	56	63	-7
Malaysia, Government of	A3	46	52	-6
Export-Import Bank of China (The)	A1	41	47	-6
Industrial & Commercial Bank of China Ltd	A1	58	65	-6
Bank of China Limited	A1	56	62	-6

Source: Moody's, CMA

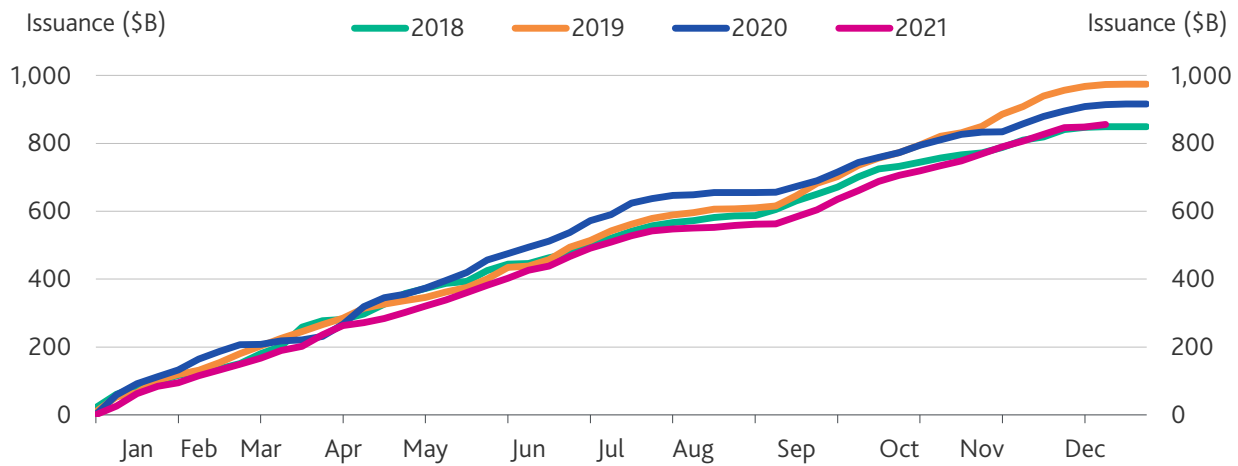
ISSUANCE

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



Source: Moody's / Dealogic

Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



Source: Moody's / Dealogic

ISSUANCE

Figure 8. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	40.895	9.025	55.134
Year-to-Date	1,643.113	618.186	2,337.087

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	7.343	0.452	7.902
Year-to-Date	678.516	156.068	855.970

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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Report Number: 1314762

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