Moody's

WEEKLY MARKET OUTLOOK

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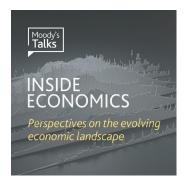
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Democrats at Fork in the Road, May Not Take It

There were media reports that Treasury Secretary Janet Yellen recently warned House Speaker Nancy Pelosi that lawmakers have until some point in October to raise the debt ceiling before the Treasury exhausts its accounting gimmicks. Lawmakers will raise the debt ceiling, but the next several weeks could be dicey in the bond market because of political hand wringing about the debt.

We had previously estimated that the drop-dead date for raising the debt ceiling was November 18, but odds are that this could be brought forward once we get the August Treasury budget data on Monday. The key will be how much remains of our estimate of the remaining balance of extraordinary measures. That could move the drop-dead date for raising the debt ceiling into early November, or even late October.

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The bond market is showing a little angst about the debt ceiling. This isn't surprising, but it's important to note that the amount of concern is small because the bond market has been through numerous debt-ceiling episodes and knows how it will play out—the debt limit will ultimately be raised. Currently, all Treasury bills from late October to November—the likely drop-dead date for raising the debt ceiling—are trading a touch cheaper than other Treasury bills. This is similar to what has happened leading up to prior debt-ceiling drop-dead dates.

Lawmakers need to get moving on this. Democrats may include a debt limit suspension in the upcoming continuing resolution, which would fund the federal government beyond this fiscal year, avoiding a government shutdown. However, Republicans would need to not filibuster it, allowing the legislation to pass with 51 votes. Even in this scenario, the

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continuing resolution would need unanimous support among Senate Democrats. This is just one way to raise the debt ceiling and it is possible that Democrats may opt for a different path. Earlier on Wednesday, Pelosi said the debt limit suspension would not be part of the continuing resolution. Therefore, Democrats could be opting to not take the path of least resistance.

Back-to-school shopping for corporate bonds

After a normal August lull in U.S. corporate bond issuance, September is off to a strong start. Tuesday was a very busy day with at least 20 companies tapping the U.S. high-yield bond market. The week after the Labor Day holiday is normally one of the busiest periods of the year, but this year will likely see more issuance than normal because of low volatility, tight high-yield corporate bond spreads, and some urgency to issuance ahead of the Federal Reserve beginning to taper its \$120 billion in monthly asset purchases.

High-yield corporate bond issuance should be very strong this month, exceeding that seen over the past few years. For perspective, average U.S. dollar denominated high-yield bond issuance over the past five Septembers was \$47 billion. For investment grade, average U.S. dollar denominated issuance over the past five Septembers was \$163 billion.

Separately, we will be watching leverage loan issuance as, once again, September is normally a strong month.

Some of the angst about the taper stems from what occurred during the so-called "taper tantrum" in 2013. During that episode, there was a noticeable but temporary hit to liquidity in the U.S. corporate bond market. In 2013, ICE BofA's corporate bond index's total returns also declined. Comparing today with 2013 is comparing apples and oranges.

We expect a significantly more muted response this time around because the Fed has made a clear distinction between its balance sheet and interest rate policies. Therefore, timing of the tapering has no implications for the timing of the first increase in the target range for the fed funds rate. Also, markets have now been through a taper, a fact that should pay dividends this time around. Another reason to be confident that the market will not overreact to this taper is that earlier this year the market digested the central bank's winding down of its corporate credit facilities, which caused no problems in financial markets.

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TOP OF MIND

Natural Disasters Taking Toll

BY LAURA RATZ and ADAM KAMINS

Rising global temperatures are fueling an increase in the frequency and severity of extreme weather events, and regional economies are feeling the heat. While most natural disasters barely register as a blip to the <u>U.S. economy</u>, the costs accrue to state and local economies. According to the National Oceanic and Atmospheric Administration, both the frequency and total cost of natural disasters wreaking more than a billion dollars in damage have increased by orders of magnitude in just the last 40 years. This includes a wide range of extreme weather events, including wildfires, droughts, winter storms, flooding and hurricanes, to name but a few. Last year, wildfires in California alone racked up property damage and mitigation costs of several billions—and that represents just one category of extreme event in just one state.

Wide swaths of the U.S. are currently wrestling with the fallout of very different types of extreme weather at the same time. While much of the West battles some of the largest wildfires on record and endures drought, the East Coast faces hurricanes and extreme flooding.

Fires

Fire season in the West got an early start in 2021, and already three of the 20 largest fires in California history have raged this year, including the Dixie Fire, which ranks second and is still not fully contained. Last year was perhaps the worst year on record, with five of the seven largest fires on record. More than 2 million acres in California have burned year-to-date, more than double the five-year average, according to the California Department of Forestry and Fire Protection.

Our preliminary estimate of property damage is up to \$600 million for the Dixie Fire and up to \$700 million for the Caldor Fire. Although the Dixie Fire is larger and has damaged more structures, Caldor is within the Sacramento metro area, which features higher property values than in Dixie's footprint. So far these figures pale in comparison to last year's devastation, when the fires were far closer to the Bay Area and its greater population density and higher property values.

Oregon's Bootleg Fire caught the nation's attention this summer as the first large fire of the 2021 season. Though our estimated price tag is far lower—only about \$50 million due to the more rural location—Bootleg was felt far beyond

Oregon. Smoke and hazy conditions extended as far as New York, eroding air quality from coast to coast. It is worth noting that wildfires are a natural part of the ecosystem in much of the West. However, fire season is getting longer every year—more than two months longer in some areas. Higher temperatures, reduced precipitation, and earlier spring melting have made for drier conditions and leave the landscape primed for ignition.

Beyond the most immediate costs from mitigation and property damage, jobs are at risk. Tourism is one of the most vulnerable industries. The Caldor Fire rages near Lake Tahoe. In 2020, dozens of wineries in northern California were destroyed by wildfires. Tourism-related employment is typically low paying, and the threat to these jobs is just one example of how climate change will exacerbate economic disparities. A similar story also holds for agriculture.

Drought

Fires are not the only consequence of dry and hot conditions. The Colorado River has been slowly drying up for decades amid overuse and low rainfall, threatening the water supply throughout the region. As a result, the nation's two largest reservoirs by capacity, Lake Mead and Lake Powell, are only 35% and 31% full, respectively. About 60 million people rely on those reservoirs for water. Those and other reservoirs are also vital to agriculture and the food supply. The West produces nearly 30% of the nation's agricultural output, and California alone accounts for 16% despite being home to only 12% of the U.S. population.

Assessing the costs of a drought is complicated by the longer timeline of the event, and irrigation and reservoirs mitigate the most immediate adverse effects of reduced precipitation. Water pricing is also notoriously opaque. About 90% of the West is experiencing drought and more than half of the region is in either extreme or exceptional drought, the direst of the U.S. Department of Agriculture's five-tiered ranking system. California's most productive agricultural region, the Central Valley, is among the regions with the worst drought conditions.

An Ida update

More than a week since Ida moved out to sea, its cost estimate has been revised slightly higher but is mostly unchanged. In Louisiana, the storm has left increasingly clear devastation in a few small parishes, but New Orleans is

being hailed as a success story following new safeguards in the aftermath of Hurricane Katrina. Power is back for most of the Crescent City, meaning that daily output is starting to return. Still, between evacuated residents, cleanup, and some remaining outages, the city is unlikely to be at full capacity for at least another week or two.

Despite this relatively good news, more than 300,000 Louisianians remain in the dark. The greatest pain remains concentrated in the Houma-Thibodaux metro area along the Gulf Coast, which is still almost entirely without power, as are a handful of parishes that sit just to the north. Until they are up and running again, employment and output will take a hit, with the implications for the September data especially significant if outages continue into the payroll reference period next week. Combine this with Louisiana's move to the top of the COVID-19 exposure rankings, and the near-term picture is a dark one, both literally and figuratively.

Meanwhile, the price tag in the Northeast has inched higher, but only moderately so. Despite shocking scenes in some parts of the Mid-Atlantic, especially New Jersey, most communities experienced minimal damage and only a day or so of disruption. This means that the toll for residential and commercial real estate is likely in line with initial estimates.

Two modest changes, however, were made. First is that the range of implied damage to the vehicle stock was narrowed a bit to signify that the destruction of cars was on the higher end of expectations. This reflects both the degree to which roads were suddenly inundated as well as high residual values due to the semiconductor shortage, resulting in a slight upward adjustment to the top of the range.

Additionally, more destruction to infrastructure than expected was incorporated into the cost estimates. In fact, the Pennsylvania Emergency Management Agency reported \$100 million in infrastructure damage along with about 400 homes destroyed. That amounts to a whopping \$250,000 per home. Although this ratio is implausibly high for the entire Northeast, the number highlights the fact that aging and vulnerable roads, along with a reliance on subways and other transit systems that are especially subject to flooding, can make heavy rain far more costly than in other parts of the country.

Bottom line (so far)

All told, the revised overall estimate for Ida's price tag is now approximately \$40 billion to \$50 billion. Note, however, that data on damage and destruction to the regional housing stock remain incomplete. When more information on the number of homes that were ultimately lost to this natural disaster is available, the overall cost estimates may be revised further.

Hurricanes are generally the costliest natural disaster, largely because of the subsequent flooding in highly developed areas. Fires are generally less destructive than such storms because fires are most likely to gain a foothold in less densely populated areas where there is dry brush for kindling and trees to fuel the fires. Lower population density and therefore less economic activity also make lost output less of a concern after a wildfire. However, if global temperatures continue to rise unabated and the costs and frequency of extreme weather events mount, an evergrowing number of regional economies will feel the blunt realities of climate change.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar will be busy. The August consumer price index will garner a lot of attention for any signs that inflationary pressures are moderating. Because the increases in prices have been concentrated in those benefiting from the reopening of the economy and areas affected by the semiconductor shortage, we still believe the acceleration in inflation is temporary. Other key data include industrial production, retail sales and a pair of regional Fed manufacturing surveys. Initial claims for unemployment insurance benefits could show the effect of Hurricane Ida. Hurricanes depress initial claims early on, because they prevent filings and processing. This backlog is worked off in subsequent weeks, temporarily boosting claim numbers. That's why we expect initial claims to increase during the next couple of weeks. We will post our forecasts for next week's data on Economic View. Also, new data on the Treasury budget will be released and could have implications for when the debt ceiling deadline. We had previously estimated that the drop-dead date for raising the debt ceiling was November 18, but odds are that it could be earlier once we get the August Treasury budget data on Monday. The key will be how much remains of our estimate of the remaining balance of extraordinary measures. The drop-dead date for raising the debt ceiling could move into early November, or even late October.

We'll also get the final Quarterly Services Survey for the second quarter. It may have implications for our tracking estimate of second-quarter GDP. The week wraps up with August producer prices. Though the PPI isn't source data for the CPI, it is for the Fed's preferred measure of inflation, the core PCE deflator. Hurricane Ida will put some upward pressure on producer and consumer prices via higher energy costs, but that will likely appear in the September data rather than August.

Europe

Euro zone and U.K. releases will top headlines next week. Euro zone industrial production likely rebounded 0.5% m/m in July after a 1% decline the previous month. A strong release out of Germany will help lift the euro zone aggregate. Likewise, the trade surplus is expected to expand to €29.9 billion in July from €26.7 billion a year earlier, following the lead of Germany, where a wider

surplus was due to a decline in imports. We expect inflation, meanwhile, to be in line with the preliminary estimate of 3% y/y in August. Base effects in oil prices, the timing of summer sales last year, and the end of Germany's temporary VAT cut supercharged the month's price growth. On a national level, inflation is expected to have risen to 3.3% y/y in Spain, 1.9% in France, and 2.1% in Italy. Another important factor is the increase in energy prices on the rise of gas prices.

U.K. inflation likely will have risen to 2.7% y/y in August from 2% in July. The U.K. is also facing a bout of abovetarget inflation from base effects, higher gas prices, and the natural effects of the recovery in domestic demand. Retail sales, meanwhile, are expected to rebound 1.9% m/m in August after pulling back 2.5% in July. Sales should swing back after July, as the worst of the Deltavariant outbreak passed. Finally, the unemployment rate was likely unchanged in the three months to July at 4.7% from the previous quarter. The pace of hiring likely slowed in July due to the Delta outbreak.

Asia-Pacific

New Zealand's June quarter GDP will be the highlight on the economic calendar. New Zealand's economy is likely to have grown 0.7% in quarterly terms in the June quarter, following a 1.4% expansion in the prior quarter, consolidating gains from improving household consumption and a fast-recovering labour market.

Australia's unemployment rate likely rose to 5% in August from 4.6% in July. Extended shutdowns across various states are expected to have weighed heavily on labour force participation rates and reduced job openings, particularly in contact-sensitive services.

China retail sales likely expanded at a more moderate pace in August as movement restrictions imposed in response to the domestic virus outbreak likely weighed on household spending. China's industrial production, however, is likely to have expanded 6.3% in yearly terms in August, following a similar 6.4% expansion in July. India's annual inflation is likely to have risen marginally to 5.7% in August from 5.6% in July, as a domestic demand revival continues in the post-restrictions phase.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
15-Sep to 15-Oct	Italy	Local elections	Low	Low
26-Sep	Germany	Federal elections	Medium	Medium
2-Oct	Brazil	Presidential and congressional elections	High	Medium
Oct/Nov	Japan	General elections	Low	Low
Oct/Nov	ASEAN	ASEAN summit	Low	Low
Nov	Asia-Pacific	Asia-Pacific Economic Cooperation forum	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	Low	Low
28-Nov	Honduras	Presidential, congressional and municipal elections	Low	Low
19-Dec	Hong Kong	Legislative Council elections	Low	Medium
10-Apr	France	General elections	Medium	Medium
29-May	Colombia	Presidential elections	High	Low

THE LONG VIEW: U.S.

The Cut to Our Q3 Growth Estimate

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 97 basis points, 1 bp tighter than this time last week. This is below its high over the past 12 months of 138 bps and just above its lowest over the past year of 95 bps. This spread may be no wider than 118 bps by year-end 2021. The long-term average industrial corporate bond spread also fell 1 bp over the past week to 88 bps. This is only modestly above its low over the past 12 months of 86 bps and well below its high of 122 bps.

The long-term investment grade corporate bond spread was 130 basis points, compared with 131 bp last week. It remains well below its recent high of 187 bps. Its tightest over the past year was 129 bps. Investment-grade industrial corporate bond spreads narrowed from 135 bps to 134 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 316 basis points was 3 bps tighter than at this point last week. The high-yield option adjusted bond spread approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread and that implied by a VIX of 18.1. The VIX has been bouncing around over the past few weeks but remains below its historical average of around 19.

DEFAULTS

The global speculative-grade corporate default rate fell to 4.9% for the trailing 12 months ended in May, returning to where it stood a year earlier and down from 5.6% at the end of April. Among high-yield bond issuers, the U.S. default rate was 2.8% at the end of May when measured on a dollar-volume basis, down from 4.5% at the end of April. The decline reflects the exit of a few large defaults in 2020 from the trailing 12-month window.

According to the Moody's Credit Transition Model, the trailing 12-month global speculative-grade default rate will fall to 1.8% by the end of the year under the MIS baseline scenario and remain little change through May 2022. To derive default-rate forecasts, Moody's CTM uses inputs, including ratings and rating transitions, as well as assumed future paths of high-yield bond spreads and changes in unemployment rates.

In the Moody's Investors Service baseline scenario, the speculative-grade default rate will drop to 1.7% at the end of this year before creeping higher in April and May

of next year, touching 1.9%. For Europe, the speculativegrade default rate will steadily decline over the next several months and end 2021 at 1.9%.

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 was \$9.3 billion in the week ended Wednesday, bringing the year-to-date total to \$1.147 trillion. These data do not fully capture the September sprint in issuance that normally occurs after the Labor Day holiday. High-yield corporate bond issuance rose \$1.65 million, bringing the year-to-date total to \$470.7 billion.

U.S. ECONOMIC OUTLOOK

Because of Democratic divisions over President Biden's Build Back Better agenda, we reduced the price tag of an assumed reconciliation package that funds a range of social investments from \$3 trillion in the August forecast to \$2.5 trillion in the September vintage. Specifically, we nixed \$500 billion in federal support of private industry, which included funding for manufacturing supply chains, R&D investments, and small-business support, among others. Our prior assumptions regarding investments in education, family leave, housing, and climate change initiatives, as well as household tax credits, are unchanged from August. The new baseline forecast assumes that all but \$500 billion of the reconciliation package will be paid for by higher taxes on corporations and high-income individuals. We did not make changes to our assumptions around the Infrastructure Investment and lobs Act.

The baseline forecast assumes the debt ceiling is raised but the drop-dead date could be in October, rather than November. The bond market is showing a little angst about the debt ceiling. This isn't surprising, but it's important to note that the amount of concern is small because the bond market has been through numerous debt-ceiling episodes and knows how it will play out—it will ultimately be raised. Currently, all Treasury bills from late October to November, which is likely the drop-dead date for raising the debt ceiling, are trading a touch cheaper than other Treasury bills. This is similar to what happened leading up to prior debt-ceiling drop-dead dates.

COVID-19 assumptions

We adjusted our epidemiological assumptions to anticipate that total confirmed COVID-19 cases in the U.S. will be 47.9 million, compared with 41.1 million in the August baseline. The change is due to the recent increase in confirmed cases because of the Delta variant. The seven-day moving average of daily confirmed cases dropped recently but that is likely due to the Labor Day holiday, which reduced testing and reporting. Despite the recent drop, the seven-day moving average of confirmed COVID-19 cases remains well above 100,000.

The date for abatement of the pandemic has been pushed out to this November because of the Delta variant. Herd resiliency, which is a 65%-or-greater share of the adult population being fully vaccinated or previously infected, was achieved on August 30, a few days earlier than the assumption of September 2 in the August baseline. Also, COVID-19 will be endemic and seasonal.

The economy is feeling the effects of the current wave of COVID-19 cases. Consumer sentiment dropped sharply in August and a number of high-frequency measures of economic activity we closely track have all weakened, including number of people passing through TSA checkpoints, seated diners from OpenTable, movie box-office revenues, and Google mobility.

We expect the variant to start fading soon, much like it has in the U.K., which seems to be leading the U.S. by a few weeks, and thus not affect the economy to an extent that we will need to downgrade our economic outlook.

Delta hits GDP

There were some changes to our forecast for GDP growth through the remainder of this year. We cut our forecast for third-quarter GDP growth from 8.2% at an annualized rate in the August baseline to 5% in the September vintage. Risks are weighted to the downside. Our high-frequency GDP model's tracking estimate of third-quarter GDP growth has been sinking like a rock lately. It also reflects only one piece of source data for August, which would capture the impact of the recent surge in COVID-19 cases. Though we don't expect that this wave of coronavirus will have significant economic costs, there is a lot less cushion now.

August vehicle sales delivered a big hit to our estimate of third-quarter GDP. Vehicle sales fell from 14.62 million to 13.06 million annualized units in August and are 16.6% below their second-quarter average. This bodes ill for real consumer spending in the third quarter. Our high-frequency GDP model has third-quarter GDP growth tracking at 3.9% at an annualized rate, less than the official forecast. The model anticipates inventories doing the bulk of the heavy lifting this quarter, and the Delta variant is causing supply-chain issues, which could slow the rebuilding of stockpiles. Also, Hurricane Ida is another potential issue for inventory rebuilding and trade. U.S. soybean exports plunged last week, and though they account for a small share of total exports, this highlights the hurricane's downstream effects.

The September baseline includes our assumptions about Hurricane Ida's economic costs. Though Ida was a severe hurricane and devastated some regional economies, it likely won't be an enormous drag on U.S. GDP because of how GDP is calculated. The primary damage from natural disasters is done to productive capacity through the destruction of existing assets.

This destruction is accounted for in the National Income and Product Accounts under the Changes in Net Stock of Produced Assets table but is not included directly in the GDP calculation. Nonetheless, natural disasters will affect GDP through a number of channels. Rebuilding will be captured in the regular source data on residential and nonresidential construction.

The consumer spending component is also likely to be affected to the extent that federal aid and insurance payouts to households are a supplement to income rather than a replacement for lost income. As with Hurricane Katrina, Ida could have a more significant impact on GDP via higher energy prices. According to the Bureau of Safety and Environmental Enforcement, 95% of oil production and 94% of natural gas production were shut down because of Ida. Based on wholesale U.S. gasoline prices, relief at the pump is coming and this will limit Hurricane Ida's hit to U.S. GDP growth.

Though we cut GDP growth this quarter, the September baseline has stronger growth in the final three months of this year, with GDP rising 7.5% at an annualized rate, compared with 6.4% in the baseline forecast. Some of the lost economic activity because of the Delta variant and Hurricane Ida, like oil production, will be made up in the fourth quarter.

For all of 2021, we look for GDP to now rise 6%, a touch lighter than the 6.3% in the August baseline and in line with the Bloomberg consensus of 6.1%. We look for GDP to rise 4.3% in 2022, compared with the 4.5% in the prior baseline and identical to the Bloomberg consensus. Though growth slows next year because of the fading fiscal impulse and less boost from the reopening of the economy, growth will be nearly double the economy's potential growth rate.

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 15.3% this year, compared with the 15.7% in the August baseline. Growth in equipment spending was revised higher for next year to 9.4%, 0.3 percentage point stronger than the August 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 the strong rate of

new business formations. The biggest downside risk is a sudden tightening in financial market conditions.

The real nonresidential structures forecast was revised slightly this year. It is forecast to drop 6.7%, a bit less than the 6.9% drop in the August baseline. This will be another rough year for real nonresidential structures investment. A modest recovery will begin next year.

There were no material changes to the commercial price index forecast, which is expected to rise 6.2% this year and 1.1% in 2022. 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.

Housing data are going to be volatile because of rebuilding after Hurricane Ida. This is normal after major hurricanes, but there is more uncertainty now 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 due to incoming data. We now look for starts to increase 16.3% this year compared with the 18.8% in the August baseline. Growth in starts will be stronger next year partly because of ongoing rebuilding, and we now look for them to rise 11.5%, compared with 8.6% in the prior baseline.

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 higher our forecast 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.

Death, taxes, and a disappointing August jobs report

The August U.S. employment report was a letdown. Nonfarm employment increased a net 235,000 in August following a revised 1.053 million (previously 943,000). Revisions have been noticeable recently; the net twomonth revision to nonfarm employment was 134,000.

The Delta variant clearly weighed on the labor market. Daily confirmed cases were surging during the August payroll reference week. According to the Bureau of Labor Statistics, 5.6 million people reported being 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 prior four weeks

due to the pandemic. Among these individuals, 13.9% received some pay from their employer for the hours not worked, up from 9.1% in July. Similar to July, there were 1.5 million individuals not in the labor force that were unable to look for work because of the pandemic.

There is a clear downward bias in August employment. The month's job growth normally comes in weaker than the consensus, and we don't see a reason why the pandemic would have altered this. The August bias is noticeable. Over the past five years, the initial estimate of August job growth has been revised higher by an average of 75,000 jobs between the initial and third estimates. Low response rates to the preliminary survey are the primary culprit behind the tendency for August job growth to come in weaker than the consensus. This struck again. The response rate for this August was 70.5%, compared with the 76.8% last August and the 75% average over the past prior five years.

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 543,000, compared with the 532,000 in the August baseline forecast. Odds are that August's job growth is revised higher.

The unemployment rate is forecast to average 4.5% in the fourth quarter, compared with the 4.6% in the prior baseline. The unemployment rate was revised lower for next year and is now expected to average 3.4% in the fourth quarter of 2022. Risks to the labor market forecast are weighted to the downside. The Delta variant could delay the return to the labor force for many because of childcare and health concerns. Lack of labor supply is the biggest problem; businesses had 10.9 million open positions at the end of July. 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 higher our forecast for the core PCE deflator. It is now expected to rise 3.9% on a year-ago basis in the fourth quarter of this year, compared with 3.5% in the August baseline. We look for inflation to moderate next year, with the core PCE deflator up 2.2% on a year-ago basis in the fourth quarter of 2022, only 0.1 of a percentage point higher than in the prior baseline.

We altered our assumptions about when the Fed begins tapering its \$120 billion in monthly asset purchases. We now expect the Fed to start tapering in December by cutting its asset purchases by \$15 billion, to \$105 billion. The August baseline had tapering beginning in January 2022, so the change is fairly minor. We expect this process to be on autopilot and the assumption is for a \$15 billion reduction at each Federal Open Market Committee meeting, which would wrap it up before the end of next year. The Fed will then reinvest the proceeds from its maturing assets to ensure the balance sheet doesn't decline. We still assume the first rate hike in early 2023. The fed funds rate reaches its equilibrium rate, a touch above 2.5%, in the second half of 2025. Markets are still pricing in a noticeably more gradual tightening cycle than our baseline.

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

Inflation expectations are also important in the future path of inflation. The Fed is keeping close tabs on various measures of inflation expectations, which appear to be anchored. The five-year, five-year forward inflation expectation rate is currently around 2.2%. This is based on the consumer price index, and if we adjust this for the tendency for the CPI to run ahead of the PCE deflator—the Fed's preferred measure of inflation—investors are expecting inflation to be on the Fed's target. One caveat is that the Fed could be distorting this a little, since the five-year, five-year forward inflation expectation rate incorporates Treasury Inflation-Protected Securities, and the Fed holds 2% of the TIPS market. As the Fed begins to taper, TIPS yields might climb.

We didn't make any significant changes to the 10-year Treasury yield forecast. A bottom could be forming in long-term rates with the current yield below our estimate of the economic fair value of 1.58%. Also, seasonals favor an increase in the 10-year Treasury yield in September. On average, over the past several years, Treasury returns have declined in September. Further, the 10-year Treasury yield has risen in four of the last five Septembers. We don't anticipate a jump in interest rates this fall, but with seasonals turning less favorable, odds are rates will rise rather than continuing to drop.

THE LONG VIEW: EUROPE

German Factory Orders Show Strong Demand

BY ROSS CIOFFI

Factory orders in Germany increased by 3.4% m/m in July, adding to June's 4.6% growth. Apart from a 3.3% pullback in May, factory orders have been on the rise throughout the year. Orders from the domestic market pulled back slightly but were made up for by gains from non-euro zone countries. Orders inched down for intermediate goods but increased notably for consumer and capital goods.

Factory orders speak to robust demand for German goods this summer, but the weaker turnover data reflect supply disruptions that are preventing factories from fulfilling these orders. Turnover of manufactured goods increased by 1.9% m/m in July after a 1.1% decline in June. The difference stands out when comparing the order and turnover indexes to their levels in July 2019. The index for manufacturing orders was 19.5% above its level in July 2019, while the level for the turnover index was 3.8% lower. Most of this gap is due to capital goods, and to transport goods in particular. Turnover for these was 10.4% lower than it was in July 2019, while orders were 19.5% higher. The shortage of semiconductors on the global market is holding up production in this particularly exposed sector.

Because the shortage is dragging on longer than initially expected, German growth will slow in the remainder of the year as industrial production remains stymied by shortages. However, the downside risks are limited because as inputs arrive, there will be make-up growth. In the meantime, the still-strong demand environment is dissuading firms from laying off workers; factories have been hiring in order to boost their productive capacity. Fortunately, Germany's short-time work scheme will also support firms' ability to keep workers on as they wait for supply chains to improve.

Germany's truck-toll mileage index, which tracks the distance covered by trucks on the country's toll roads, dropped by 2.2% m/m in August. The index is highly correlated with changes in the manufacturing index because trucks deliver inputs and finished goods. A decline in the index is not a given that industrial production will decrease, however, as proven in July when the truck mileage index decreased but manufacturing was up 1.3% m/m. Moreover, July's 3.4% m/m jump in factory orders was a promising signal for production in coming months. That said, ongoing supply disruptions make the decline in truck mileage more salient than the increase in factory orders. Throughout the year we have seen strong demand for German factory

goods, while at the same time input bottlenecks have prevented manufacturers from fulfilling these orders. This has been the case most significantly in the transport equipment industry. Unfortunately for German manufacturers, supply issues will persist throughout the rest of the year.

Preliminary trade data for July were also released out of Germany on Thursday. Exports inched up by 0.5% m/m while imports tumbled by 3.8%. This led to a sizable increase in the trade surplus to €17.9 billion from €13.5 billion in June. The above-mentioned supply issues have recently held back exports as well. The contraction in imports may be good for the trade balance, but it is not a strong signal for domestic demand. Consumer confidence has lost momentum in recent months, likely due to inflation fears and outbreaks of the Delta variant. That said, we still expect households to be, on net, in the mood to spend. Unemployment figures are improving, and tourism data in the euro zone suggest that many citizens took holidays during the month. Consumers will be more oriented toward services than goods in the third quarter.

ECB cuts pace of bond purchases

The European Central Bank decided to moderately decrease the pace at which it purchases government bonds under its Pandemic Emergency Purchase Program, judging that the financing conditions will remain favorable despite the smaller asset purchases. Indeed, the euro zone recovery has been proceeding even better than expected, with GDP growth up 2.2% q/q in the second stanza and output expected to reach pre-pandemic levels by the end of the year. High vaccination rates in Europe mean the impact of COVID-19 has become less severe, but variants remain a haunting downside risk.

The ECB said the recent and ongoing acceleration in inflation above target will be temporary. Inflation forecasts at the bank are still below target until 2023. The bank foresees headline inflation averaging 2.2% this year, 1.7% in 2022, and 1.5% in 2023. We likewise forecast inflation rates to slow below target in the coming two years before speeding up again in 2024. This means that, even with the upcoming slowdown in PEPP purchases, it is much too early to be worried about the ECB hiking rates or ending net purchases, even under the bank's Asset Purchase Program.

A Nuanced Shift at Australia Central Bank

BY KATRINA ELL and SHAHANA MUKHERJEE

The Reserve Bank of Australia's monetary policy announcement this week packed some surprises. Although the central bank kept the cash rate steady at 0.1%, in line with our expectations, it forged ahead with reducing its pace of asset purchases. This will see its weekly asset purchases reduced to A\$4 billion from A\$5 billion previously.

The latest move has surprised markets. Many expected the RBA to walk away from this commitment given the severe Delta outbreak sweeping through several states. This explains why the Aussie dollar weakened to 0.747 per U.S. dollar as an initial reaction, though it has since tightened to settle closer to 0.74 to the U.S. dollar.

The latest decision revealed a shift in the central bank's position on its asset purchase commitments, though it is a nuanced change. The implications are not expected to be sizably different for at least two reasons. First, the magnitude of tapering is relatively small, and the central bank is still offering substantial monetary support through low interest rates and liquidity flow. Second, its approach and commitment to maintaining these settings is now clearer, as the central bank has modified its guidance on future asset purchases. In particular, the central bank has said it will maintain the current pace of asset purchases until at least mid-February. This differs from its communication in its August meeting, when it said that it could consider further tapering in November. This is important. It recognises that the economic recovery has paused and that the near-term outlook has fundamentally shifted. The RBA has been clear that its plan for asset tapering is flexible, as illustrated in this week's move.

Cost of lockdowns

The economic costs posed by the extended lockdowns will be significant and drag on the September-quarter output. We have therefore lowered our forecast for Australia's GDP. We now forecast third-quarter GDP to contract a hefty 1.5% in quarterly terms, down from our August estimate of a 0.2% quarterly contraction. This brings full-year GDP growth down to 4% in 2021, from 4.4% previously. Weakness will spill over into the December quarter, with the unemployment rate expected to drift higher in coming months. This will dampen already weak wage growth and keep inflation pressures muted. The RBA has reaffirmed that it will not begin normalising the cash rate from its record-low 0.1% until inflation has comfortably returned to the 2%

to 3% target range and full employment has been achieved. We are at least two years away from that situation.

Despite the latest disruption, we expect the pause in the economic recovery to be temporary, and a bounceback will occur when movement controls ease. We don't expect the rebound to be of the same magnitude observed when restrictions were eased in 2020, because monetary and fiscal support has not been as forthcoming this time around. The RBA's central scenario does not see the economy returning to its pre-Delta path until the second half of 2022. The RBA is notoriously upbeat on the outlook for the Australian economy, so this lengthy delay is noteworthy.

Finally, the near-term outlook for Australia's residential property market is somewhat mixed, with more potential upsides than downsides. Australia's residential property prices have been resilient, benefiting from the record-low interest rates and a sharp domestic recovery anchored by the government's fiscal thrust. Statistics indicate that house prices have been relatively unfazed by the latest lockdowns; average dwelling values rose 1.5% over the month in August. But the rate of growth has been slowing since March 2021 in another sign that a moderation in price growth is underway. While prolonged restrictions (particularly those impacting New South Wales and Victoria) are likely to keep consumer sentiment subdued and temper the increase through October, a few factors should sustain the upward trend in subsequent months.

Beyond the latest disruption, some momentum is likely to return as investors (particularly first-time buyers) seek to capitalise on low borrowing costs. Also, the timing of a potential intervention by the Australian Prudential Regulatory Authority—in the form of tighter macroprudential policies to cool the price boom—may be delayed, since policymakers would prioritise stabilising recovery coming out of the latest outbreak. Finally, the potential for further increases in residential prices will remain considerable in the event of international borders reopening to immigration, particularly if interest rates remain accommodative. These factors will drive expectations and are likely to sustain the upward trend in house prices over the next few quarters. The timing and extent of further price rises crucially depend on the labour market recovery in the post restrictions phase and on the country's success in containing future outbreaks.

RATINGS ROUND-UP

U.S. Change Activity Light

BY MICHAEL FERLEZ

U.S. rating change activity was light during the holidayshortened reference week. Downgrades outnumbered upgrades for the second straight week, while also accounting for the bulk of the affected debt. Rating change activity was split across a diverse set of industries with speculative-grade companies representing all but one rating change. The largest rating change in terms of affected debt was made to Nordstrom Inc. On September 1, Moody's Investors Service downgraded Nordstrom Inc.'s senior unsecured rating to Ba1. Additionally, Moody's also downgraded Nordstrom's commercial paper rate to Not Prime, its senior unsecured shelf rating to (P)Ba1 and its issuer rating to Ba1. In the rating action, Moody's Investors Service cited Nordstrom's lagging recovering in its operating performance relative to many of its department store and off-price peers this year. The downgrade affected \$3.1 billion in outstanding debt. Despite the softening rating change

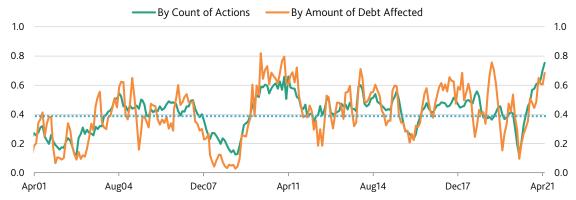
activity in recent weeks, the overall trend in rating change active has remained positive, with a recovering U.S. economy helping drive more upgrades than downgrades.

Europe

Western European rating change activity remained light, registering just three rating changes for the week ended September 7. Rating change activity was largely positive, with upgrades accounting for two of the three changes and all the affected debt. The largest change in terms of affected debt was to Western Power Distribution plc, which saw its long-term issuer and senior unsecured rating upgraded one-notch to Baa2. In the rating rationale, Moody's Investors Service cited the expectation that financial profile of WPD will be supported following the recent approval of National Grid plc's acquisition of WPD.

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/S G
9/1/2021	NORDSTROM, INC.	Industrial	CP/LTIR/SrUnsec	3,140.56	D	Baa3	Ba1	SG
9/1/2021	TALEN ENERGY SUPPLY, LLC	Utility	LTCFR/PDR/SrSec/BCF/ SrUnsec	3,075.34	D	B2	В3	SG
9/1/2021	MATADOR RESOURCES COMPANY	Industrial	LTCFR/PDR/SrUnsec	2,100.00	U	B2	B1	SG
9/2/2021	BLOOMIN' BRANDS, INC.	Industrial	SrSec/BCF/SrUnsec/ LTCFR/PDR	300.00	U	Ba2	Ba1	SG
9/3/2021	IIRSA NORTE FINANCE LIMITED	Industrial	SrSec	213.00	D	А3	Baa1	IG
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
9/3/2021	NATIONAL GRID PLC-WESTERN POWER DISTRIBUTION PLC	Utility	SrUnsec/LTIR	1,381.11	U	Baa3	Baa2	IG	UNITED KINGDOM
9/3/2021	HOMEVI S.A.S.	Industrial	LTCFR/PDR/SrSec/BCF		D	B1	B2	SG	FRANCE
9/7/2021	TECHNICOLOR S.A.	Industrial	SrSec/BCF		U	Ca	Caa3	SG	FRANCE
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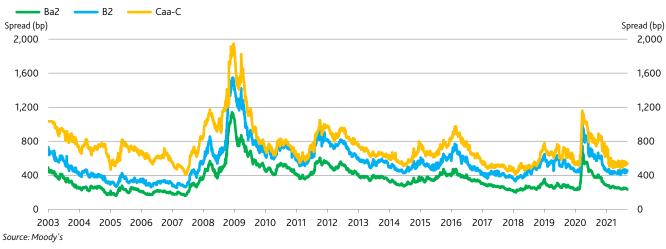
Source: Moody's

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 (September 1, 2021 – September 8, 2021)

CDS Implied Rating Rises	CDS Impli	CDS Implied Ratings		
Issuer	Sep. 8	Sep. 1	Senior Ratings	
Martin Marietta Materials, Inc.	A3	Baa2	Baa2	
John Deere Capital Corporation	A2	А3	A2	
Oracle Corporation	Aa3	A1	Baa2	
Exxon Mobil Corporation	Aa2	Aa3	Aa2	
Bank of New York Mellon Corporation (The)	A3	Baa1	A1	
Chevron Corporation	Aa2	Aa3	Aa2	
NextEra Energy Capital Holdings, Inc.	A2	A3	Baa1	
United Airlines, Inc.	Caa2	Caa3	Ba3	
Simon Property Group, L.P.	Baa2	Baa3	A3	
Williams Companies, Inc. (The)	Baa2	Baa3	Baa2	

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Sep. 8	Sep. 1	Senior Ratings
Stanley Black & Decker, Inc.	A2	Aa3	Baa1
3M Company	Aa3	Aa2	A1
Intel Corporation	A1	Aa3	A1
Amgen Inc.	Aa3	Aa2	Baa1
Burlington Northern Santa Fe, LLC	Aa3	Aa2	A3
Eli Lilly and Company	Aa3	Aa2	A2
Cargill, Incorporated	Baa2	Baa1	A2
NIKE, Inc.	Aa2	Aa1	A1
Emerson Electric Company	A1	Aa3	A2
Sherwin-Williams Company (The)	Baa2	Baa1	Baa2

CDS Spread Increases		CDS Spreads			
Issuer	Senior Ratings	Sep. 8	Sep. 1	Spread Diff	
Talen Energy Supply, LLC	Caa1	4,205	3,763	442	
K. Hovnanian Enterprises, Inc.	Caa3	752	712	41	
Carnival Corporation	B2	406	379	27	
Corning Incorporated	Baa1	80	64	17	
Nordstrom, Inc.	Ba1	238	222	16	
Murphy Oil Corporation	Ba3	316	300	16	
Domtar Corporation	Baa3	297	284	13	
Royal Caribbean Cruises Ltd.	B2	383	371	12	
Gap, Inc. (The)	Ba3	145	133	12	
Occidental Petroleum Corporation	Ba2	175	167	8	

CDS Spread Decreases		CDS Spreads			
Issuer	Senior Ratings	Sep. 8	Sep. 1	Spread Diff	
Macy's Retail Holdings, LLC	Ba3	212	286	-74	
Nabors Industries, Inc.	Caa2	796	869	-74	
R.R. Donnelley & Sons Company	В3	450	518	-68	
Realogy Group LLC	В3	276	298	-22	
Scripps (E.W.) Company (The)	Caa1	220	241	-21	
SLM Corporation	Ba1	255	272	-17	
Vornado Realty L.P.	Baa2	120	136	-16	
United States Cellular Corporation	Ba2	123	136	-13	
United Airlines, Inc.	Ba3	423	433	-10	
Martin Marietta Materials, Inc.	Baa2	43	52	-10	

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (September 1, 2021 – September 8, 2021)

CDS Implied Rating Rises	CDS Impli	_	
Issuer	Sep. 8	Sep. 1	Senior Ratings
ING Groep N.V.	Aa3	A1	Baa1
TotalEnergies SE	Aa1	Aa2	A1
de Volksbank N.V.	A2	A3	A2
Iberdrola International B.V.	A2	A3	Baa1
Veolia Environnement S.A.	Aa1	Aa2	Baa1
Compagnie de Saint-Gobain SA	A1	A2	Baa2
Orsted A/S	Aa2	Aa3	Baa1
Vattenfall AB	Aa1	Aa2	A3
Koninklijke KPN N.V.	Baa2	Baa3	Baa3
Eksportfinans ASA	B2	В3	Baa1

CDS Implied Rating Declines	CDS Impli	ed Ratings	
Issuer	Sep. 8	Sep. 1	Senior Ratings
Alliander N.V.	A2	Aa3	Aa3
Atlas Copco AB	A2	Aa3	A2
Credit Agricole Corporate and Investment Bank	Aa2	Aa1	Aa3
Landesbank Baden-Wuerttemberg	Aa2	Aa1	Aa3
Raiffeisen Bank International AG	Aa3	Aa2	A3
Bankinter, S.A.	Baa2	Baa1	Baa1
Autoroutes du Sud de la France (ASF)	A1	Aa3	A3
Ardagh Packaging Finance plc	B1	Ba3	Caa1
Swisscom AG	Aa3	Aa2	A2
Royal DSM N.V.	Aa1	Aaa	A3

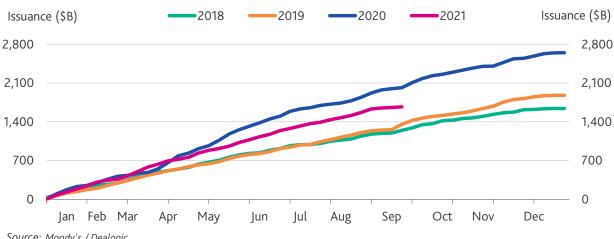
CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Sep. 8	Sep. 1	Spread Diff
Boparan Finance plc	Caa1	981	952	29
Iceland Bondco plc	Caa2	440	421	20
Deutsche Lufthansa Aktiengesellschaft	Ba2	260	246	14
Ineos Group Holdings S.A.	B2	200	190	10
Ziggo Bond Company B.V.	В3	216	207	9
Permanent tsb p.l.c.	Baa2	218	210	9
Ardagh Packaging Finance plc	Caa1	213	205	8
Bankinter, S.A.	Baa1	54	48	6
Virgin Media Finance PLC	B2	221	215	6
Jaguar Land Rover Automotive Plc	B1	348	343	5

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Sep. 8	Sep. 1	Spread Diff
Novafives S.A.S.	Caa2	757	787	-30
Casino Guichard-Perrachon SA	Caa1	447	460	-14
Stena AB	Caa1	399	411	-13
Piraeus Financial Holdings S.A.	Caa3	558	568	-10
Avon Products, Inc.	Ba3	192	201	-9
Caixa Geral de Depositos, S.A.	Baa3	90	98	-8
Leonardo S.p.A.	Ba1	127	134	-7
Premier Foods Finance plc	В3	146	152	-7
GKN Holdings Limited	Ba1	108	114	-6
Sappi Papier Holding GmbH	Ba2	310	314	-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

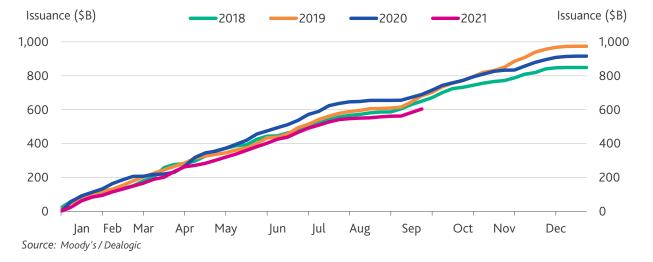


Figure 7. Issuance: Corporate & Financial Institutions

	USD Denominated			
	Investment-Grade	High-Yield	Total*	
	Amount \$B	Amount \$B	Amount \$B	
Weekly	9.360	1.650	12.703	
Year-to-Date	1,147.096	472.322	1,670.142	

	Euro Denominated			
	Investment-Grade	High-Yield	Total*	
	Amount \$B	Amount \$B	Amount \$B	
Weekly	18.934	1.567	20.855	
Year-to-Date	476.225	111.634	604.526	

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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