

**WEEKLY MARKET
OUTLOOK**

NOVEMBER 18, 2021

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Supply-Chain Stress Grows, But Relief Is Coming

Stress in U.S. supply chains intensified in September, but some modest relief is coming. Our U.S. Supply-Chain Stress Index rose from 139.8 in August to 147.6 in September. That month-to-month intensification is roughly equivalent to the increase from July to August. Scarcity of raw materials, intermediate inputs and labor are driving up prices and lead times across a large number of commodities and manufactured goods.

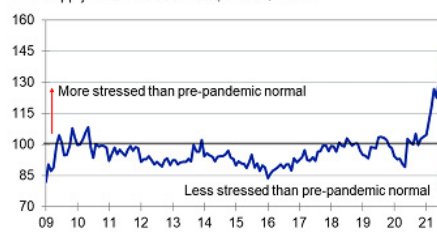
There are signs that the severe pressure placed on U.S. supply chains in the second half of 2021 may be beginning to alleviate. The Baltic Dry Index has descended steadily after spiking in late September and the number of containers being unloaded at the Port of Long Beach exceeds 2019's volume. The first regional Fed manufacturing survey for November showed a decline in delivery times. Also, job growth in manufacturing and logistics was solid in October. We have some of the inputs for the SCSI for October and they point toward a reduction in the amount of stress.

Table of Contents

- Top of Mind** 4
- Week Ahead in Global Economy** .. 6
- Geopolitical Risks**7
- The Long View**
 - U.S.8
 - Europe13
 - Asia-Pacific14
- Ratings Roundup**..... 15
- Market Data** 18
- CDS Movers**29
- Issuance** 21

Adding to the Stress

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



Sources: Multiple Sources, Moody's Analytics

Moody's Analytics and Moody's Investors Service maintain separate and independent economic forecasts. This publication uses the forecasts of Moody's Analytics. Moody's Analytics markets and distributes all Moody's Capital Markets Research materials. Moody's Analytics does not provide investment advisory services or products. For further detail, please see the last page.

Supply-chain issues are juicing inflation

The stress in U.S. supply chains is adding a lot to inflation, but this will pass. It sets up a significant bout of disinflationary pressures in the second half of next year or early 2023. Therefore, we expect that ongoing supply-chain disruptions will raise the prices of some goods even further, translating into higher headline and core inflation than in previous baselines into early next year. However, declines in durable-goods prices are likely to drive inflation lower next year, more than offsetting a sharp acceleration in shelter inflation.

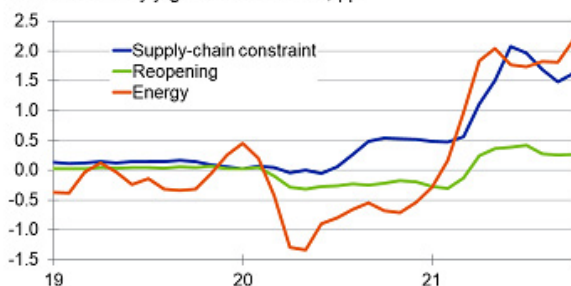
Something that isn't getting enough attention is the sheer amount by which supply-chain stress is boosting the U.S. consumer price index. Building on our prior work estimating the reopening effect on the CPI, we created a supply-chain constrained CPI. The components included are:

- New vehicles
- Used cars and trucks
- Motor vehicle parts and equipment
- Motor vehicle maintenance and repair
- Video and audio
- Sporting goods
- Furniture and bedding

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% and near the Fed's 2% objective.

Supply Chain Issues Boosting CPI

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



Sources: BLS, Moody's Analytics

We acknowledge that if you exclude enough, one can get any growth in the CPI that they want. However, this time is different as the supply-and-demand shocks caused by the pandemic highlight the importance of decomposing what is driving fluctuations in the CPI—and currently, they are flashing that inflationary pressures are transitory.

The correlation coefficient between the year-to-year difference in our SCS and the contribution to year-over-year growth in the CPI from the supply-chain constrained components is 0.66. Correlation doesn't imply causation. Therefore, we used Granger causality tests and found a causal relationship with no lags—one month and two months. The causal relationship runs in both directions. For example, supply-chain stress creates changes in the contribution to the CPI from supply-chain constrained components and vice-versa.

A potential tangled web

Though we don't have a crystal ball, this recovery could be cut short by inventory imbalances, financial imbalances and/or fiscal tightening. The outcome of the midterm elections will help assess the risks of a sudden shift toward fiscal austerity, but the most likely outcome is political gridlock, which isn't recessionary. Financial markets are overly supportive for the economy, but the hit to GDP from of a sudden tightening in financial market conditions, when the economy is growing 4%, 5% or 6%, is less concerning.

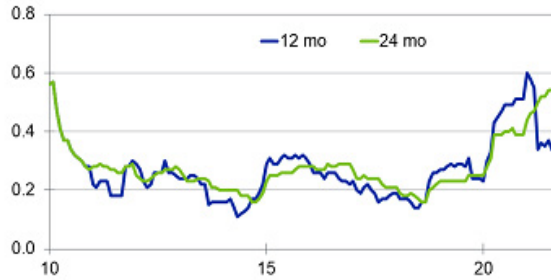
The catalyst for the next recession might be an inventory correction. Current supply-chain disruptions are making it difficult for businesses to manage their inventories. Therefore, it's possible that businesses get caught with excess inventories in a couple of years, after they over-order today to compensate for the delays. This has caused recessions in the past and is a symptom of a boom-bust cycle.

Manufacturers' unfilled orders have been climbing more quickly lately than they have after each of the past few recessions. Also, the pandemic hasn't repealed either the law of demand or supply, and the supply response could set up for a recession in a couple of years.

The law of supply states that, all other factors being equal, as the price of a good or service increases, the quantity of goods or services that suppliers offer will increase, and vice versa. The pandemic potentially puts the law of supply on steroids as businesses overbook now in anticipation of sustained higher prices, but volatility of both consumer and producer prices has moderated recently.

Volatility in Prices Climbs

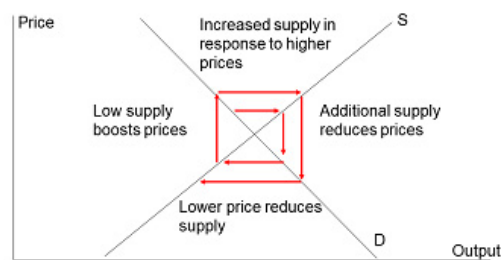
Rolling standard deviation in PPI, % change, over...



Sources: BLS, Moody's Analytics

The volatility in consumer and producer prices today could set the stage for the Cobweb theorem, which normally plagues agriculture, to impact 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 and how much to produce before the market price is set. This agricultural model applies to an economy emerging from a pandemic, where there is uncertainty that today's prices will hold in a few months and the effect will be mitigated or magnified by the price elasticity of demand.

A Potential Tangled Web



Source: Moody's Analytics

Volatility in prices will 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.

Inventories Can Cause Big Swings in GDP

Contribution to volatility in GDP growth, 5-yr rolling



Sources: BEA, Moody's Analytics

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.

All told, we're not on recession watch, but with a large number of industries experiencing volatility in prices and supply-chain issues, it is possible that mistakes will be made, and a sudden inventory recession could occur. It's a web the pandemic has weaved.

Perspective on U.S. Regional Inflation

BY ADAM KAMINS

Cost pressures are mounting everywhere, but just as the pandemic did not affect all regions equally, inflation also differs depending on where one looks. As concerns mount, data on consumer prices for regions and metro areas provide a glimpse into where rising costs are causing the most pain and where less pronounced increases represent a silver lining.

Other metrics also provide a glimpse into what is behind regional differences. Though supply-chain issues are affecting all corners of the U.S., divergent demand pictures may be a more important determinant of regional variation.

Consumer prices by region

Last week's release of the [October Consumer Price Index](#) amplified concerns about rising prices, revealing more pronounced increases than initially expected. But the extent to which those concerns are warranted varies somewhat across the U.S. To see this, we compared the urban CPI for all items across the four census regions for which the Bureau of Labor Statistics reports data. Over the past year, costs have risen at a nearly identical clip in the South and Midwest, tracking about 40 basis points above the national rate. The West is lower, and the Northeast is far behind the rest of the pack.

This pattern partly persists when controlling for the low starting point associated with the Northeast and West, since both regions struggled more last year. Relying instead on a two-year annualized growth rate puts the West about in line with the rest of the nation. But the Northeast also stands out as remaining well below the rest of the nation.

This pattern partially reflects weaker demand creating less upward price pressure in portions of the Northeast. Historical out-migration was exacerbated by the impact of the pandemic on big cities, shrinking the pool of consumers just enough to make inflation a bit less potent. Yet it is worth noting that this still means stronger price growth than at any point in the past decade and a half, compared with the most intense pressures in the three decades for the U.S. as a whole.

Metro area differences

More detailed data for 21 metro areas are also published either monthly or every other month. Taking an average over the preceding four months to put areas on a relatively equal footing reveals clear patterns driving broader regional differences.

As expected, Northeast metro areas line the bottom of the list for price growth. To varying degrees, Boston, New York City, and Washington DC have all experienced well below-average inflation. This is mirrored by the pattern in San Francisco, where price gains are far less pronounced than elsewhere.

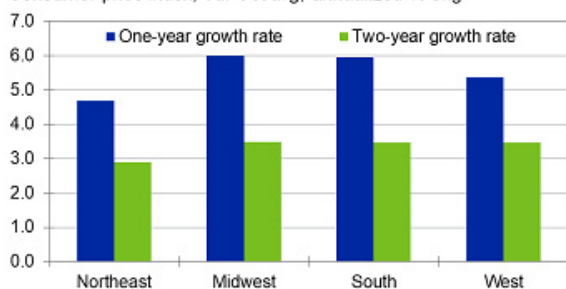
These patterns reflect reduced daytime population in each area's urban core, whether caused by out-migration or the continued prevalence of remote-work arrangements. As a result, demand for consumer services and housing remains depressed, keeping a lid on price gains. Combine this with subpar consumer confidence, particularly in the Mid-Atlantic and along the Pacific Coast, and there is simply not as much pricing power for firms in those regions.

The fastest growth, on the other hand, is taking place in Atlanta, Riverside CA and St. Louis. This holds whether looking at one- or two-year growth. Each metro area has leveraged a cost advantage to attract some workers and firms from more expensive and land-constrained cities.

Robust demand growth alongside supply-chain issues appear to underlie major regional differences in cost indexes. In fact, the correlation between per capita net domestic migration and CPI growth is highly positive. Atlanta and Riverside, for example, are magnets for new residents, while out-migration from large, expensive coastal economies has kept a lid on demand.

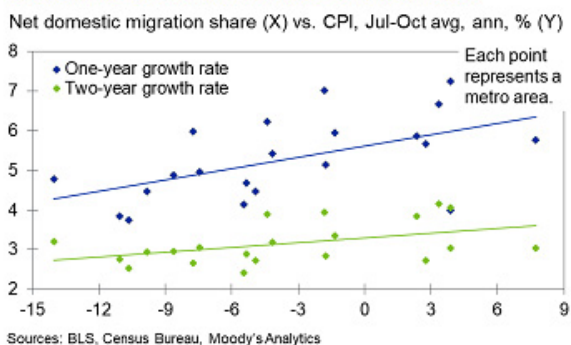
Northeast Price Pressures Are Muted

Consumer price index, Jul-Oct avg, annualized % chg



Sources: BLS, Moody's Analytics

Demand Drives Inflation Differences



Similarly, overall affordability is also playing a role. Median single-family house prices and the housing affordability index, which looks at the ratio of income to house prices, are both strongly predictive of recent results, with the priciest markets experiencing the least severe cost increases.

While part of this may simply reflect a higher starting point holding back growth rates, the trend of out-migration from cities suggests that there is more at play. In fact, with places like Boston and San Francisco seeing far less significant price growth than most of their peers, ever-so-slight convergence in regional cost profiles may be emerging. Although global economies along the coasts will remain far more expensive than their peers for many decades, even a slightly narrower gap could eventually help stem the tide of residents fleeing to less expensive pastures.

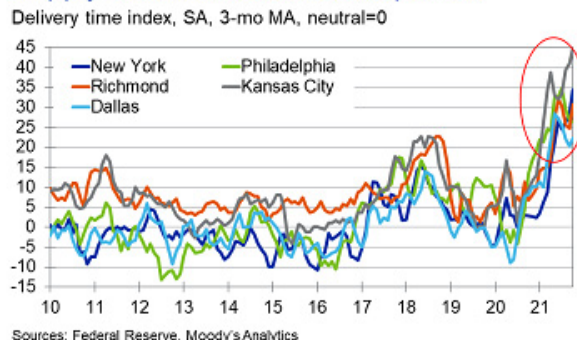
The supply side

While demand is acting as a key regional differentiator, there is also a question of whether the supply-chain issues driving price gains differ meaningfully across regions. To answer this, we compared five regional Federal Reserve manufacturing surveys. The five banks to conduct such a survey—Boston, Dallas, Kansas City, New York and Richmond—all show how pervasive disruptions are.

As of October, the delivery time indexes in Kansas City and New York were at all-time highs, reflecting the largest-ever

increases in share of respondents indicating that times are getting longer, spanning a period of at least a couple of decades. In the other three districts, the index has reached an all-time high at some point since spring and remains close to its peak. Each remains far ahead of its average index value from before the pandemic hit, signaling that no area is immune to disruptions, hardly a shocking finding.

Supply Chain Issues Are Ubiquitous



To the extent that one district appears to have been hit a little bit harder, it may be Kansas City. The delivery time index is not only at its all-time high, but it exceeds that of every other region in both its level and change from pre-pandemic value. The indexes for input costs and prices charged to consumers are also more elevated. This suggests that the district, which mostly comprises the Mountain West—including Colorado and Utah—is feeling the effects of disrupted supply chains a bit more than the rest of the nation.

While one must squint to see these impacts, the composition of different regions matters more when it comes to cost impacts. [Supply-chain stresses](#) are most profoundly affecting areas with a high concentration of manufacturing, exports or both. This may help to explain why the Midwest—despite a demand picture that in many ways resembles that of the Northeast—is experiencing more intense upward price pressures.

The Week Ahead in the Global Economy

U.S.

It's another busy week on the U.S. economic data front. Among the key data are existing-home sales, advanced goods trade deficit, nominal personal income, PCE deflators, new-home sales, and revisions to third-quarter GDP. The bulk of the data will be released Wednesday, ahead of the Thanksgiving holiday. The headline and PCE deflator for October will garner a lot of attention because of the heightened concern and risks that inflation remains higher for longer, potentially forcing the Fed's hand. The minutes from the November Federal Open Market Committee meeting will also be released.

There have been media reports that President Biden's decision on who he will nominate as Fed chair is imminent. It appears to be down to current Fed Chairman Jerome Powell and Fed Governor Lael Brainard. Senate Banking Committee Chairman Sherrod Brown said that either would have the votes to be confirmed. Our baseline forecast assumes that Powell is nominated for a second term, but there wouldn't be any significant changes to the baseline if Biden tapped Brainard. She is a little more dovish than Powell but not significantly enough to push our expectation for the timing of the first increase in the target range of the fed funds rate from late 2022 to early 2023.

Though our forecast wouldn't change, market expectations likely would, given the perception that she is more dovish than Powell even though the two have voted the same way since 2014. Therefore, if Biden picks Brainard, odds are markets would reduce the number of rate hikes currently priced in for next year and there could be a little movement in market-based measures of inflation expectations.

Europe

We aren't expecting a surprise in Germany's third-quarter GDP estimate due out next week. Real output likely grew 1.8% q/q following a 1.6% increase in the second quarter. The economic recovery proceeded over the summer thanks in large part due to the reopening of consumer services after

lockdowns earlier in the year. Consumer spending, therefore, was likely the driver of growth during the quarter.

Germany's industrial economy struggled against global supply shortages, and this will likely show up as falling investments and net exports.

Meanwhile, the number of job seekers in France likely fell to 3.2 million in October from 3.3 million in September. Again, the recovery of the services economy likely supported employment, though there is a possibility that there was some exit from the labor force as well. With COVID-19 infections popping up again in Europe, we are looking at another slow tourism season, and this is going to cool the recovery in the labor market as well.

Finally, Russia's industrial production was likely 6.2% higher in October relative to the same month a year earlier. The year-on-year growth rate likely eased from 6.8% in September. The comparison to last year's low base, due to the pandemic, is charging the year-on growth rate. But Russia's gas and oil exporters likely tracked a good month thanks to the frenzied demand for the goods across Europe and Asia.

Asia-Pacific

Central banks in New Zealand and South Korea will further tighten policy settings at their November meetings. The Reserve Bank of New Zealand will lift the Official Cash Rate by 25 basis points to 0.75%, following the early October hike. New Zealand's economy is butting up against capacity constraints and it is appropriate to be dialling back monetary support. The services sector will gain further momentum over 2022 as international borders reopen, lifting the underperforming tourism and education sectors.

The Bank of Korea will hike the policy rate to 1% as it seeks to cool household debt growth as well as heated housing markets. Household consumption has improved in South Korea alongside increased vaccination coverage and reduced movement controls. Exports have been an ongoing strength to the economy, helped by high semiconductor prices amid the global shortage.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
21-Nov	Chile	Presidential elections	Medium	Low
21-Nov	Venezuela	Regional and municipal elections	Low	Low
28-Nov	Honduras	Presidential, congressional and municipal elections	Low	Low
Nov/Dec	WTO	12th WTO Ministerial Conference (Nov 30-Dec 3)	Medium	Low
19-Dec	Hong Kong	Legislative Council elections	Low	Medium
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	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	UN	UN Climate Change Conference 2022 (COP 27)	Medium	Low

Unemployment Forecast at 4.5% in the Fourth Quarter

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 104 basis points, 4 bps wider than at this time last week. This is just below its high over the past 12 months of 105 bps and just above its lowest over the past year of 95 bps. This spread may be no wider than 117 bps by year-end 2021, but the potential for a partial government shutdown and debt-limit crisis could cause some volatility in financial markets at the end of the year. The long-term average industrial corporate bond spread widened from 91 bps last week to 94. This is above the low of 86 bps over the last 12 months.

The long-term investment grade corporate bond spread was 136 basis points, compared with 132 bps at this time last week. The spread is well below its recent high of 150 bps. Investment-grade industrial corporate bond spreads widened 9 bps to 139.

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.

U.S. dollar denominated investment-grade issuance totaled \$27.9 billion in the latest week, bringing the year-to-date total to \$1.507 trillion. High-yield corporate bond issuance totaled \$16.9 billion, bringing the year-to-date total to

\$592.9 billion. High-yield and investment grade issuance will be weaker in 2022.

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 better 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 about whether or not 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. This may not sway Biden much; former President Donald Trump replaced Janet Yellen with Powell after her first term. However, with the strong case for Powell to be reappointed, if he isn't, it may be seen as an effort to politicize the central bank. We assume that Powell is reappointed.

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 as 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.

U.K. Labor Market Improves

BY ROSS CIOFFI

In the three months to September, the U.K. unemployment rate declined to 4.3%, down from 4.7% in the previous stanza. The employment rate also improved, rising to 60.7% in the September quarter from 60.3% previously. The total number of employed, however, does remain below precrisis levels. This is happening at the same time that job vacancies have reached a new record from August to October of 1,172,000. We expect that this mismatch in supply and demand is largely because of Brexit and the fact that it cut off the supply of European workers who filled many jobs that are less popular among the British public, such as truck driving or customer service.

Making the release even brighter was the fact that there was not a large uptick in unemployment following the expiration of the U.K.'s furlough scheme in September. It is true that there could be revisions to the figures, but even those workers that were made redundant with the end of state-backed furlough benefits will likely work through their notice period in the coming months. The September releases show that the labor market is heating up and this will put additional pressure on the Bank of England to raise interest rates at its next meeting in December.

Nord Stream 2 delayed again

German regulators suspended the approval of the Nord Stream 2 pipeline until the Gazprom-owned operator, Nord Stream 2 AG, sets up a subsidiary in Germany. The delay has highlighted the fact that even in a good situation, the pipeline will not likely pump gas to Europe until later this winter. Gas futures have jumped—9.7% at the time of writing—in response to the news and renewed worries about Europe's gas supply. Rising tensions between Russia and Europe about the border with Belarus will not help confidence that Russia supplies Europe with all of the gas needed. That said, if this is the only objection the German regulator has, the delay will not be significant; Nord Stream 2 AG has already announced that it will create a subsidiary in Germany.

Even if gas prices cool, they will remain high by historic standards this winter. The effect on utility bills this year and next will eat into household spending and trigger

inflationary fears. This will mostly affect those European countries that are more reliant on gas and oil—the prices of which are also being stoked by energy-supply fears—like Germany and Spain. We don't see a considerable easing in gas prices until the end of winter.

Energy stokes French, Italian inflation

France's headline inflation rate sped up to 2.6% y/y in October from 2.2% in September. Energy prices drove the increase in both monthly and yearly terms: Rising by 4.8% m/m and by 20.2% y/y. Higher natural gas and petroleum product prices pushed up the index. Core inflation remained more moderate, speeding up to just 1.4% y/y in October from 1.3% in September. Services prices held up more than core goods prices, largely because of the recovery in transport service prices.

Similarly, in Italy, headline inflation climbed 0.5 percentage point to 3% y/y in October, the highest value since September 2012. Here too, energy prices drove the increase. Transport services prices were also important in the Italian release, and as a result, core inflation accelerated to 1.1% y/y from 1% previously. Core inflation remains significantly below the headline as domestic demand is still recovering.

Turkish Central Bank, undeterred, cuts rate again

The Central Bank of the Republic of [Turkey](#) cut interest rates again at its meeting Thursday by another 100 basis points, to 15%. The cut comes despite the fact that the most recent inflation reading was 19.9% y/y in October. In its communiqué, the central bank said that inflation pressures are driven by supply-side factors and conditions in global markets that are affecting food, energy and commodity prices. The rate cut, however, will likely de-anchor inflation expectations and exacerbate the domestic causes of inflation. The decision has also further hurt the country's standing in international markets, with the lira falling more than 5% against the dollar to TL11.208; the exchange rate is 13.1% higher than a week ago.

Japan's Trade Data Disappointment

BY SONIA ZHU and SHAHANA MUKHERJEE

Japan's October trade disappointed. Although Japan's seasonally adjusted trade deficit narrowed to ¥445 billion in October due to stronger monthly export growth of 2.7% (compared with a 0.3% monthly increase in imports), critical sources of weakness remained. Transport equipment exports continued to disappoint as motor vehicle shipments fell nearly 28% in yearly terms. But on the upside, the strain from this segment was offset by improving shipments of other commodities.

The bilateral export readings were mostly disappointing. Although annual shipments to the all-important U.S. market settled at 0.4% in October, hurt by a near 46% yearly decline in auto exports, those to other major markets saw a moderation in growth. Amongst these, shipments to China slowed to 9.5% from 10.3% in September, also dragged lower by weak auto shipments. In comparison, shipments to EU economies held steady at 12.1%.

The outlook for exports remains uncertain in the months ahead. Some pandemic-related disruptions are fading, but the semiconductor shortage is an ongoing concern that shows no sign of easing. Meanwhile, softening activity metrics and higher inflation in the U.S. and China's weakening consumer demand suggest that overseas demand for Japanese goods can see some correction in the coming months. On the other hand, prospects for some manufactured goods may be positive in the short term as China experiences intermittent power shortages and machinery producers are buoyed by global efforts to ramp up semiconductor production capacity.

Although Japan's economy shrank slightly in the third quarter, the domestic outlook has improved thanks to a significant decline in COVID-19 cases, high vaccination rates, and a gradual rollback in restrictions. The Kishida administration is also expected to push a government stimulus package to shore up the recovery. This bodes well for domestic demand.

But the potential for further weakness in Japan's net trade position stands to temper the expected lift to national income in coming months. Soaring commodity prices, higher input costs, and a depreciating yen (and therefore higher import bill) will mean higher production costs, which could have a net negative impact on export revenues, contingent on the extent to which producers pass on higher input costs to end consumers.

Bank Indonesia holds steady

Bank Indonesia stood pat in November's meeting, keeping the reverse repo rate unchanged at 3.5%. The central bank also extended its relaxed repayment terms for credit card debt to June 2022 to bolster household spending. The COVID-19 infection curve continues to flatten; new daily infections have declined to about 400 cases, down from 1,000 cases just a month ago. Indonesia's economic growth slowed more than expected in the third quarter amidst COVID-19 mobility restrictions that kept domestic consumption subdued. In view of this, we expect BI will keep monetary policy accommodative until the economic recovery firms.

Although CPI volatility has risen in the APAC region, inflation is surprisingly stable in Indonesia. Headline inflation grew 1.66% year on year in October, beneath the central bank's 2%-4% target range. Core inflation remains subdued due to lukewarm domestic demand. As a top exporter of coal and palm oil, the recent global energy crisis and commodity boom have been a tailwind for the economy. A larger trade surplus and stable, low inflation give BI room to stay accommodative. Nevertheless, the central bank should keep a close eye on any fluctuations in capital flows that would destabilise the rupiah. At this juncture, we do not expect it to consider lowering rates.

Recent consumer confidence and retail sales figure are looking more sanguine. BI's October consumer survey put the consumer confidence index at 113.4, a return to positive territory (100 is the neutral line) and pre-pandemic levels. The retail sales index increased 5.2% year on year in October, a reversal from the 2.2% year-on-year contraction in August. Strengthening consumer confidence may pave the way for a faster rebound in consumption. As Indonesia reopens its borders to foreign tourists, tourism and spending are on track to rally next year.

BI will keep a close eye on the Fed's action and respond accordingly. Any drastic change in rates risks destabilisation of the rupiah. The Indonesian central bank has previously announced plans to tighten monetary policy by gradually reducing the size of excess liquidity in the banking system next year and possibly hiking interest rates at the end of 2022.

Upgrades Dominate U.S. Changes

BY MICHAEL FERLEZ

U.S. rating change activity was overwhelmingly positive last week, with upgrades accounting for all but one rating change and all the reported affected debt. Rating actions were spread across many industries, with energy-related firms headlining the list of largest upgrades. Additionally, investment-grade companies played a larger role in last week's activity, accounting for nearly half of all upgrades. The largest upgrade in terms of affected debt was made to Plains All American Pipeline L.P.'s, which saw the rating on its senior unsecured notes lifted to Baa3 from Ba1. Plains' also saw its preferred stock rating and short-term commercial paper rating upgraded to Ba2 and P-3, respectively. In the Moody's Investors Service rating action, Moody's Vice President Arvinder Saluja was cited saying, "Plains has continued to reduce debt in 2021 with further leverage reduction likely in 2022-23 using free cash flow." The Moody's official added further that, "With the formation of the Permian JV, the company is well poised to benefit

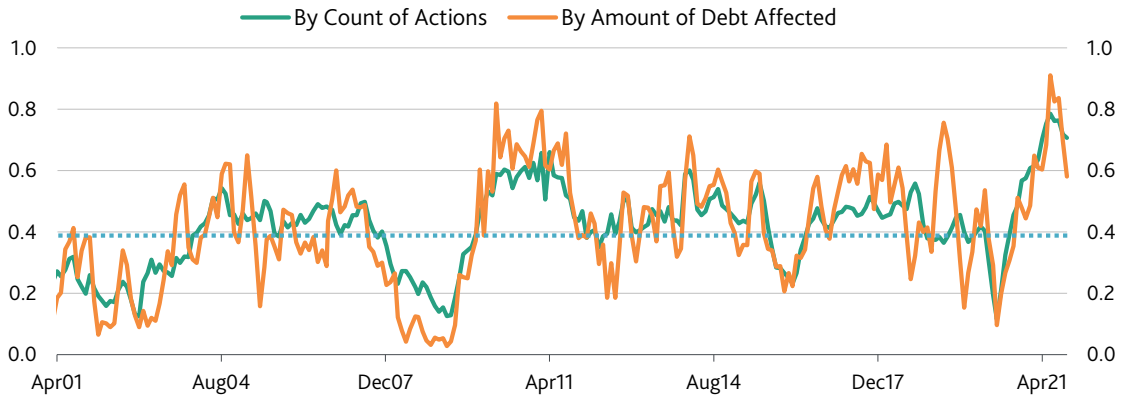
from the continued recovery in the fundamentals for crude production and be more resilient to carbon transition risks." Other notable upgrades included Jefferies Financial Group, which saw all its ratings upgraded.

Europe

Western European rating change activity was credit negative for the week ended November 16, with downgrades outnumbering upgrades two to one and accounting for 59% of the affected debt. The largest downgrade was made to Austrian-based CA Immobilien Anlagen AG, which saw both its long-term issuer and senior unsecured ratings downgraded to Baa3. In their rating action downgrading CA Immo, Moody's Investors Service cited CA Immo's increased leverage following a special dividend and the additional debt from the Starwood fund that will need to be serviced by CA Immo.

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
11/10/2021	JEFFERIES FINANCIAL GROUP	Financial	SrUnsec/LTIR/MTN/PS	7895.6	U	Baa3	Baa2	IG
11/10/2021	MICROCHIP TECHNOLOGY INC.	Industrial	SrSec/SrUnsec/SrSec/BCF	5600.0	U	Baa3	Baa2	IG
11/10/2021	RED ROCK RESORTS, INC.-STATION CASINOS LLC	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	750.0	U	Caa1	B3	SG
11/11/2021	NEXT LEVEL HOLDING COMPANY, LLC-YS GARMENTS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
11/12/2021	DARDEN RESTAURANTS, INC.	Industrial	SrUnsec/MTN/CP	939.1	U	Baa3	Baa2	IG
11/12/2021	AVIS BUDGET GROUP, INC-AVIS BUDGET CAR RENTAL, LLC	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	2898.2	U	B3	B2	SG
11/12/2021	TORRID PARENT INC.-TORRID LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG
11/15/2021	DEVON ENERGY CORPORATION	Industrial	SrUnsec/CP	6242.6	U	Ba1	Baa3	SG
11/15/2021	HOUGHTON MIFFLIN HARCOURT COMPANY-HOUGHTON MIFFLIN HARCOURT PUBLISHERS INC.	Industrial	SrSec/BCF/LTCFR/PDR	303.3	U	B3	B2	SG
11/15/2021	DANA INCORPORATED	Industrial	SrUnsec	1978.5	U	B2	B1	SG
11/15/2021	DIAMONDBACK ENERGY, INC.	Industrial	SrUnsec	5050.0	U	Ba1	Baa3	SG
11/15/2021	FLYNN RESTAURANT GROUP LP	Industrial	LTCFR/PDR		U	B3	B2	SG
11/15/2021	OVINTIV INC.	Industrial	SrUnsec/CP	5561.4	U	Ba1	Baa3	SG
11/15/2021	HOME POINT CAPITAL INC.	Financial	LTCFR		D	B1	B2	SG
11/16/2021	PLAINS ALL AMERICAN PIPELINE L.P.	Industrial	SrUnsec/PS/CP	9937.0	U	Ba1	Baa3	SG
11/16/2021	KINGFISHER HOLDING B, INC.-KESTRA ADVISOR SERVICES HOLDINGS A, INC.	Financial	SrSec/BCF		U	B3	B2	SG
11/16/2021	RGIS SERVICES, LLC (NEW)	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG

Source: Moody's

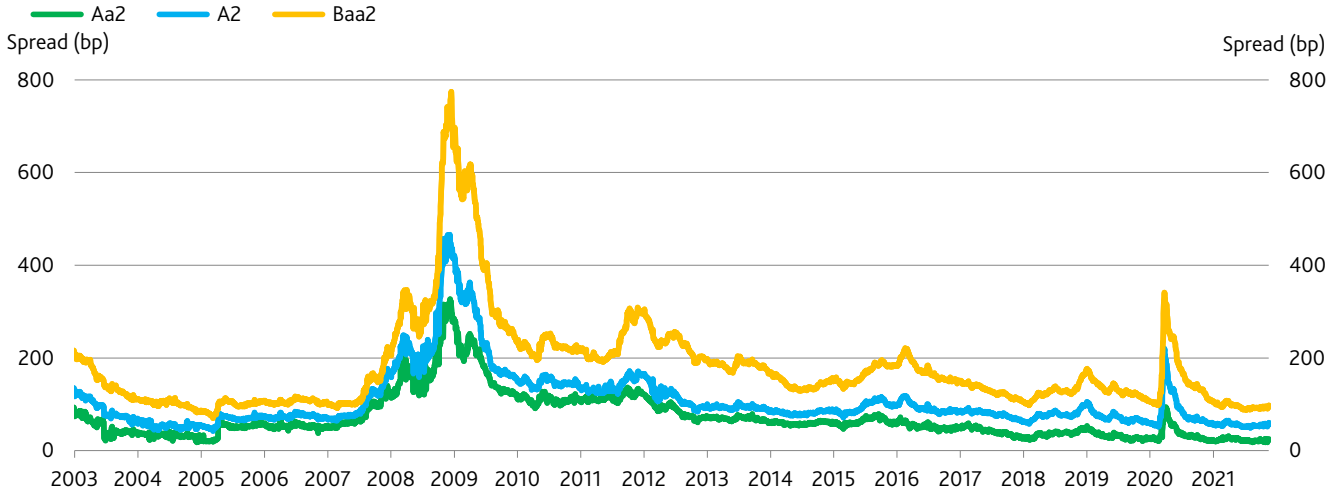
FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	New FSR	IG/SG	Country
11/10/2021	DUDLEY SUMMIT PLC	Industrial	SrSec	236.89	D	Baa1	Baa2		IG	UNITED KINGDOM
11/10/2021	GENESIS CARE PTY LIMITED-GENESISCARE USA HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR		D	B2	B3		SG	UNITED KINGDOM
11/15/2021	OUTOKUMPU OYJ	Industrial	SrSec/LTCFR/PDR	291.16	U	B1	Ba3		SG	FINLAND
11/15/2021	ALLEGION PLC	Industrial	SrUnsec	1200.00	U	Baa3	Baa2		IG	IRELAND
11/15/2021	INVITALIA S.P.A.-BANCA DEL MEZZOGIORNO - MEDIOCREDITO CENTRALE S.P.	Financial	SrUnsec/LTIR	349.39	D	Ba1	Ba3		SG	ITALY
11/16/2021	CA IMMOBILIEN ANLAGEN AG	Industrial	SrUnsec/LTIR	1543.16	D	Baa2	Baa3		IG	AUSTRIA

Source: Moody's

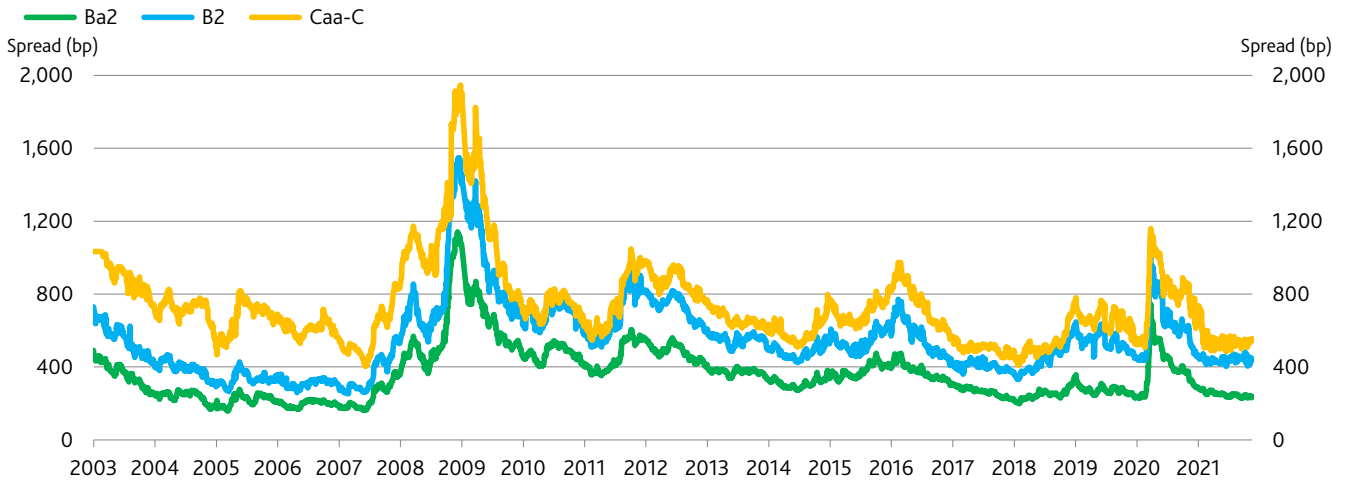
MARKET DATA

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 10, 2021 – November 17, 2021)

CDS Implied Rating Rises			
Issuer	CDS Implied Ratings		Senior Ratings
	Nov. 17	Nov. 10	
Archer-Daniels-Midland Company	Aa3	A2	A2
R.R. Donnelley & Sons Company	Ba2	B1	B3
Highwoods Realty Limited Partnership	A3	Baa2	Baa2
Bank of New York Mellon Corporation (The)	A3	Baa1	A1
Nissan Motor Acceptance Company LLC	Ba1	Ba2	Baa3
FedEx Corporation	A3	Baa1	Baa2
FirstEnergy Corp.	Baa2	Baa3	Ba1
Welltower Inc.	Baa1	Baa2	Baa1
Constellation Brands, Inc.	Baa2	Baa3	Baa3
Kimberly-Clark Corporation	Aa3	A1	A2

CDS Implied Rating Declines			
Issuer	CDS Implied Ratings		Senior Ratings
	Nov. 17	Nov. 10	
Delhaize America, LLC	A2	Aa3	Baa1
Raytheon Technologies Corporation	A2	A1	Baa1
U.S. Bancorp	A1	Aa3	A2
Occidental Petroleum Corporation	Ba3	Ba2	Ba2
Carnival Corporation	B3	B2	B2
Sysco Corporation	Baa2	Baa1	Baa1
Emerson Electric Company	A3	A2	A2
Delta Air Lines, Inc.	B1	Ba3	Baa3
Royal Caribbean Cruises Ltd.	B3	B2	B2
Danaher Corporation	A2	A1	Baa1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Nov. 17	Nov. 10	Spread Diff
Carnival Corporation	B2	398	343	55
Talen Energy Supply, LLC	Caa1	1,903	1,859	44
American Airlines Group Inc.	Caa1	663	624	39
Royal Caribbean Cruises Ltd.	B2	355	320	35
Rite Aid Corporation	Caa2	929	907	22
Nabors Industries, Inc.	Caa2	659	637	22
iStar Inc.	Ba3	258	237	21
Dish DBS Corporation	B3	496	476	20
Staples, Inc.	Caa1	1,011	992	20
Occidental Petroleum Corporation	Ba2	178	162	16

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Nov. 17	Nov. 10	Spread Diff
R.R. Donnelley & Sons Company	B3	173	254	-81
Beazer Homes USA, Inc.	B3	323	357	-34
K. Hovnanian Enterprises, Inc.	Caa3	810	831	-21
Pitney Bowes Inc.	B1	428	446	-19
Service Properties Trust	Ba2	201	216	-15
Meritage Homes Corporation	Ba1	136	152	-15
Commercial Metals Company	Ba2	165	180	-15
First Industrial, L.P.	Baa2	128	141	-13
American Axle & Manufacturing, Inc.	B2	404	416	-12
Xerox Corporation	Ba1	260	271	-11

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (November 10, 2021 – November 17, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Nov. 17	Nov. 10	Senior Ratings
Legrand France S.A.	Aa2	A3	A3
Santander UK plc	Aa1	Aa3	A1
Santander Financial Services plc	Aa1	Aa3	A1
Dexia Credit Local	Baa2	Baa3	Baa3
Daimler AG	A3	Baa1	A3
Merck KGaA	Aaa	Aa1	A3
BAWAG P.S.K. AG	Baa1	Baa2	A2
ArcelorMittal	Ba1	Ba2	Baa3
thyssenkrupp AG	Ba3	B1	B1
Linde GmbH	Aaa	Aa1	A2

CDS Implied Rating Declines	CDS Implied Ratings		
	Nov. 17	Nov. 10	Senior Ratings
Societe Generale	A1	Aa2	A1
ASML Holding N.V.	Baa1	A2	A2
Barclays PLC	Baa2	Baa1	Baa2
Banco Bilbao Vizcaya Argentaria, S.A.	A2	A1	A3
UniCredit S.p.A.	Baa3	Baa2	Baa1
Natixis	A1	Aa3	A1
Lloyds Bank plc	Aa3	Aa2	A1
Commerzbank AG	A3	A2	A1
Danske Bank A/S	Aa3	Aa2	A3
Deutsche Telekom AG	A1	Aa3	Baa1

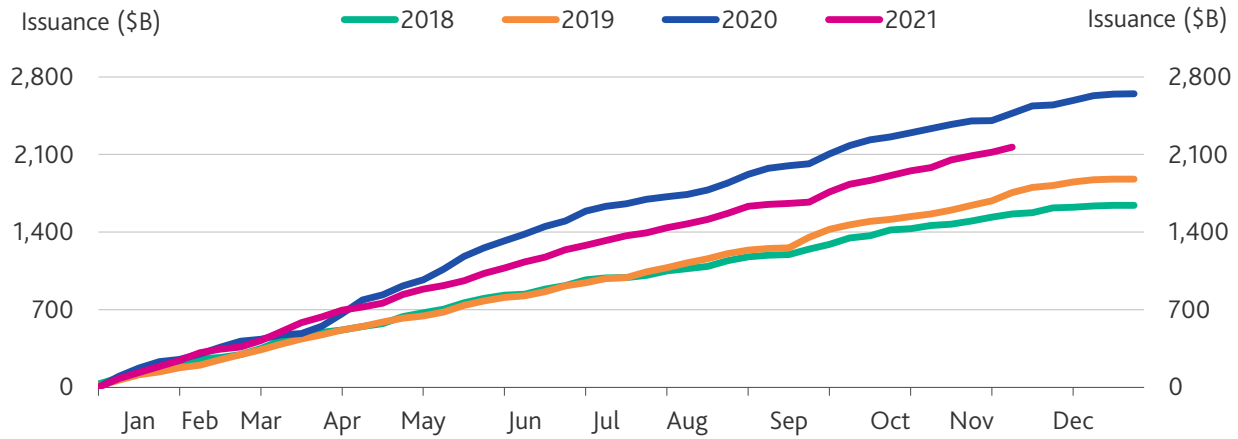
CDS Spread Increases	CDS Spreads			
	Senior Ratings	Nov. 17	Nov. 10	Spread Diff
Boparan Finance plc	Caa1	1,463	1,232	232
Iceland Bondco plc	Caa2	584	552	32
Piraeus Financial Holdings S.A.	Caa2	548	521	28
National Bank of Greece S.A.	B3	244	217	27
British Telecommunications Plc	Baa2	122	101	22
Telecom Italia S.p.A.	Ba2	195	178	17
Sappi Papier Holding GmbH	Ba2	339	325	14
Novafives S.A.S.	Caa2	733	722	11
ASML Holding N.V.	A2	50	40	10
Smiths Group plc	Baa2	61	52	9

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Nov. 17	Nov. 10	Spread Diff
Vedanta Resources Limited	B3	708	804	-96
thyssenkrupp AG	B1	199	224	-25
Legrand France S.A.	A3	31	45	-15
Vue International Bidco plc	Ca	580	594	-14
CMA CGM S.A.	B2	282	292	-11
Santander UK plc	A1	25	34	-9
Santander Financial Services plc	A1	25	34	-9
Jaguar Land Rover Automotive Plc	B1	337	344	-7
Dexia Credit Local	Baa3	65	68	-4
KBC Group N.V.	Baa1	61	65	-4

Source: Moody's, CMA

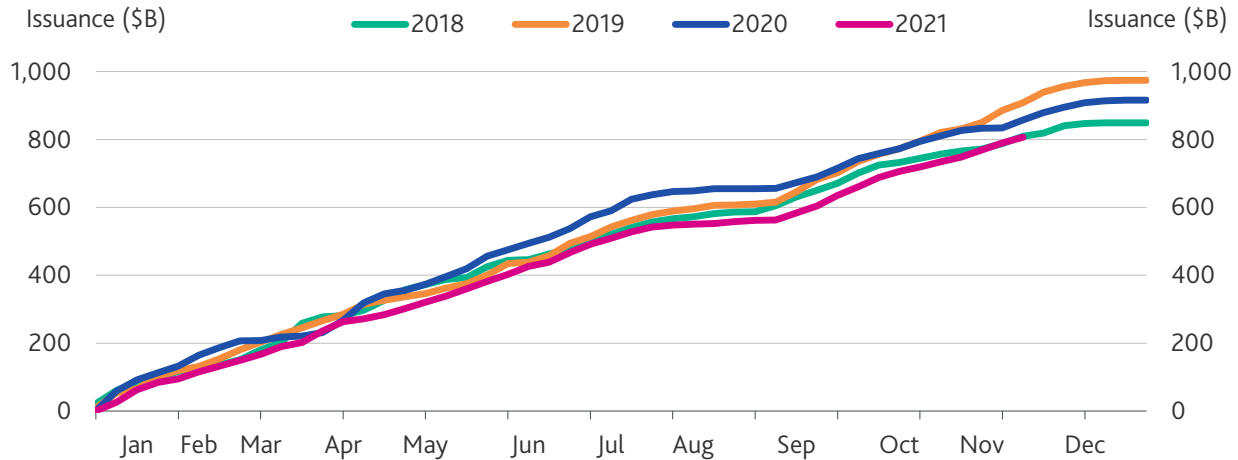
ISSUANCE

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	27.941	16.900	46.376
Year-to-Date	1,507.132	592.896	2,167.037

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	12.789	4.446	17.339
Year-to-Date	636.083	150.581	806.942

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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Report Number: 1311565

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