Moody's

WEEKLY MARKET OUTLOOK

OCTOBER 28, 2021

Lead Authors

Ryan Sweet Senior Director-Economic Research

Martin Wurm Senior Economist

Adam Kamins Director

Asia-Pacific

Katrina Ell Senior Economist

Stephan Angrick Senior Economist

Europe

Ross Cioffi Economist

Katrina Pirner Economist

U.S.

Steven Shields Economist

Ryan Kelly Data Specialist

Podcast



Some Central Banks Can't Take the Heat

Central banks are feeling the heat from the acceleration in inflation and are increasingly nervous that this bout of transitory inflation will linger longer than previously thought. Therefore, a number of central banks either began tightening monetary policy or signaled an earlier start. This is putting pressure on the short end and belly of the U.S. vield curve, and it presents a little challenge to the Federal Reserve, since markets may begin betting on a policy error by the Fed. With other central banks acting, fear that the Fed is behind the curve will intensify. Someone will be right, but it's unclear who. Those central banks tightening now could tame inflation at the expense of growth, while a patient Fed may have to stomach higher-than-expected inflation to ensure the economy fully and quickly recovers from the recession.

Table of Contents
Top of Mind4
Week Ahead in Global Economy 6
Geopolitical Risks7
The Long View
U.S8
Europe13
Asia-Pacific14
Ratings Roundup15
Market Data18
CDS Movers19
Issuance21

Markets recently repriced the Fed's tightening cycle, taking their cues from the revised inflation outlook along with Fed officials signaling heightened concern that the acceleration in inflation and supply-chain issues could linger well into next year. This could bleed into long-term inflation expectations. Markets are pricing in two hikes next year, one at the September Federal Open Market Committee meeting, with a 60% chance of it occurring at the June meeting.

The Fed isn't going to duplicate the errors of the 1970s. Stagflation in the 1970s occurred because the economy was juiced up by the Vietnam War and Great Society spending, the job market tightened, wage growth accelerated, and businesses jacked up prices. This was the genesis of the runaway inflation of the 1970s and early 1980s, which was exacerbated by Arab oil embargoes and spiking oil prices, and by the Federal Reserve's initial mishandling of the accelerating inflation.

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.

The role of inflation expectations wasn't well understood then, and the Fed didn't realize expectations were becoming unanchored. However, the Fed has tools to jawbone inflation expectations lower if need be. There is a risk that the Fed, similar to what other central banks are doing, jumps the gun and tightens prematurely. The Fed seems the least likely to do this, but some policymakers are growing uneasy about realized inflation and inflation expectations.

Measuring expectations

We looked at measures of inflation expectations, consumerand market-based, over different time horizons and their ability to predict future inflation. Inflation expectations do a fairly good job in predicting inflation in the next year but, not surprisingly, struggle to accurately predict inflation in five to 10 years.

Markets' reassessment of the path for the fed funds rate is still modest compared with expectations for other central banks in developed countries. Markets have been jolted by the Bank of England, which recently signaled hikes could start very soon, and central banks that have already begun tightening monetary policy, including New Zealand's central bank.

The latest central bank to throw markets a curveball was the Bank of Canada. On Wednesday, the BoC ended its quantitative easing program early and signaled that rate hikes are likely warranted in the near future. The BoC's Monetary Policy Report said upside risks to inflation have become a greater concern because price increases are above the central bank's 1% to 3% control range. Markets now expect the BoC will start raising interest rates within the next six months, with four rate hikes fully priced in for next year.

How will markets respond to more U.S. inflation surprises?

As energy prices surge, U.S. inflation swaps can act as a gauge for how strongly markets might respond to more inflation surprises. Expected inflation, survey-based or otherwise, generally tends to increase following unexpected inflation news.

Since 2004, one- and five-year inflation swap rates have been more responsive than five-year Treasury Inflation-Protected Securities break-even inflation to inflation surprises—defined here as the difference between observed inflation and consumer expectations in the Michigan survey—while controlling for macroeconomic factors such as changes in unemployment and oil prices. In practice, this overstates the difference, because expected inflation is highly persistent. Controlling for this pattern, however, one-year inflation swaps still respond to an inflation surprise about three times more strongly than five-year break-even

inflation, and five-year inflation swaps respond about 1.3 times more strongly.

What does this relationship suggest about potential market responses to more inflation surprises? Assuming, as a thought experiment, that consumer expectations remain at their elevated August levels, modest inflation surprises in our baseline predict a gradual drop of inflation swap rates in 2022 as inflation and energy prices moderate. However, inflation rates peaking above 6.5% under our Stagflation Scenario would push up inflation swap rates near 3% well into next year.

This is a modest prediction, mostly because of historical inertia in trader expectations. As a counterpoint, even relatively small upticks in inflation swap rates are consistent with a high burst of future inflation. Moreover, although markets often are slow to change their minds, they sometimes overreact, posing downside risks to this prediction.

Therein lies the caveat of reading too much into market prices. Financial asset prices rarely reflect analysis of household behavior or demographic trends, and traders might respond to altogether unrelated signals such as market panics. Market-implied measures may respond faster than surveys, but they do not predict inflation more accurately.

Many economists therefore point to long-term trends. Thanks to steady productivity growth and monetary policy, U.S. inflation since the 1980s has been low, averaging an annual 1.7% in the past decade, compared with 2.5% in the 2000s. The trend is also attributable to demographics. The U.S. population's aging labor force has been disinflationary for decades (Juselius and Takàts, 2018). While baby-boomer retirements may push long-term inflation higher, such trends are persistent enough for inflation rates to fall below their current levels, with an easing of supply disruptions.

Time to taper

The Federal Reserve will likely begin reducing its \$120 billion in monthly asset purchases at the conclusion of the November meeting of the Federal Open Market Committee, a month earlier than in the baseline forecast. Recently, Fed Chairman Jerome Powell said it's time to taper, but he then quickly pivoted to note that the central bank can remain patient on raising the target range for the fed funds rate. The acceleration in consumer prices has turned up the heat on central banks across the world and the Fed hasn't been immune.

Powell did sound a little more concerned about near-term inflation, highlighting that the risks are toward longer and more persistent supply-chain bottlenecks and higher

inflation. He had been consistently in the camp maintaining that the acceleration in inflation was transitory. Powell hasn't completely bailed on this, but the ongoing issues in global supply chains and the recent runup in energy prices will delay the deceleration in U.S. inflationary pressures. None of Powell's comments imply that the Fed is in a hurry to raise the target range for the fed funds rate. The Fed has learned from its past mistakes that fluctuations in energy prices have a temporary effect on realized inflation.

The Fed's monthly asset purchases weren't inflationary, therefore tapering won't be disinflationary. However, tapering could help keep market-based measures of inflation expectations anchored, since tapering is the preamble to the Fed beginning to tighten monetary policy by allowing its

balance sheet to decline and/or by increasing the target range for the fed funds rate.

Powell's concerns are shifting away from the health of the labor market to inflation. If he keeps this up, it would suggest that his view of the timing of the first rate hike is moving from 2023 to 2022. In fact, he didn't lean against market expectations, which is fully pricing in a pair of rate hikes in the second half of next year.

The Fed doesn't want to find itself chasing inflation, something it hasn't had to do in decades, but it also doesn't want to tighten prematurely.

TOP OF MIND

No 'Jolt' of Workers for State Economies

BY ADAM KAMINS

Last week, the <u>U.S.</u> Bureau of Labor Statistics unveiled its first official state-level Job Openings and Labor Turnover Survey. The state JOLTS provides a far deeper regional dive into detailed labor market dynamics than previously existed. While many of the results align with expectations and broader regional metrics, the survey introduces additional nuance into how workers and firms are behaving across the nation.

Tightest labor markets

JOLTS results for the nation's four broad census regions have consistently shown the Northeast's labor market to be tightest over the past year. So, it is little surprise to see states in the mid-Atlantic and New England dotting the top of the list of those with the highest gap between job openings and hiring.

As of August, employers in Pennsylvania, Massachusetts and Maryland were experiencing the most difficulty in finding workers. Each of those three, along with number four on the list, Wisconsin, boasts above-average openings rates and subpar hiring. In other words, it is not an especially large or small value for one side of the equation driving an elevated difference between openings and hires as much as it is solid demand for workers accompanied by a lack of labor.

The list of tightest labor markets—which also includes Minnesota, New Jersey, and some smaller New England states—share some common threads keeping demand afloat. For the most part, they are home to large and midsize cities that have not been hit as hard as nearby gateway markets, including New York City and Chicago. This means that the need for retail and construction workers, for example, remains healthier than in some peer markets.





But demographic struggles are preventing those needs from being met. Each of the five tightest states lost residents outright, experienced a sharper drop-off in growth than the U.S., or did both last year. This has diminished the pool of available employees enough to hold back hiring, accounting for the below-average jobs recovery relative to prepandemic heights in each state.

Struggles to hold onto residents, which reflect both longstanding secular trends and the impact of the COVID-19 pandemic, are compounded by the age profile of many states with tight labor markets. Many of those atop the list are among the nation's oldest, including not just Pennsylvania, but New Hampshire and Maine, which experienced some of the most significant hiring challenges in the nation this summer. This reveals the potential toll that early retirements are taking on their labor markets.

Signs of slack

While tight labor markets are very much the norm, there are some parts of the country where the gap between hiring and openings is at least close to its historical norm. A small gap between openings and hiring can be either a positive or a negative, and a detailed look at the data sheds light on which states fall into each category.

Perhaps the clearest archetype for a state in which hiring and openings have tracked each other recently is Nevada. The state boasts the highest hire rate in the nation by a sizable margin, with only Alaska even within 2 percentage points. To some extent this is cyclical, reflecting a rebound from the state's very deep early hole, which is also evident in one of the highest job openings rates in the U.S.

But the story is not purely one of a tourism rebound fueling renewed demand for workers. The fact that the hire rate is within reach of the openings rate can also be traced to robust population growth. Even with its economy decimated last year, Nevada added residents at a faster clip than all but two of its peers. This owes in part to the fact that its prevalent leisure/hospitality jobs cannot be done remotely. Combine this with the pleasant weather and general allure associated with Las Vegas, and the net domestic outmigration seen elsewhere is less troublesome, making it easier to fill reopened positions as leisure travelers gradually return

<u>Energy</u> states also have been able to fill open positions more easily, although the reasons for this vary. In some cases, like

North Dakota and Oklahoma, lower oil prices and less drilling nationally have reduced demand for workers, keeping both the openings and hire rates in check. In other states, such as Alaska and Wyoming, a modest pickup in extraction has created openings, and those states' specialized workforces appear to be jumping at the corresponding high-wage opportunities.

Finally, while layoff rates are low, they remain elevated in some states in which there is significant labor market churn, including many of the energy states for which there is some degree of slack. But the list also includes faster-growing states—these include Nevada, Colorado and North Carolina—likely reflecting reduced fears of being unable to find suitable replacements for lost workers amid very strong population growth.

In each of those high-churn states, above-average layoffs are accompanied by an elevated quits rate. This signals that workers feel empowered to leave jobs in many states that are experiencing more widespread layoffs, signaling that workers are retaining the upper hand in those places as well.

Highest-Layoff States Boast Elevated Quits

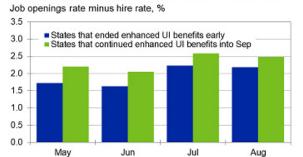


A somewhat different story is unfolding in New England, where the labor market appears more favorable to firms. The layoff rate is elevated in a number of smaller states in the region, including Rhode Island and Vermont, but quits are not nearly as high. This suggests that reduced outmigration in some smaller northeastern states has increased the labor pool enough to allow employers to more freely lay workers off, yet it has not bolstered demand enough to instill confidence in workers that a new opportunity will be waiting.

Policy takeaways

A snapshot from a new data series is hardly enough to draw any conclusions, but the state JOLTS data provide even more evidence that the early termination of enhanced unemployment insurance by about half of states did not bear fruit. As of May, before any states eliminated the additional \$300 per week in federal funding for unemployed workers, the gap between openings and hires was about 50 basis points higher in states that intended to continue benefits. From May to August, both saw openings grow more quickly than hiring, but it widened more in states that cut benefits off early.

Tightness Increased Even After UI Cutoff



Had the cuts worked as intended, the hoped-for flood of workers would have presumably pushed the hire rate up enough to narrow the gap with the openings rate. Even absent that, one would have expected a smaller increase in that gap than in states that did not end benefits early. Instead, the wider gulf suggests that cutting benefits backfired by removing money from the pockets of unemployed residents, supporting a similar result from the August payroll survey.

Sources: BLS, Moody's Analytics

Meanwhile, the September state JOLTS data should begin to provide some clarity on whether vaccine mandates are having any impact on the inability of firms to find workers. Anecdotal evidence of unvaccinated workers being fired abounds, but with employer mandates more common in places with relatively high vaccination rates, the impact on the labor force is less pronounced.

This suggests little drag in the coming months, but next month's release should provide more color, especially after states with lower vaccination rates experienced stronger monthly growth in the September payroll survey. This likely reflects a rebound in southern states that were helped as the Delta variant receded—including Florida, Oklahoma and Texas, the three fastest-growing states last month—but more detailed information on openings and hiring will tell the full story.

The Week Ahead in the Global Economy

U.S.

The U.S. economic data front will be busy once again. Among the key data to be released next week are the ISM manufacturing survey, productivity and costs, factory orders, nominal trade deficit, jobless claims, and the October employment report. Factory orders and the nominal trade deficit could have implications for revisions to third-quarter GDP growth. We will closely watch unit labor costs. There is no evidence yet that robust wage growth was exerting significant upward pressure on prices, but the possibility merits close monitoring by the Federal Reserve. Strong growth in average hourly earnings has been garnering a lot of attention, but average hourly earnings are not the best measure of wage growth. We don't put a ton of emphasis on them given the measurement issues. Our takeaway from all the wage data we track is that wage growth has begun to moderate, though some believe this moderation is due to difficult year-over-year comparisons. Job growth likely accelerated in October after falling short of expectations in each of the prior two months. The Delta variant of COVID-19 left its mark all over the August and September employment reports. Daily cases dropped between the September and October payroll reference weeks, and that should translate into stronger job growth in October.

The Federal Reserve will likely begin reducing its \$120 billion in monthly asset purchases at the conclusion of the November meeting of the Federal Open Market Committee, a month earlier than in our baseline forecast. Recently, Fed Chairman Jerome Powell said it is time to taper, but he then quickly pivoted by noting that the central bank can remain patient on raising the target range for the fed funds rate. The acceleration in consumer prices has turned up the heat on central banks across the world and the Fed hasn't been insulated.

Europe

Euro zone unemployment and retail sales releases will lead headlines next week along with national industrial production figures, all for the month of September. Euro zone unemployment likely fell to 7.4% in September from 7.5% in August on further recovery in the services sector. Retail sales, meanwhile, likely held up in September but made little progress due to decreasing demand for goods. Sales were likely up 0.4% m/m. Industrial production meanwhile likely showed some variability due to the minor 0.6% m/m rebound in Germany and no growth in Spain. Unfortunately, factories' inventory issues are still holding back production. This will remain the case until next year when global supply chains begin to unclog.

The Bank of England's monetary policy decision will also be an important news piece. Although we expect no change of the bank's policy rate (currently at 0.1%), there should be some clearer signs about the BoE's intentions for the next months. The likelihood of a rate hike before the end of the year is rising quickly.

Asia-Pacific

Indonesia and Hong Kong will release third-quarter national accounts data. We expect Indonesia's GDP cooled to 4.5% y/y in the September quarter from 7.1% in the June stanza. Domestic demand endured a hefty slump due to the archipelago's record infection surge, which peaked mid-July and led to aggressive movement controls to contain the spread. In contrast, exports have remained buoyant thanks to elevated commodity prices. Elsewhere, the advance estimate of Hong Kong's GDP growth is forecast at 5.6% y/y, from 7.6% in the June quarter. Like Indonesia, exports have been an important strength.

On the monetary policy front, the Reserve Bank of Australia will keep monetary settings on hold in November. The cash rate will remain at 0.1%, while asset purchases will continue at the rate of A\$4 billion per week. Further tapering of asset purchases isn't expected until February.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
31-Oct	Japan	General elections	Low	Low
Oct/Nov	UN	UN Climate Change Conference COP26	Medium	Low
Nov	Asia-Pacific	Asia-Pacific Economic Cooperation forum	Medium	Low
8-Nov	China	Sixth plenary session of the Central Committee	Medium	Low
Nov	G-20	G-20 Summit	Medium	Low
7-Nov	Nicaragua	Presidential, congressional elections	Low	Low
14-Nov	Argentina	Legislative elections	Medium	Low
21-Nov	Chile	Presidential elections	Medium	Low
28-Nov	Honduras	Presidential, congressional and municipal elections	Low	Low
19-Dec	Hong Kong	Legislative Council elections	Low	Medium
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
2-Oct-22	Brazil	Presidential and congressional elections	High	Medium
Oct/Nov-22	China	National Party Congress	High	Medium

THE LONG VIEW: U.S.

Global Supply-Chain Issues Continue

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 96 basis points, 1 bp tighter than this time last week. This is below its high over the past 12 months of 118 bps and just above its lowest over the past year of 95 bps. This spread may be no wider than 115 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 remained at 87 bps. This is a hair above the low of 86 over the past 12 months and well below the high of 108 bps.

The long-term investment grade corporate bond spread was 128 basis points, the same as this time last week. It remains well below its recent high of 169 bps. Investment-grade industrial corporate bond spreads narrowed from 132 bps to 130 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 311 basis points is 2 bps wider than at this point last week. Rising global energy prices and low volatility in the stock market helped keep the high-yield option adjusted spread within a tight range. The Bloomberg Barclays high-yield option adjusted spread also widened, by 4 bps, to 289 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 spread approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread and is not significantly off that implied by a VIX of 16.38.

Defaults

Not only is issuance strong, but defaults remain very low. The latest Moody's monthly default report showed the trailing 12-month global speculative-grade default rate came in at 2.6% at the end of September, down from the 3.1% in August and the lowest since 2019. August was the eighth consecutive month to register a decline in the default rate since it hit a cyclical peak of 6.8% in January 2021.

The U.S. trailing 12-month speculative-grade default rate fell 40 basis points in September to 2.5%, lowest at any time over the past several years. The trailing 12-month European speculative-grade default rate fell from 3.3% in August to 2.4% in September. Europe's 12-month

speculative grade default rate is normally lower than that of the U.S.

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 faired noticeably better in the second quarter.

U.S. dollar denominated investment-grade issuance moderated this week, totaling \$59.8 billion in the week ended Wednesday and bringing the year-to-date total to \$1.428 trillion. High-yield corporate bond issuance picked up to total \$10.0 billion for the period and bringing the year-to-date total to \$559.6 billion.

U.S. ECONOMIC OUTLOOK

Fiscal policy assumptions are key to the outlook for the U.S. economy over the next few years, and there were only tweaks to these assumptions in the October baseline. We still assume \$2.5 trillion in government spending on infrastructure and President Biden's Build Back Better agenda. We did alter our assumption about the amount of taxes raised over the next decade through greater tax compliance, reducing it from \$600 billion in the September baseline to \$120 billion in the October baseline. Therefore, the legislation will add more to the deficit than in the September baseline.

Lawmakers raised the federal debt limit by \$480 billion. According to the Treasury, this sum would sustain all borrowing until December 3, the same date by which lawmakers will have to extend government funding and avert a shutdown. This sets up significant policy risk toward the end of 2021, when the U.S. economy may be more vulnerable to brinkmanship on Capitol Hill than it is today. The December deadlines will coincide with the holiday spending season and potentially another wintertime surge in infections as cold weather pushes more Americans indoors. The baseline forecast assumes that lawmakers will either approve a full-year appropriations bill by December 3 or pass another shortterm extension of government funding into late December or early 2022. The big question is how Democrats will address the next deadline to increase the debt limit.

COVID-19 assumptions

We adjusted our epidemiological assumptions to anticipate that total confirmed COVID-19 cases in the U.S. will be 47.49 million, compared with the 47.9 million in the September baseline. The seven-day moving average of daily confirmed cases has dropped recently, suggesting that we are likely on the other side of this wave of COVID-19.

The date for abatement of the pandemic changed slightly as it is now November 28, four days later than in the September baseline. Herd resiliency, which is a 65%-orgreater 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.

Delta eases its grip; supply chains tighten theirs

The Delta variant of COVID-19 weighed more on the economy in the third quarter than previously anticipated. However, the good news is that over recent weeks, a number of high-frequency data we track have improved, suggesting Delta's grip on the economy is loosening. Google mobility at workplaces has increased and is the highest since the pandemic began. Seated diners through OpenTable are also rising, as are box-office receipts. Weekly mortgage purchase applications have resumed rising and oil demand has edged higher.

We cut our forecast for third-quarter GDP growth from 5% at an annualized rate in the September baseline to 3.4% in the October vintage. Risk bias, or the difference between our high-frequency GDP model's estimate of third-quarter GDP growth and our official forecast, is -0.5 percentage point. Therefore, the risks are that third-quarter GDP growth comes in weaker than we expect. We also reduced our forecast for GDP growth in the fourth quarter as it is now expected to increase 6.2% at an annualized rate, compared with 7.5% in the September baseline.

For all of 2021, we now look for GDP to rise 5.8%, a touch lighter than the 6% in the October baseline and in line with the Bloomberg consensus of 5.9%. We look for GDP to rise 4.3% in 2022, identical to the September baseline and slightly stronger than the Bloomberg consensus of 4.1%. GDP growth will continue to moderate in 2023, rising 2.4%, which is still a touch stronger than the economy's potential growth rate.

Global supply-chain issues continue to plague the U.S. economy and have contributed to the acceleration in inflation. One doesn't have to look far to see clear evidence that supply-chain issues are having economic costs. Vehicle inventories are near record lows, driving prices higher. Consumers have responded with unit vehicle sales plunging recently. After running just shy of 19 million annualized units in April, sales dropped to around 12 million in September. Anecdotes in the ISM manufacturing survey remain littered with comments about supply-chain issues.

Easing of the supply-chain bottlenecks is key to our nearterm forecast for U.S. manufacturing production, inventory replenishing, and easing in inflationary pressures. To better track the amount of stress on U.S. supply chains, we identified a number of high-frequency metrics and combined them to create a U.S. Supply-Chain Stress Index. The SCSI is indexed such that 100 is the average pre-pandemic stress in U.S. supply chains. Therefore, anything north of 100 indicates greater pressure on supply chains and vice-versa. The SCSI suggests there has been little improvement recently. All three components are well above 100 but, not surprisingly, transportation is where the most stress lies followed by production and then inventories. We haven't changed our assumptions about when supply-chain issues begin to improve, currently mid-2022, but risks are that it takes longer.

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 14.5% this year, compared with 15.3% in the September baseline. Growth in equipment spending was revised higher next year to 9.6%, 0.2 percentage point stronger than the September baseline.

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 support investment through the rest of this year and into next. 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 6.2%, less than the 6.7% decline in the September baseline. We expect double-digit growth in real nonresidential structures investment in each of the next two years.

Because of incoming data, we raised our forecast for the commercial price index. We expect it to rise 8.3% this year, compared with 6.2% in the September baseline. We also now look for it to rise 1.9% next year, slightly better than the 1.1% in the prior baseline. We expect a rebasing of asset values across the board if interest rates begin to rise in the near term—retail and office will be hit hard because of longer-term evolutionary dynamics at work for these two property types.

The housing data are going to be volatile because of rebuilding after Hurricane Ida. This is normal after major hurricanes, but there is more uncertainty about the timing because of high construction costs and shortages

of materials and labor. The downward revision to the housing starts forecast in the baseline is mostly attributable to incoming data, which we now expect to increase 14.2% this year, compared with 16.3% in the September baseline. Starts are expected to increase by 9.4% next year and 6.6% in 2023.

The gap between housing demand and supply led us to boost our forecast for house price growth this year and next. We have been steadily revising our forecast higher for house prices over the past several months. The forecast is for the FHFA All-Transactions Home Price Index to increase 10.5% this year and 5.8% next year. The August baseline had house prices rising 7.7% this year and 5.8% in 2022.

Bumpy road to year's end

To achieve our forecast for fourth-quarter GDP growth, consumers will need to do their part. The trajectory for real consumer spending was on an unfavorable trajectory heading into the quarter as unit vehicle sales declined in September. The trajectory for consumer spending is important in normal times, but these are not normal times. It will take a strong start to the fourth quarter for real consumer spending to come anywhere close to our forecast for around a 6% annualized gain. The mini reopening of the economy following this wave of COVID-19 would help, particularly for spending on consumer services. However, goods spending may be a problem since COVID-19 could alter the timing of holiday shopping.

There is a high probability that the holiday shopping season this year begins sooner than normal or already is underway. Many media reports and retailers have warned consumers to start their holiday shopping early, because supply-chain issues have limited inventory for the season. This is clear in the inventory-to-sales ratio, which is among the lowest in recent memory. Last year, warnings by retailers brought forward some holiday shopping from November into October and from December into November. Also, there were concerns about the timeliness of deliveries from retailers, and these haven't been resolved as job openings in transportation remain extremely elevated.

Earlier-than-normal holiday shopping will wreak havoc with the seasonal adjustment process. After seasonal adjustment, October and November retail sales could be strong, but December would be a big dud. Again, getting back to the trajectory for real consumer spending, a really bad December would lend downside risk to our forecast for consumer spending and GDP growth in the first

quarter of 2022. That's because there won't be any idiosyncratic events to help rescue spending early in the quarter, leaving a sizable mountain to climb. Though this year could end on a high note, next year could get off to a slower-than-expected start. But, blame the holidays.

Another disappointing employment report

Nonfarm employment rose by 194,000 between August and September, but the net revision to the prior two months was sizable, totaling 169,000. Revisions over the past several months have been considerable and there isn't a reason that this won't occur again when September employment is revised. Some of the weakness is misleading. For one, seasonal adjustment issues likely depressed the total gain in nonfarm employment by 150,000 to 200,000 in September. This is clear in the drop in government employment as the seasonal adjustment factor depressed the measure of non-teacher educational workers.

The September baseline incorporates the August employment report. We anticipate some payback in subsequent months and average monthly job growth this year is forecast to average 536,000, compared with 543,000 in the September baseline forecast. Risks are weighted to the upside. Job growth in the fourth quarter could be stronger than expected, since the Delta variant won't be as large of a drag.

One area where we find clear evidence that COVID-19 weighed on the job market in September is in the number of people not at work because of their own illness. The September payroll reference period coincided with the recent peak in COVID-19 cases. Lately, there has been a strong correlation between the number of people not at work because of their own illness and the average confirmed daily COVID-19 cases during the payroll reference period.

On a seven-day moving average, COVID-19 cases totaled 57,715 on October 10. For the October payroll reference week, new data on COVID-19 suggests there should be a significant improvement relative to the September payroll reference period. Based on the relationship with COVID-19 cases, the number of people not at work because of their own illness could drop closer to 1.3 million in October after being near 1.6 million in September.

The unemployment rate is forecast to average 4.6% in the fourth quarter of this year, compared with 4.5% in the prior baseline. The unemployment rate was revised lower next year and is now expected to average 3.5% in the fourth quarter of 2022. Risks to the forecast for the labor market are weighted to the downside, as the Delta variant delayed the return to the labor force for many because of childcare and health concerns. Lack of labor supply is the biggest problem; businesses had 10.4 million open positions at the end of August. Still, we expect the economy to hit full employment by the end of 2022 or early 2023.

Inflation and the Fed

New historical data and the Delta variant led us to revise our forecast higher for the core PCE deflator, now expected to rise 4% on a year-ago basis in the fourth quarter of this year, compared with 3.9% in the September baseline. Though we have been revising our forecast for core inflation higher recently, it is still driven by transitory factors. We look for inflation to moderate next year, with the core PCE deflator up 2.3% on a yearago basis in the fourth quarter of 2022, only 0.1 percentage point higher than in the prior baseline. The headline PCE deflator could rise more than anticipated through the remainder of this year because of the jump in oil, natural gas and retail gasoline prices. The upward revision to the forecast for natural gas prices in the October baseline incorporates what has happened in markets recently.

We are sticking with our assumption about when the Fed begins tapering its \$120 billion in monthly asset purchases. We expect the Fed to start tapering in December by cutting its monthly asset purchases by \$15 billion to \$105 billion. The Fed will reduce these purchases by \$15 billion per month, completing the tapering process by mid-2022. After that, the Fed will reinvest the proceeds from maturing assets to ensure its balance sheet doesn't contract.

We still assume the first rate hike will occur in early 2023. The fed funds rate reaches its equilibrium rate in the second half of 2025, a touch above 2.5%. Markets have adjusted their expectations for tightening but still anticipate a more gradual pace than our baseline.

Tapering won't impact inflation. Though tapering won't be disinflationary, it could help keep market-based measures of inflation expectations anchored, since tapering is the preamble to the Fed beginning to tighten monetary policy either by allowing its balance sheet to decline and/or by increasing the target range for the fed funds rate.

The October baseline also incorporates the recent runup in the 10-year Treasury yield, which is around 1.6%. A good chunk of the increase in the 10-year is attributable to the term premium, or the extra compensation investors need to hold long-term Treasuries rather than shorter-maturity ones. One reason for the rise in the term premium is the more aggressive, eight-month tapering timeline laid out by the Fed recently. Also, tapering could start sooner, with the first reduction occurring in November. The new tapering timeline also means the Fed will buy \$600 billion less in Treasuries and mortgage-backed securities. This puts some upward pressure on the 10-year term premium.

Our past work has shown that not only does realized inflation raise the term premium, but so do energy prices. Global energy prices continue to climb; this is helping to raise the 10-year term premium. Better headlines on the Delta variant could also push the term premium higher, and there are signs that the worst of this coronavirus wave is behind us. The 10-year Treasury yield is expected to end this year at 1.8% and end 2022 at just south of 2.4%.

The forecast is that the Dow Jones Industrial Average has peaked and will gradually decline during the next year. Risks are heavily weighted to the upside, but peak growth, inflation uncertainty around fiscal policy, and the Fed tapering could weigh on equity markets.

THE LONG VIEW: EUROPE

U.K.'s Vulnerable Recovery

BY KATRINA PIRNER

The U.K.'s recovery slowed over the summer, though this wasn't entirely unexpected. The economy has exhausted the easy, big gains from the initial lifting of lockdown restrictions, with consumer spending bound to normalize in the subsequent months. However, other developments are cause for varying degrees of concern, including rising inflation, a cooling housing market, heightened tensions between the U.K. and EU, and labor shortages.

U.K. inflation rose to 3.2% in August 2021, a marked increase from July's 2% reading. Part of this jump is attributed to the rebound in prices for restaurants and hotels. These prices were set to rise following last August's "Eat Out to Help Out" scheme, which temporarily reduced café and restaurant prices. However, other underlying trends are less likely to dissipate in the coming months. Shortages of lorry drivers are expected to drive up delivery costs, which combined with higher energy and food prices means inflation will rise above 4% by the end of 2021. Although we have raised the risk of a sustained period of high inflation, our baseline forecast still assumes that inflation will soften in the latter half of 2022.

As a result of higher inflation, we now expect the Bank of England to raise interest rates early next year. By the end of 2022, interest rates are forecast to rise to 0.3% and will continue to increase through to 2023. Due to the stronger-than-anticipated rebound in inflation, we have raised the risk of a spike in long-term interest rates. That said, the likelihood of this occurring remains low, with our forecasts anticipating interest rates will remain below 2% through to the end of 2025.

We've slightly increased the risk that U.K. house prices will collapse for several reasons. First, the gradual phase-out of the country's stamp duty tax holiday was completed at the end of September 2021. Ahead of this due date, house price growth slowed to just over 0.1% m/m compared with 2% growth in August. We think house prices will soften following the expiration of this tax holiday. Second, rising living costs and an expected increase in unemployment could squeeze households' purchasing power, denting house prices. Third, higher interest rates could deter would-be buyers who face the prospect of higher mortgage costs. Still, the lack of housing supply suggests prices are more likely to cool than tumble.

Tension with the EU

EU-U.K. tensions show no signs of easing, with each side showing little appetite for compromise. Northern Ireland's unionist parties have rejected the Northern Ireland Protocol, putting pressure on Westminster to renegotiate the deal. Although the EU recently announced concessions on border checks for some goods traveling from Great Britain to Northern Ireland, goods will still require additional documentation. As such, the EU's proposal offers only a minor reprieve from Brexit-related red tape and will likely be rejected by unionists and Westminster as insufficient. The EU has also ignored the U.K.'s proposal for a dual regulatory regime and the replacement of the European Court of Justice with an independent arbitrator to oversee future legal disputes. The longer this dispute continues, the more relations between the EU and the U.K. risk being materially damaged, reducing the probability of a services agreement.

In September, vacancies hit a historic high, boosted by Brexit and the furlough scheme. To alleviate stress on the trucking and meat industries, the government has initiated a temporary visa scheme for 5,000 lorry drivers and 5,500 poultry workers. Nevertheless, we don't believe this will significantly alleviate the shortage of workers in this industry given that recruiting, submitting the paperwork, and approving work visas takes time. Additionally, we suspect the uptake among foreign workers may be low given that these visas are valid for just three months.

We believe the emergence of an acute labor shortage in the U.K. is unlikely. The expiration of the furlough scheme at the end of September should facilitate the reallocation of idle workers, though this will take time due to geographic and skill mismatches. However, the end of the free movement of European labor to the U.K. poses a more long-term challenge for industry. If the labor shortage did intensify, it would hurt the economy. Such a scenario could weigh on output and put additional upward pressure on wages, leading to increased prices for consumers. This would threaten the recovery of the U.K. economy. Consequently, we've added the risk of labor shortages to the risk matrix and will be monitoring how the U.K. labor market evolves over the next couple of months.

Japan's Domestic Demand on the Mend

BY KATRINA ELL and STEPHAN ANGRICK

The Bank of Japan's decision to hold policy steady in October came as the economy remains under pressure and just days before Japan's lower house elections on 31 October. Although the improved COVID-19 situation is a silver lining, supply constraints are increasingly weighing on exports and production. Together with the disruptions caused by the recent COVID-19 wave, this prompted the bank to lower its growth forecast for fiscal year 2021 (running from April 2021 to March 2022) to 3.4%. This compares with the BoJ's previous forecast of 3.8%, and our own forecast of 3.1%.

The cautious tone of the BoJ's Outlook Report, released alongside the October policy statement, reflects the challenges still facing the economy. The domestic picture has improved notably thanks to a substantial decline in new COVID-19 infections and a much-improved vaccination rate, which should enable a more durable consumption recovery in the months ahead. But supply disruptions have dealt a blow to exports and production, scrambling the outlook for coming quarters and, possibly, far into 2022.

On inflation, the Bol notes that the downward revision of its forecast reflects the impact of recent base year and weighting revisions to CPI. These revisions, undertaken in August, are a regular exercise intended to ensure the composition of the CPI basket accurately reflects actual consumption patterns. The latest set of revisions increased the weighting of mobile phone communication, given its increased importance to the average consumer. Together with the notable decline in prices observed over the past year, in large part due to the government's efforts to reduce Japan's high costs for mobile communication, this pulled headline CPI in September a whopping 1.23 percentage points lower. CPI should rise in the months ahead as this effect wears off and higher energy costs are more fully reflected in consumer prices. The yen's recent depreciation will contribute to this through higher import prices.

We continue to expect the BoJ to stay put as demand and fundamental price momentum will remain subdued. We expect the bank to nudge towards a moderately tighter policy stance as it tweaks measures to ensure financial stability. This includes gradually dialling back pandemic-related asset purchases—a process already well underway—and technical tweaks like adjustments of the operational details of its asset purchase operations. Easing remains an

option in the case of a severe shock to the economy and yen appreciation.

South Korea's disappointing third quarter

South Korea's economy had a tough run in the September quarter. GDP surprised on the downside with a 0.3% q/q expansion, according to advance estimates. This followed a revised 0.8% expansion in the June quarter. Domestic demand took a hit in the third stanza due to a fourth COVID-19 wave that hit in July and sent daily caseloads into record territory. In response, the government enforced strict social distancing measures, which stifled growth in services and private consumption. Business confidence also plummeted. As the country is set to ease social distancing measures from next week, the domestic economic outlook is brightening.

In our November baseline update we will upwardly-revise our estimate for fourth quarter GDP growth to capture higher household consumption. But this will not be enough to prevent the downward revision in South Korea's full-year GDP growth to 4.1% in 2021 (from 4.2% previously) due to the weaker-than-expected third quarter and the impact of China's slower growth trajectory. We maintain our expectation for GDP growth to hit 3.3% in 2022.

Encouragingly, daily COVID-19 cases have fallen from their peak. Also, South Korea recently managed to get more than 70% of the population fully vaccinated, beating its schedule by more than a week. As the country adjusts to living with COVID-19, movement restrictions will gradually phase out, giving a boost to consumption and investment in the fourth quarter. In addition, a cash handout to more than 88% of the nation was distributed last month. This will contribute to fourth-quarter economic gains, as the money must be spent by the end of the year.

Exports, which are South Korea's growth engine, increased from the previous quarter thanks to the global economic recovery. Exports increased 1.5% q/q, reversing from a 2% decrease in the second quarter. The chip shortage fuelled sturdy demand for South Korean semiconductors. A global increase in manufacturing and construction spurred demand for steel, petroleum and petrochemical exports. South Korea's export performance will remain robust in the fourth quarter as long as the global economic recovery continues. One downside risk is China's slower growth.

RATINGS ROUNDUP

Activity Skews Positive in the U.S. and Europe

BY STEVEN SHIELDS

The long stretch of U.S. credit upgrades outnumbering downgrades continued this past week. For the period ended October 25, upgrades were responsible for five of the eight changes issued by Moody's Investors Service and nearly two-thirds of the affected debt. The most notable upgrade in the period occurred to H.B. Fuller Company impacting approximately \$600 million in debt. The adhesive manufacturer's senior unsecured notes were raised to Ba3 from B2 reflecting its meaningful debt reduction and improved credit metrics since its fully debt-financed acquisition of Royal Adhesives in 2017. United Natural Foods Inc. also received an upgrade to B2 from B3 on its senior unsecured notes. According to the Moody's Vice President Mickey Chadha, "UNFI's operating performance has been better than expected and the company has lowered its debt burden while improving EBITDA thereby improving credit metrics. The increases in sales volumes due to pantry loading during the coronavirus pandemic has also been a tailwind for the company and we expect the demand for specialty groceries will remain high even after consumer buying patterns normalize."

Meanwhile, all three downgrades in the period were issued to speculative-grade firms. TransMontaigne Partners LLC's senior unsecured notes were lowered one notch to Caa1 from B3. Its credit profile reflects its high leverage, modest scale, risks associated with executing its growth plans,

customer concentration, and distributions required to service debt at its holding parent company.

Europe

Rating activity was also skewed positive in Europe. Upgrades accounted for 60% of total changes and almost all the affected debt. Merck KGaA 's senior unsecured notes were lifted to A3 from Baa1. The firm's A3 rating mirrors its long-standing good operational diversification because of its presence in three different industries, steady growth prospects of its business sectors, lower exposure to generic competition, and a track record of conservative financial policies.

On October 22, Moody's raised Autostrade per l'Italia S.p.A.'s senior unsecured and backed senior unsecured ratings to Ba2 from Ba3. ASPI's ratings and outlook have been also placed under review for upgrade. The rating action follows the settlement agreement between ASPI and the grantor, Ministero delle Infrastrutture e della Mobilita' Sostenibili, MIM. The agreement concludes a lengthy dispute between the parties following collapse of the Polcevera bridge and marks the withdrawal of the government's earlier allegations of serious breaches of ASPI's concession contract.

RATINGS ROUND-UP

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

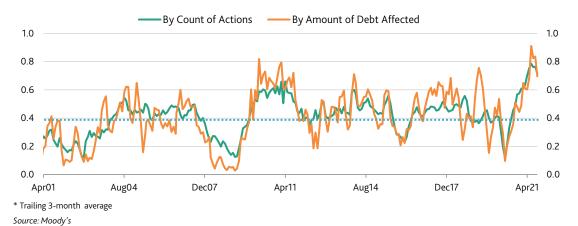


FIGURE 2 Rating Key

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/S G
10/20/2021	UNITED NATURAL FOODS, INC	Industrial	SrUnsec/SrSec/BCF/ LTCFR/PDR	500.0	U	В3	B2	SG
10/20/2021	TRANSMONTAIGNE PARTNERS LLC	Industrial	SrUnsec/LTCFR/PDR	600.0	D	В3	Caa1	SG
10/21/2021	WILLA MIDCO S.A.R.LWERNER FINCO LP	Industrial	SrUnsec/SrSec/BCF/ LTCFR/PDR	265.0	U	Caa2	Caa1	SG
10/21/2021	NEXUS BUYER LLC (INTRAFI)	Industrial	LTCFR/PDR		D	B2	B3	SG
10/22/2021	H.B. FULLER COMPANY	Industrial	SrUnsec/SrSec/BCF/ LTCFR/PDR	600.0	U	B2	Ba3	SG
10/25/2021	ELWOOD ENERGY LLC	Utility	SrSec	402.0	D	Ba1	Ba2	SG
10/25/2021	KORE WIRELESS GROUP INC.	Industrial	SrSec/BCF		U	В3	B2	SG
10/25/2021	DRW HOLDINGS, LLC	Financial	SrSec/BCF/LTIR/LTCFR		U	B1	Ba3	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
10/20/2021	TULLOW OIL PLC	Industrial	SrSec/LTCFR/PDR	1800.0	U	В3	B2	SG	UNITED KINGDOM
10/21/2021	ATLANTIA S.P.AAUTOSTRADE PER L'ITALIA S.P.A.	Industrial	SrUnsec/MTN	10018.8	U	Ba3	Ba2	SG	ITALY
10/21/2021	MERCK KGAA	Industrial	SrUnsec/LTIR/JrSub/MTN	11975.4	U	Baa1	А3	IG	GERMANY
10/22/2021	IVC ACQUISITION PIKCO LIMITED-IVC ACQUISITION LTD	Industrial	SrSec/BCF		D	B2	В3	SG	UNITED KINGDOM
10/25/2021	EP BCO SA	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG	LUXEMBOURG
Cource: Moody's									

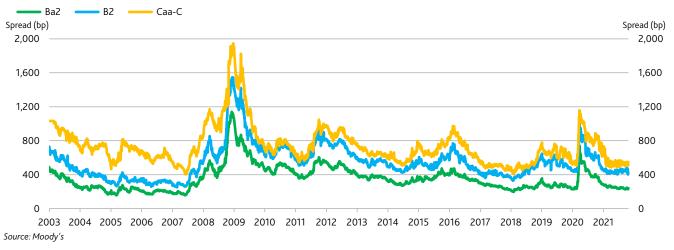
Source: Moody's

MARKET DATA

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



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



CDS MOVERS

Figure 3. CDS Movers - US (October 20, 2021 – October 27, 2021)

CDS Implied Rating Rises	CDS Impli	ed Ratings	
Issuer	Oct. 27	Oct. 20	Senior Ratings
DTE Energy Company	A1	A3	Baa2
Air Products and Chemicals, Inc.	Aa2	A1	A2
Boeing Company (The)	Baa3	Ba1	Baa2
American Tower Corporation	Baa2	Baa3	Baa3
Cargill, Incorporated	A2	A3	A2
Sysco Corporation	Baa1	Baa2	Baa1
Kimberly-Clark Corporation	Aa3	A1	A2
HP Inc.	Baa2	Baa3	Baa2
Martin Marietta Materials, Inc.	A2	A3	Baa2
CenterPoint Energy Resources Corp.	Baa1	Baa2	A3

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
Amazon.com, Inc.	A2	Aa3	A1
Bank of America Corporation	Baa1	A3	A2
International Business Machines Corporation	A3	A2	A3
Walt Disney Company (The) (Old)	Aa2	Aa1	A2
General Motors Company	Ba1	Baa3	Baa3
Bank of New York Mellon Corporation (The)	A3	A2	A1
Chevron Corporation	Aa3	Aa2	Aa2
Honeywell International Inc.	Aa2	Aa1	A2
Williams Companies, Inc. (The)	Baa3	Baa2	Baa2
PNC Financial Services Group, Inc.	A2	A1	A3

CDS Spread Increases	CDS Spreads			
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Xerox Corporation	Ba1	288	262	26
American Axle & Manufacturing, Inc.	B2	424	401	23
Murphy Oil Corporation	Ba3	327	306	22
Nabors Industries, Inc.	Caa2	520	499	21
K. Hovnanian Enterprises, Inc.	Caa3	843	824	19
Amkor Technology, Inc.	B1	168	150	19
DPL Inc.	Ba1	143	125	18
Rite Aid Corporation	Caa2	915	898	17
Meritor, Inc.	B1	239	223	16
Carnival Corporation	B2	401	388	13

CDS Spread Decreases	_	CDS Spreads		
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Talen Energy Supply, LLC	Caa1	2,165	2,299	-134
Macy's Retail Holdings, LLC	Ba3	246	279	-33
United States Steel Corporation	В3	366	389	-23
Tenet Healthcare Corporation	Caa1	270	289	-20
United States Cellular Corporation	Ba2	121	139	-18
Pactiv LLC	Caa1	446	463	-16
Mattel, Inc.	B1	187	201	-14
Olin Corporation	Ba2	172	185	-13
Whirlpool Corporation	Baa1	70	81	-11
American Tower Corporation	Baa3	61	71	-10

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (October 20, 2021 – October 27, 2021)

CDS Implied Rating Rises	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
HSBC Holdings plc	A3	Baa1	А3
Banque Federative du Credit Mutuel	Aa2	Aa3	Aa3
Norddeutsche Landesbank GZ	Baa2	Baa3	A3
Standard Chartered Bank	Aa3	A1	A1
Danone	Aa1	Aa2	Baa1
HSBC Bank plc	Aa3	A1	A1
Novo Banco, S.A.	Ba2	Ba3	Caa2
Scottish Power UK plc	A2	A3	Baa1
Sky Limited	Aaa	Aa1	Baa2
ASML Holding N.V.	A3	Baa1	A2

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Oct. 27	Oct. 20	Senior Ratings
Banco Santander S.A. (Spain)	A1	Aa3	A2
Intesa Sanpaolo S.p.A.	Baa2	Baa1	Baa1
Portugal, Government of	Aa2	Aa1	Baa2
Credit Agricole Corporate and Investment Bank	Aa3	Aa2	Aa3
Commerzbank AG	A3	A2	A1
Dexia Credit Local	Baa3	Baa2	Baa3
Landesbank Hessen-Thueringen GZ	Aa3	Aa2	Aa3
E.ON SE	A2	A1	Baa2
Anheuser-Busch InBev SA/NV	Baa2	Baa1	Baa1
Banca Monte dei Paschi di Siena S.p.A.	Ba3	Ba2	Caa1

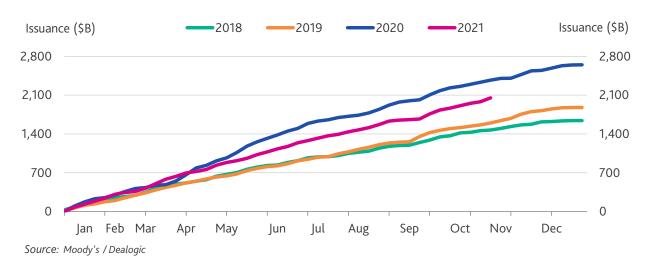
CDS Spread Increases		CDS Spreads			
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff	
Banca Monte dei Paschi di Siena S.p.A.	Caa1	213	179	34	
Casino Guichard-Perrachon SA	Caa1	647	627	20	
British Telecommunications Plc	Baa2	99	81	18	
Deutsche Lufthansa Aktiengesellschaft	Ba2	233	217	16	
Jaguar Land Rover Automotive Plc	B1	374	363	11	
Boparan Finance plc	Caa1	1,186	1,176	11	
Premier Foods Finance plc	В3	198	191	7	
Avon Products, Inc.	Ba3	233	228	6	
Piraeus Financial Holdings S.A.	Caa2	538	534	4	
Rolls-Royce plc	Ba3	166	162	4	

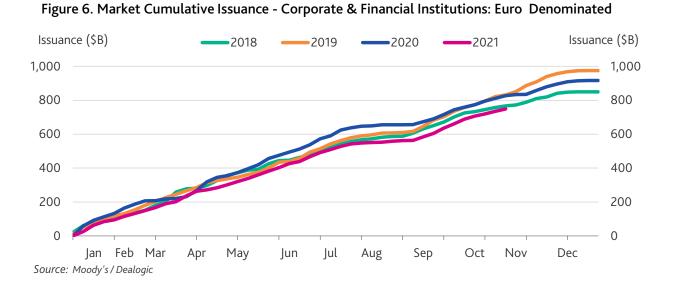
CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Oct. 27	Oct. 20	Spread Diff
Ineos Group Holdings S.A.	B2	198	252	-54
Vue International Bidco plc	Ca	597	623	-26
Banco Comercial Portugues, S.A.	Ba1	165	185	-20
Novo Banco, S.A.	Caa2	174	191	-17
CMA CGM S.A.	B2	295	310	-15
Norddeutsche Landesbank GZ	A3	64	72	-8
UPC Holding B.V.	В3	171	179	-7
Stena AB	Caa1	422	429	-7
Atlantia S.p.A.	Ba3	103	110	-6
CECONOMY AG	Ba1	180	186	-6

Source: Moody's, CMA

ISSUANCE

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





ISSUANCE

Figure 7. Issuance: Corporate & Financial Institutions

	USD Denominated				
	Investment-Grade	High-Yield	Total*		
	Amount \$B	Amount \$B	Amount \$B		
Weekly	59.832	10.015	70.527		
Year-to-Date	1,427.840	559.592	2,051.415		
		Euro Denominated			
	Investment-Grade	High-Yield	Total*		
	Amount \$B	Amount \$B	Amount \$B		
Weekly	11.247	3.481	14.728		
Year-to-Date	591.478	137.095	748.747		

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

To order reprints of this report (100 copies minimum), please call 212.553.1658.

Report Number: 1308535

Editor Reid Kanaley help@economy.com Contact Us Americas +1.212.553.1658 clientservices@moodys.com

Europe +44.20.7772.5454 clientservices.emea@moodys.com

Asia (Excluding Japan) +85 2 2916 1121 clientservices.asia@moodys.com

Japan +81 3 5408 4100 clientservices.japan@moodys.com © 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR INVESTOR. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLICATIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS OF EACH SECURITY THAT IS UNDER CON

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to:
(a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

 $MJKK\ and\ MSFJ\ also\ maintain\ policies\ and\ procedures\ to\ address\ Japanese\ regulatory\ requirements.$