MOODY'S

WEEKLY MARKET OUTLOOK AUGUST 12, 2021

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Delta Bad Hand?

The potential economic fallout from surging infections and hospitalizations due to the Delta variant of COVID-19 is a downside risk to our forecast for growth in the second half of this year, but the drag should be significantly less than prior waves.

Still, the daily CNN Business/Moody's Analytics Back-to-Normal Index, a compilation of government statistics and third-party data that measures where the economy is compared with before the pandemic, has taken a meaningful step back in recent weeks. The BNI hit a pandemic peak of 93.5% in mid-June. It was 92% last Friday. The biggest declines in the BNI have been in the South and West, where vaccination rates are relatively low and infections have increased the most.

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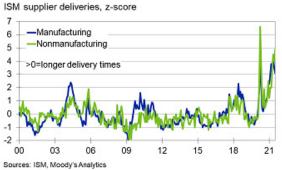
In Florida, where Delta is an especially serious problem for the hospital system, the BNI has fallen from more than 102% in mid-June, meaning that it had more than recovered from the pandemic recession, to less than 97%.

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 upbeat economic outlook. But the Bureau of Labor Statistics is conducting its employment survey for August this week, and it wouldn't be surprising if Delta takes a bite out of August jobs.

The Delta variant could have implications for U.S. inflation. Tighter restrictions, if implemented, would be disinflationary in some states. Meanwhile, we are monitoring the situation in the Asia-Pacific region, which could lead to higher inflation in the U.S. Several countries in the region have tightened restrictions forcefully, including temporary factory closures in Thailand, Malaysia and Vietnam. Some countries are also closing ports where COVID-19 cases are rising; this could add to the supply-chain disruptions that have already lengthened U.S. suppliers' delivery times.

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.

To highlight this, we calculated z-scores. These measure the standard deviations above or below the mean for various measures of supplier deliveries we closely track, including the ISM manufacturing and nonmanufacturing surveys. The z-score shows how many standard deviations each measure of supplier deliveries is from its mean; currently, they are extremely elevated.



The Delta variant could magnify supply-chain issues, which would boost U.S. inflation as the semiconductor shortage remains, raising prices for vehicles and consumer electronics. Port closures could also increase shipping costs. As for the growth outlook, tighter restrictions in the Asia-Pacific region could also slow the replenishing of inventories in the U.S.

Checking in on inflation

It's early, but there are tentative signs that some of the temporary factors behind the past surge in U.S. inflation are fading. The CPI rose 0.5% in July, in line with our and the consensus forecast but a deceleration from the 0.9% gain in June. Used-vehicle prices rose only 0.2% in July after jumping 10.5% in June and 7.3% in May. Past gains in usedvehicle prices were attributed to lean inventories. Newvehicle prices were up 1.7% after rising 2% in June. Energy prices increased 1.6% while food prices were up 0.7%. Excluding food and energy, the CPI rose 0.3%, a touch weaker than either we or the consensus expected. On a year-ago basis, the core CPI was up 4.2% in July.

The reopening of the economy is a one-time event that is boosting a number of components of the CPI, including lodging away from home, vehicle rentals, and airfares along with admission to sporting and other events. Based on their shares of the headline CPI, these added 0.1 percentage point to the gain in July, identical to that in each of the prior two months.

Other one-time factors boosting inflation are the fiscal stimulus and global semiconductor shortage. Both have

reduced the supply of new cars and raised prices at the dealership. Low new-car inventories have increased demand for used cars and trucks. However, growth in used-car prices has begun to moderate, suggesting the largest gains are behind us

Transitory Factors Begin to Fade

Contribution to headline CPI, % change, ppt 0.4 Reopening -New and used vehicles 0.3 0.2 0.1 0.0 -0.1 -0.2 Jan-20 Apr-20 Jul-20 Oct-20 Jan-21 Apr-21 Jul-21 Sources: BLS, Moody's Analytics

New- and used-vehicle prices added 0.1 percentage point to growth in the headline CPI in July, compared with the 0.4percentage point contribution in June and 0.3-percentage point boost in May. Used-car prices are still more than 20% above their underlying trend. Deviations from trend in usedcar prices don't normally persist for an extended period of time

Odds are that the CPI for used-car prices will move closer to trend during the next year, which will be disinflationary. For perspective, if the gap between the actual used-car CPI and trend is closed, that would reduce year-over-year growth in the headline CPI by 0.28 of a percentage point.

No implications for the Fed

Incoming inflation data has few implications for the timing of the Fed tapering its monthly asset purchases or when it will begin to raise interest rates. Our baseline forecast assumes the Fed adopts a balanced approach to tapering the monthly Treasury and mortgage-backed securities buys, but some Fed officials favor focusing initially on MBS because of the red-hot housing market.

During a crisis, Fed MBS purchases support housing as a buyer of last resort. During the pandemic they have helped the housing market but narrowed mortgage spreads. Yet it is not just the Fed that is behind the booming housing market. Fundamentals are a bigger driver. Demographics and pentup demand have led to a surge in home sales. Some fear a bubble, but this housing market is significantly different from the last bubble. Lending requirements are more stringent today than 20 years ago, when tightening came in

Supply Chain Issues Could Get Worse

efforts to limit subprime lending. Unlike in the mid-2000s, people can actually afford the homes they are buying.

The Fed's MBS purchases have helped lower borrowing costs for potential homebuyers, which has boosted sales. At first glance, there is no correlation between year-over-year growth in the Case-Shiller price index and the change in the Fed's MBS holdings. Yet since MBS purchases first occurred in 2009, the correlation coefficient is 0.1. We doublechecked to make sure that the MBS share of all assets held outright on the Fed's balance sheet is not what matters. The correlation between house price growth and the MBS share of total assets held outright by the Fed is -0.05 since 2009.

Correlations change significantly if we focus on Fed MBS purchase binges, including in 2009 and since the pandemic began. For example, the correlation coefficient between house price growth and MBS purchases since the pandemic started is 0.57.

Correlation does not imply causation. Therefore, we used Granger causality tests to see if there is a causal relationship between house price growth and the Fed's MBS purchases, and which way it ran. We tested it with various lags, and MBS purchases were found to Granger-cause changes in house prices. The results showed that the causality runs one way, which is not surprising.

Despite a causal relationship, MBS have played a small role in the recent acceleration in house prices; so, there would be only a little downward pressure on prices once the Fed begins to taper. Home sales should remain strong, supported by a demographic tailwind. The issue is on the supply side. New- and existing-home inventories are lean. The demand-supply imbalance is the primary reason for house prices' recent runup, not the Fed.

Tightening cycle will differ from markets view

We don't expect the first rate hike until early 2023, which assumes that inflation moderates later this year and in the first half of next year. Financial markets expect this tightening cycle to be gradual. They have priced in about 125 basis points of tightening by the end of 2028. Also, over the next few years the Fed is expected to be more aggressive than the Bank of England and the European Central Bank but less so than the Bank of Canada. It is difficult to see how the Fed could normalize rates as slowly as the markets are pricing in with the economy expected to be at full employment and inflation firmly above its 2% through-thebusiness cycle target.

For another way to assess the amount of tightening this cycle, we turn to the inertial Taylor rule endorsed by Fed Vice Chairman Richard Clarida. This modification of the Taylor rule has a coefficient of zero on the unemployment gap, a 1.5 coefficient on the inflation gap, or the difference between core PCE inflation and the Fed's 2% longer-run objective. Clarida also used a neutral real policy rate equal to his long-run expectation. We use this Taylor rule and a neutral real policy rate of 0.5%. We include our baseline forecasts for the core PCE deflator, and this has a significantly more aggressive tightening cycle than markets are betting on, with the target fed funds rate at 2.25% by the end of 2025, around 75 to 100 basis points more than markets expect.

TOP OF MIND

How Far Can Virus-Addled States Fall?

BY ADAM KAMINS

As new COVID-19 cases rise dramatically, a starker U.S. regional divide than ever has emerged. As expected, areas with low vaccine uptake are experiencing a surge in cases, with hospitalizations and deaths also on the rise. Meanwhile, areas in which the majority of adults are immunized are faring better, with cases rising but at a slower clip and hospitalization rates significantly lower.

The regional economic risks associated with this divide are clear, as overburdened healthcare systems, reduced confidence, and potential isolated closures loom. But this is no longer just an abstract risk—in fact, with portions of the southeastern U.S. inundated with new cases, there is some real-time evidence of an adverse economic impact as more residents are infected and hospitals grow more crowded.

Delta Variant Poses Threat to Southeast COVID-19 hospitalizations per 100k residents, Aug 3-9 avg



Hourly timecard data from Homebase show the clearest link between recent surges and economic health. Both the index itself and the change in the index are farther removed from their pre-pandemic peaks in states where cases have increased most dramatically than they are elsewhere. In fact, the eight largest declines during the four-week period ending August 4 compared with the prior four weeks were all in states with above-average increases in new COVID-19 cases.

The Gulf Coast has been hit especially hard, with Florida, Louisiana and Mississippi all in the midst of some of the nation's largest declines in hours worked. On the flip side, New England is faring extremely well, helped along by the nation's highest vaccination rates as well as a lower starting point given that many states and cities in the Northeast only recently began to reopen.

All of this suggests that major outbreaks are having an adverse impact on consumer industries. This is consistent with recent guidance about exhibiting caution indoors even for those who are vaccinated, making those who are inclined

to act more carefully likely to once again pull back on spending to a degree.

Still, it is difficult to read too much into these results for a couple of reasons. One is that other indicators such as state measures of consumer confidence seem to be holding up reasonably well. For example, the University of Florida's metric for the Sunshine State kept moving in the right direction through July. In addition, the Homebase index is not seasonally adjusted, meaning that some of the negative relationship being observed of late could reflect a summer slowdown, especially in Florida. This gives license to discount the results but not to dismiss them entirely given that virus-induced declines were pronounced a year ago as well and began to abate by late summer as new cases fell despite downward seasonal pressures.

From the workplace to home base

Google mobility data showing time spent in the workplace relative to before the pandemic also show a modest link with new cases. The good news for hard-hit states is that a recent surge in new cases has generally done little to dent their status as overperformers since the pandemic began. But the change in the index signals that the feel-good story may be taking a turn for the worse.



New Cases Slowed Real-Time Metrics Correlation with new per capita COVID-19 cases

Sources: Homebase, Google, Johns Hopkins University, Moody's Analytics

The five states with the largest increases in new cases over the past month—Louisiana, Arkansas, Florida, Missouri and Mississippi-have experienced declines in workplace mobility that rank in the top 20 nationally. Given that this metric has proven at least somewhat predictive of changes in payrolls, it is possible that the recent results are a leading indicator of soft labor market data in southeastern states, although once again seasonal fluctuations are likely exaggerating any impact.

A few states that have struggled since the early days of the pandemic are also showing signs of weakness in the

workplace mobility figures. Recent declines in New York and Massachusetts have arrested a trend of modest improvement throughout 2021. This suggests that it is not only states with low vaccination rates and high cases that are starting to suffer. Those that are home to large cities and where concern about COVID-19 is high, owing at least in part to early outbreaks, are also facing some troubles of their own as reopening momentum halts.

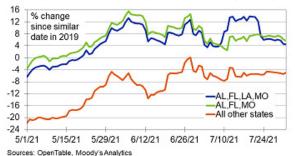
Staying in

Though a bit more limited in terms of scope and geography, with only 40 states covered, seated diner reservations from OpenTable paint a picture that is largely independent of seasonal patterns, making it especially useful. Instead of indexing to early 2020, these figures are based on the percent change in seated diner reservations relative to a similar period in 2019. And this measure, like its more seasonal counterparts, shows weak evidence of a relationship between recent surges and activity. To see this, the four-week average was again used and compared with the preceding four-week period. As with Google mobility data, there is a positive correlation between the seated diners relative to before the pandemic. But the change over the past month or so indicates a very clear negative relationship, pointing to significant slippage among states that have seen cases and hospitalizations rise most dramatically.

To some extent, the pronounced relationship owes to a dramatic decline in Louisiana, which rose sharply in June and then surrendered its gains amid surging cases in July. Although its inclusion may exaggerate the impact of recent outbreaks, the link between infection rates and dining out remains clear even after stripping out the Bayou State. Based on a population-weighted average of state figures, there is evidence of a converging trend between Southeast states that are dealing with a surge in cases and the rest of the nation.

Gap Has Narrowed Since Latest Surge

Seated diner reservations, 14-day MA, population-weighted avg



The most significant question for states that have struggled with a resurgent pandemic revolves around whether troubling economic indicators represent a canary in the coal mine or noise. At this stage, the former is growing increasingly likely but epidemiological outcomes matter most. Should hospitals become even more overrun than they are, requiring some schools to close and injecting additional fear into consumers, the subtle slowdown in the Southeast could give way to a more dramatic setback. Still, there is a floor under how far virus-addled states can fall. At this stage of the pandemic, leaders of most states that are experiencing outbreaks are unlikely to impose renewed mask mandates, let alone widespread closures. This means that consumer industries won't go into a nosedive, although it will likely come at a significant public health cost.

In the near term, however, the most important indicators will be the seasonally adjusted payroll and household survey data for July and August. If they indicate weakness in states with major outbreaks, that would nullify any argument that the main culprit is the time of year, which would bode ill for the Southeast in the months ahead.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar is packed again. Among the key data being released next week are retail sales, industrial production, housing starts, jobless claims, and regional and state employment. The shift in consumer spending from goods to services will continue to weigh on retail sales. The July data for retail sales will feed into our high-frequency GDP model's estimate of real consumer spending. Industrial production will provide our first look at some of the source data for equipment spending in the third quarter.

State and local government normally doesn't get a ton of attention but we will dig through this report to see if there is any evidence that ending expanded unemployment insurance benefits early had any positive impact on labor supply constraints. So far, there hasn't been any concrete evidence that it has. On the policy front, the minutes from the July meeting of the Federal Open Market Committee will be released. In the postmeeting statement last month, the Fed provided a subtle clue that it is moving closer to announcing its tapering plans. The minutes could provide more information on where the consensus within in the Fed is on tapering—the eventual reduction of the central bank's \$120 billion in monthly asset purchases.

Europe

U.K. economic releases will top headlines next week. First, the unemployment rate likely fell to 4.5% in the three months to June from 4.8% in the three months to March. The gradual reopening of the services economy during the period fueled job growth, while the ongoing furlough scheme has prevented layoffs. The U.K.'s CPI inflation likely accelerated to 2.6% y/y in July. We expect inflation to continue heating up and to peak going into 2022. Meanwhile, retail sales likely continued to grow in June,

but at a slower 0.1% m/m pace. Concerns over the Delta variant meant lower foot traffic at shops at the start of the month.

The euro zone's final estimate for inflation in July will also be released next week, though we are not expecting a difference from the preliminary estimate; inflation should come in at 2.2% y/y. Base effects, surges in demand, and supply bottlenecks will keep price growth above target throughout the year. However, we expect these forces to dissipate in the medium term.

Asia-Pacific

Japan's June quarter GDP will be the highlight on the economic calendar. Japan's economy is likely to have grown a modest 0.1% in quarterly terms over the June quarter, following a 1% contraction in the prior quarter. Although Japan's export-reliant manufacturers have benefitted from consistently strong overseas demand, the movement restrictions imposed across key prefectures during the intense fourth wave have hurt household confidence and weighed on consumption. Some degree of catchup in spending towards the end of the quarter, together with some strength from exports, is expected to have delivered the marginal lift in output.

Japan's core consumer inflation is expected to have cooled to 0.1% y/y in July from 0.2% in June, as the state of emergency weighed on consumption and employment revival through this period.

Australia's unemployment rate is likely to have ticked up to 5.3% in July from 4.9% in June, largely due to the imposition of strict movement restrictions in Sydney and parts of New South Wales, which disrupted most forms of economic activity.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
5-Sep	Hong Kong	Legislative Council elections	Low	Medium
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
22-Oct	Japan	General elections	Medium	Medium
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
10-Apr	France	General elections	Medium	Medium
29-May	Colombia	Presidential elections	High	Low

Markets Expect Gradual Fed Tightening, But...

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 101 basis points, up 3 bp from this time last week. This is below its high over the past 12 months of 138 bps and not far above its lowest over the past year of 95 bps. This spread may be no wider than 114 bps by year-end 2021. The long-term average industrial corporate bond spread widened by 3 bp over the past week to 93 bps. This is only modestly above its low over the past 12 months of 86 bps and well below its high of 131 bps.

The long-term investment grade corporate bond spread was 134 basis points, compared with 131 bp last week. It remains well below its recent high of 194 bps. Its tightest over the past year was 129 bps. Investment-grade industrial corporate bond spreads widened from 135 bps to 138 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 337 basis points was 5 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 but wider than that implied by a VIX of 15.8. The VIX has been bouncing around over the past few weeks but is 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 yearover-year decline of 35% for investment grade. Highyield issuance faired noticeably better in the second quarter.

U.S. dollar denominated investment-grade issuance was \$36.9 billion in the week ended Wednesday, bringing the year-to-date total to \$1.075 trillion. High-yield corporate bond issuance rose \$17.8 billion, bringing the year-to-date total to \$449.4 billion. Issuance for August is coming in stronger than previously thought, but there appears to have been a rush to issue because of some

fluctuations in rates. Odds are some issuance that would have occurred in September got pulled into August. There will likely be a lull in issuance, which is normal, ahead of Labor Day.

U.S. ECONOMIC OUTLOOK

U.S. federal lawmakers are feverishly working on another massive fiscal program, including a \$550 billion bipartisan infrastructure deal and a \$3.5 trillion package of spending and tax breaks to support a range of social investments.

The bipartisan infrastructure deal is small, as new outlays would average only 0.2% of annual GDP within the next decade. It would also include a potpourri of pay-fors. The most immediate impact of the deal would be to marginally reduce growth in 2022, since the pay-fors kick in right away while increased spending takes time to materialize because of lags in starting infrastructure projects. The apex in the boost to growth would come in 2023 when real GDP increases 2.9%, compared with 2.3% when assuming no further fiscal support is enacted. The deal creates close to 650,000 jobs at its peak impact in mid-decade, reducing the jobless rate a couple of tenths of a percentage point.

The \$3.5 trillion package is much larger, as gross fiscal support would average 1% of annual GDP over the next decade. It is assumed to be mostly paid for by higher taxes on corporations and well-to-do households. The boost to growth under just the reconciliation package would occur quickly, with real GDP increasing 5.4% in 2022, compared with 4.3% if no further fiscal stimulus is passed. There are more than 2 million additional jobs by mid-decade and the jobless rate is at least 0.5 percentage point lower.

The August baseline forecast assumes that the \$550 billion bipartisan infrastructure deal passes in its current form. This fall, Democrats will debate the \$3.5 trillion package and seek to enact it through the budget reconciliation process, which requires only a simple Senate majority. Our base-case scenario is that moderate Democrats will roll back the scale of spending and tax breaks from \$3.5 trillion to \$3 trillion. All but \$200 billion of the partisan reconciliation package will be financed by higher taxes on corporations and well-to-do households. Concerns around the deficit will be much more binding going forward than they have been in the past year. Under our current fiscal assumptions, the federal deficit will fall from 15% of GDP in fiscal 2020 to 12.8% and 5.8% in fiscal 2021 and 2022, respectively.

Tweaking GDP forecast

We lowered our forecast for GDP growth this year and next. We now expect real GDP to rise 6.3% this year, compared with 6.7% in the July baseline. Some of the downward revision is attributed to the data on secondquarter GDP, which came in weaker than in our prior baseline forecast. Another reason for the downward revision to our forecast for growth this year and next is we now anticipate a slower inventory rebuild because of supply chain issues. The number of days between a semiconductor order and shipment continues to climb. The Delta variant is hitting the Asia-Pacific region hard. This could also delay any improvement in global supply chains and might limit the amount of inventory that must be restocked in the U.S.

Real GDP is forecast to grow 4.5% in 2022, compared with 5% in the July baseline. We revised higher our forecast for GDP growth in 2023 by 0.3 of a percentage point to 2.6%. Our GDP forecasts are close to the Bloomberg consensus of 6.5% in 2021 and 4.2% in 2022. The consensus is for GDP to rise 2.3% in 2023.

Note: The August baseline forecast will incorporate the annual revisions to GDP that were released by the BEA with the advance estimate of second-quarter GDP.

Labor market recovery sticking to script

The July U.S. employment report was strong across the board, but labor supply constraints remain binding. There isn't any concrete evidence that states that ended expanded unemployment insurance benefits prematurely boosted the labor force.

Nonfarm employment rose by a net 943,000 in July, and the two-month net revision totaled 119,000. Seasonal adjustment issues with state and local government education juiced the headline. July is encouraging, but there is still a long way to go, as employment is down more than 8 million from where it would have been if the pandemic hadn't occurred. Private employment increased by 703,000 in July, and the underlying trend is running around 480,000 per month. Not seasonally adjusted, private employment rose 779,000, which is significantly stronger than in a typical July.

Given the incoming data, we nudged higher our forecast for average monthly job growth this year from 503,000 in the July baseline to 532,000 in the August baseline. The unemployment rate fell more than expected in July, but we didn't alter the forecast. The unemployment rate is still expected to average 4.6% in the fourth quarter of this year and 3.5% in the final three months of next year. Both numbers are identical to the July baseline.

Inflation and the Fed

New historical data led us to revise higher our forecast for the core PCE deflator, as it's now expected to rise 3.5% on a year-ago basis in the fourth quarter of this year, compared with 3.2% in June. We look for inflation to moderate next year, with the core PCE deflator up 2.1% on a year-ago basis in the fourth quarter of 2022, identical to the July baseline.

There were no changes to our assumptions about monetary policy in the August baseline. We still look for the initial rate hike in the first quarter of 2023. Tapering will occur in January 2022 and will complete by the end of next year. We don't anticipate a repeat of the 2013 "taper tantrum," which occurred because markets tied the Fed's balance sheet and interest rate policies together. But taper-implied rates haven't risen, implying that markets now understand this.

Financial markets expect this tightening cycle to be gradual, pricing in about 125 basis points of tightening by the end of 2028. Also, in the next few years, the Fed is expected to become more aggressive than the Bank of England and European Central Bank but less than the Bank of Canada. It is difficult to see how the central bank could normalize rates in 2023 and subsequent years as slowly as the markets are pricing in with the economy expected to be at full employment and inflation firmly above its 2% through-the-business cycle target. For another way to assess the amount of tightening this cycle, we turn to the inertial Taylor rule, one endorsed by Fed Vice Chairman Richard Clarida. This modification of the Taylor rule has a coefficient of zero on the unemployment gap, a 1.5 coefficient on the inflation gap, or the difference between core PCE inflation and the Fed's 2% longer-run objective. Clarida also used a neutral real-policy rate equal to his long-run expectation. We use this Taylor rule and a real-neutral real-policy rate of 0.5%. We include our baseline forecasts for the core PCE deflator, which has a significantly more aggressive tightening cycle than markets are betting on, with the target fed funds rate at 2.25% by the end of 2025, around 75 to 100 basis points more than what markets expect.

We cut our forecast for the 10-year U.S. Treasury in the third quarter and now have it averaging 1.4%, compared with 1.7% in the July baseline. The 10-year Treasury yield is now expected to average 1.7% in the fourth quarter of this year, 20 basis points lower than in the prior baseline. The August baseline for long-term rates converges to the July baseline in mid-2022.

We have revised higher the forecast for the Dow Jones Industrial Average because of how equity markets have performed since the July baseline, but the contours of the forecast haven't changed. The Dow is forecast to have peaked and will gradually decline during the next year. Risks are heavily weighted to the upside, but peak growth, inflation and Fed tapering could weigh on equity markets.

THE LONG VIEW: EUROPE

U.K. Growth to Slow in Third Quarter

BY ROSS CIOFFI

U.K. GDP rebounded strongly in the second quarter, growing by 4.8% q/q after contracting by 1.6% q/q in the first quarter. Nevertheless, it remains 4.4% below output in the fourth quarter of 2019, the last period before the pandemic hit. Notably, services, production and construction output all increased over the quarter, undoubtedly buoyed by the four-step easing of lockdown restrictions. The greatest contribution to June's GDP figure came from household consumption, which contributed 4.1 percentage points to growth. Meanwhile, gross fixed capital formation declined by 0.5% q/q, driven by lower government investment. GDP growth will slow slightly in the third quarter as the impact from the easing of restrictions wanes and because higher infection rates forced Brits to self-isolate in July.

Europe's car producers still struggling

The euro zone's industrial production slumped by 0.3% m/m in June, deepening May's 1.1% decrease. As a result, output was down 0.1% q/q over the second quarter in contrast to the first quarter's 1.1% increase. Once again, capital goods dragged on production, and in particular the automotive sector struggled. That said, the 1.4% m/m decline in car production in June was softer than the average decrease of 4.7% m/m in the five months prior. The post-lockdown recovery is fueling demand for industrial goods; however, global supply bottlenecks are still holding back production.

Turkey's post-lockdown jump

Turkey's economy heated up in June. Retail sales jumped by 14.4% m/m, following heavy declines in April and May. Lockdown measures eased substantially, meaning that consumers favored nonfood goods during the month. Sales of textiles, clothing and footwear made a standout 57.4% m/m rebound. Meanwhile, industrial turnover perked up by 6.2% m/m in June. Mining, manufacturing and construction all gained. Industrial production was also on the rise during the month, up 2.3% m/m. Turnover among services, meanwhile, jumped by 11.9% m/m, again thanks to softer health measures. The accommodation and food service sectors saw turnover increase by 57.8% m/m. The strong demand reflected in these releases has been spurring inflation higher this summer and will continue to do so heading into the fall, especially as producer costs remain high.

Inflation jumps

Releases from Germany, Italy and Portugal showed inflation heating up in July. We expected as much given the base effects in energy prices and the fact that recoveries are spreading to the service sector with the easing of social distancing measures and the return of tourism.

In Germany, headline inflation shot to 3.8% y/y from 2.3%. However, base effects are significant. Not only is inflation in the energy component boosting the headline, but the country's temporary 3-percentage point VAT cut last year is pushing up year-on-year comparisons. Base effects from the VAT cut will become even stronger this fall. That said, there were tangible gains due to the underlying strengthening of demand and to the cost push from supply bottlenecks.

Italy's inflation rate sped up to 1.9% y/y in July from 1.3% in June. Rising energy prices were the major contributor to the month's acceleration. Core CPI, which excludes energy and food prices, rose just 0.6% y/y in July, following June's 0.3% increase. The weak core reading speaks to the fact that the economy is still recovering from the COVID-19 crisis. However, there were signs of recovery, such as the quick acceleration in accommodation service prices. The influx of tourists this summer has provided a boost.

In Portugal, meanwhile, the inflation rate sped up to 1.5% y/y from 0.5%. Here too, base effects in the energy segment are doing much of the heavy lifting. Core inflation actually declined by 0.4% in monthly terms, but in yearly terms, it was up 0.8% in July. Portugal was hit harder than Italy by the outbreak of the Delta variant in July, which is likely the reason behind the month's weakening inflation in restaurant and accommodation services.

Inflation will vary among euro zone countries due to variations in the strength of their recoveries. In all cases, base effects, the post-lockdown spending spree, and global supply bottlenecks will push inflation rates toward or beyond target. Each of these forces is predominantly temporary, so although inflation will be high, we are expecting it to fall below target again going into 2022.

Philippines GDP Declines Amid Infections

BY KATRINA ELL, ERIC CHIANG AND SHAHANA MUKHERJEE

The early signs of recovery in the Philippine economy have proved short-lived, with the country recording a 1.3% contraction in seasonally adjusted GDP for the second quarter, following a 0.7% expansion in the first quarter.

The quarterly contraction reflects the effects of relatively strict movement controls that were in place for most of the June quarter. The Philippines has struggled to contain COVID-19 cases, and the country has been recording high infections through most of 2021. The latest peak came in April. The sluggish vaccine rollout coupled with decentralised health advice and poor adherence to social distancing measures are to blame. Conditions are not much better in the current quarter, as movement controls remain in place along with elevated infections.

Turning to the annual figures, GDP growth surged by 11.8% in yearly terms following a revised 3.9% contraction in the first quarter. Base effects are at play. In the June quarter of 2020, GDP growth contracted by a spectacular 17% as the pandemic hit hard.

Major sectors of the economy rebounded off a low base effect last year, particularly manufacturing, real estate

and construction. However, output from most sectors still fell short compared with the second quarter of 2019. Service sector output, which makes up more than half of the economy, remained 9.1% below the second quarter of 2019. Similarly, private consumption remained 9.2% below the second quarter of 2019, as mobility restrictions suppressed domestic demand.

The slow pace of the vaccination rollout remains a major drag and downside risk to the Philippines' economic recovery—only 10% of the total adult population is fully vaccinated. The Philippines may be forced to prolong the costly mobility restrictions if the current outbreak does not soon abate.

The central bank has kept the benchmark rate at a record low of 2% since November and is expected to keep monetary settings steady for the remainder of 2021, including at its meeting later this week.

We maintain our expectation that the Philippines will be amongst the last in Asia to regain lost output from the pandemic. The Philippines is not expected to return to pre-pandemic levels (based on the final quarter of 2019) until mid-2022.

T-Mobile and Deutsche Bank Lead U.S., Europe Upgrades

BY MICHAEL FERLEZ

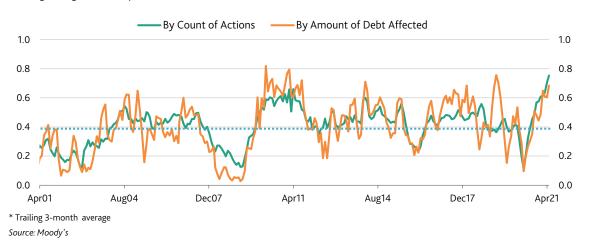
U.S. rating change activity was overwhelmingly positive in the latest period, with upgrades accounting for all but one rating action and all the affected debt. Last week's performance continues the positive trend of rating change activity over the past year. Rating changes were spread across numerous industries, with speculativegrade companies again accounting for the bulk of the rating actions. The largest upgrade in terms of affected debt was T-Mobile USA Inc. On August 6, Moody's Investors Service upgraded T-Mobile's corporate family rating and probability of default to Ba1 and Ba1-PD, respectively. Moody's Investors Service also made a number of other changes, including upgrading T-Mobile's ratings outlook to positive and upgrading the senior unsecured notes of T-Mobile's wholly owned subsidiaries Sprint Corp. and Sprint Communications Inc to Ba2. In their rating action, Moody's Investors Service cited its

expectation for T-Mobile's strong financial performance. In total, the upgrade affected \$41 billion of outstanding debt.

Western European rating changes were equally strong, with upgrades accounting for all five rating actions. Last week's changes were headlined by the Moody's Investors Services upgrade of Deutsche Bank AG, which saw all its rating and rating assessments upgraded by one-notch. Among the upgrades was Deutsche Bank's long-term senior unsecured debt ratings which was upgraded to A2, impacting \$91 billion in debt. In its upgrade of the longterm unsecured debt rating, Moody's Investors Service cited the upgrade of Deutsche Bank's Baseline Credit Assessment and that Deutsche Bank's results were unchanged following recent revisions to Moody's Advanced Loss Given Failure analysis.

RATINGS ROUND-UP





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
СР	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
8/4/2021	EVERTEC, INCEVERTEC GROUP, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG
8/4/2021	SEVERIN HOLDINGS, LLC-SEVERIN ACQUISITION, LLC	Industrial	LTCFR/PDR		U	B3	B2	SG
8/5/2021	OLIN CORPORATION	Industrial	SrSec/BCF/SrUnsec		D	Baa3	Ba2	SG
8/5/2021	TIMKEN COMPANY (THE)	Industrial	SrUnsec	905.00	U	Baa3	Baa2	IG
8/6/2021	FRANKLIN RESOURCES, INCLEGG MASON, INC.	Financial	JrSub/SrUnsec	1,750.00	U	Baa1	A3	IG
8/6/2021	T-MOBILE US, INCT-MOBILE USA, INC.	Industrial	SrUnsec/LTCFR/PDR	40,555.00	U	Ba3	Ba2	SG
8/6/2021	NORTHERN OIL AND GAS, INC.	Industrial	LTCFR/PDR/SrUnsec	550.00	U	Caa1	B3	SG
8/6/2021	SEAWORLD ENTERTAINMENT, INC SEAWORLD PARKS & ENTERTAINMENT, INC.	Industrial	SrSec/LTCFR/PDR	227.50	U	B2	Ba3	SG
8/9/2021	M/I HOMES, INC.	Industrial	LTCFR/PDR/SrUnsec	650.00	U	Ba3	Ba2	SG
8/9/2021	EVO PAYMENTS INTERNATIONAL, LLC	Industrial	LTCFR/PDR/SrSec/BCF		U	B2	B1	SG
8/9/2021	AMERICAN TIRE DISTRIBUTORS, INC. (NEW)	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG
8/10/2021	ADVANCED MICRO DEVICES, INC.	Industrial	SrUnsec	349.78	U	Baa3	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
8/4/2021	DEUTSCHE BANK AG	Financial	CP/PS/SrUnsec/MTN/LT D/LTIR/STD/Sub	90774.32	U	B1	Ba3	SG	GERMANY
8/4/2021	NATWEST GROUP PLC-THE ROYAL BANK OF SCOTLAND INTERNATIONAL LIMITED	Financial	LTD/LTIR		U	Baa1	A3	IG	JERSEY
8/5/2021	MOYLE INTERCONNECTOR (FINANCING) PLC	Utility	SrSec	187.20	U	A3	A2	IG	UNITED KINGDOM
8/9/2021	ARCELORMITTAL (OLD)-ARCELORMITTAL	Industrial	CP/SrUnsec/MTN	6960.72	U	Ba1	Baa3	IG	LUXEMBOURG
8/10/2021 Source: Moody's	BACARDI LIMITED-BACARDI-MARTINI B.V.	Industrial	СР	3864.40	U			IG	NETHERLANDS

MARKET DATA

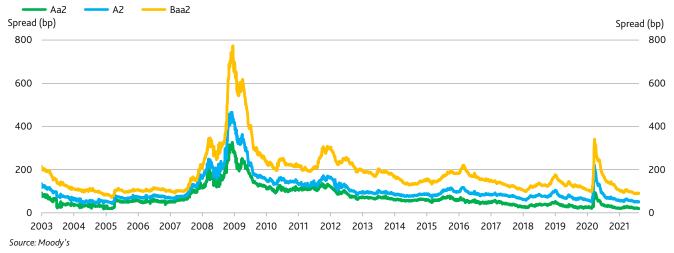


Figure 1: 5-Year Median Spreads-Global Data (High Grade)





2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Source: Moody's

CDS MOVERS

Figure 3. CDS Movers - US (August 4, 2021 – August 11, 2021)

CDS Implied Rating Rises	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 11	Aug. 4	Senior Ratings	
JPMorgan Chase Bank, N.A.	A2	A3	Aa2	
Toyota Motor Credit Corporation	Aa1	Aa2	A1	
International Business Machines Corporation	Aa3	A1	A2	
Charles Schwab Corporation (The)	Baa1	Baa2	A2	
Lowe's Companies, Inc.	Aa2	Aa3	Baa1	
Carnival Corporation	Caa2	Caa3	B2	
FedEx Corporation	A2	A3	Baa2	
Simon Property Group, L.P.	Baa2	Baa3	A3	
Consolidated Edison Company of New York, Inc.	A2	A3	Baa1	
NRG Energy, Inc.	Ba2	Ba3	Ba2	

CDS Implied Rating Declines	CDS Impli	ed Ratings	
Issuer	Aug. 11	Aug. 4	Senior Ratings
Raytheon Technologies Corporation	A1	Aa3	Baa1
Tenet Healthcare Corporation	B2	B1	Caa1
AvalonBay Communities, Inc.	Baa2	Baa1	A3
Expedia Group, Inc.	Ba1	Baa3	Baa3
Illinois Tool Works Inc.	A2	A1	A2
McKesson Corporation	A3	A2	Baa2
Service Properties Trust	Ba3	Ba2	Ba2
Cardinal Health, Inc.	Baa2	Baa1	Baa2
Texas Instruments, Incorporated	A2	A1	A1
Pitney Bowes Inc.	Caa2	Caa1	B1

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Aug. 11	Aug. 4	Spread Diff
Nabors Industries, Inc.	Caa2	1,060	1,006	54
Talen Energy Supply, LLC	B3	2,263	2,235	29
Service Properties Trust	Ba2	201	177	25
Tenet Healthcare Corporation	Caa1	284	268	16
Pitney Bowes Inc.	B1	404	388	15
Mattel, Inc.	B1	197	182	15
United Airlines, Inc.	Ba3	439	431	8
International Game Technology	B3	241	233	8
Expedia Group, Inc.	Baa3	100	93	7
Service Corporation International	Ba3	167	161	7

CDS Spread Decreases		CDS Spreads			
Issuer	Senior Ratings	Aug. 11	Aug. 4	Spread Diff	
Carnival Corporation	B2	398	498	-100	
Royal Caribbean Cruises Ltd.	B2	386	438	-52	
Staples, Inc.	Caa1	992	1,031	-39	
American Airlines Group Inc.	Caa1	747	777	-29	
V.F. Corporation	Baa1	57	85	-28	
Apache Corporation	Ba1	211	236	-25	
United States Steel Corporation	ВЗ	279	301	-22	
Macy's Retail Holdings, LLC	B1	314	336	-21	
Commercial Metals Company	Ba2	167	188	-20	
NRG Energy, Inc.	Ba2	163	182	-19	

CDS Movers

Figure 4. CDS Movers - Europe (August 4, 2021 – August 11, 2021)

CDS Implied Rating Rises	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 11	Aug. 4	Senior Ratings	
CaixaBank, S.A.	A1	Baa1	Baa1	
HSBC Holdings plc	A3	Baa1	A3	
Landesbank Baden-Wuerttemberg	Aa1	Aa2	Aa3	
BNP Paribas Fortis SA/NV	Aa1	Aa2	A2	
KBC Bank N.V.	Aa2	Aa3	A1	
Raiffeisen Bank International AG	Aa2	Aa3	A3	
Anglo American plc	Baa3	Ba1	Baa2	
Autoroutes du Sud de la France (ASF)	Aa2	Aa3	A3	
National Grid Electricity Transmission plc	Aa3	A1	Baa1	
RWEAG	Aa2	Aa3	Baa2	

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 11	Aug. 4	Senior Ratings	
SSE plc	Baa1	A2	Baa1	
Thales	A3	A2	A2	
Eksportfinans ASA	В3	B2	Baa1	
CMA CGM S.A.	ВЗ	B2	B3	
Piraeus Financial Holdings S.A.	Ca	Caa3	Caa3	
TV plc	Ba1	Baa3	Baa3	
Sappi Papier Holding GmbH	Caa1	B3	Ba2	
Pearson plc	Baa2	Baa1	Baa3	
TUI AG	С	Ca	Caa1	
Italy, Government of	Baa3	Baa3	Baa3	

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Aug. 11	Aug. 4	Spread Diff
Piraeus Financial Holdings S.A.	Caa3	582	565	17
Novafives S.A.S.	Caa2	847	833	14
Boparan Finance plc	Caa1	961	947	13
SSE plc	Baa1	48	39	9
celand Bondco plc	Caa2	436	429	7
CMA CGM S.A.	B3	323	318	5
British Telecommunications Plc	Baa2	75	72	4
Bayer AG	Baa2	57	55	3
Thales	A2	43	40	3
Alliander N.V.	Aa3	32	30	3

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Aug. 11	Aug. 4	Spread Diff
Vedanta Resources Limited	Caa1	871	930	-59
Banca Monte dei Paschi di Siena S.p.A.	Caa1	145	169	-24
Rolls-Royce plc	Ba3	201	220	-19
UPC Holding B.V.	ВЗ	195	210	-15
RCI Banque	Baa2	163	175	-12
Renault S.A.	Ba2	163	174	-11
CaixaBank, S.A.	Baa1	37	46	-10
Vue International Bidco plc	Ca	613	623	-10
Casino Guichard-Perrachon SA	Caa1	521	530	-8
Virgin Media Finance PLC	B2	225	232	-7
Source: Moody's, CMA				

ISSUANCE

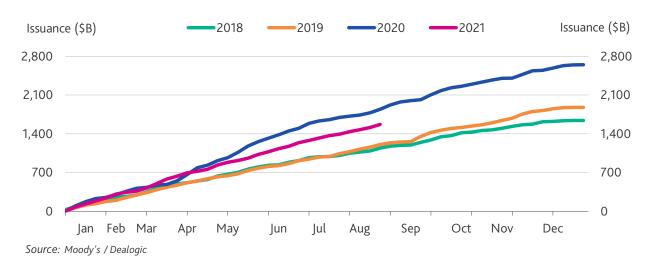
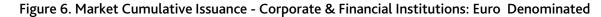
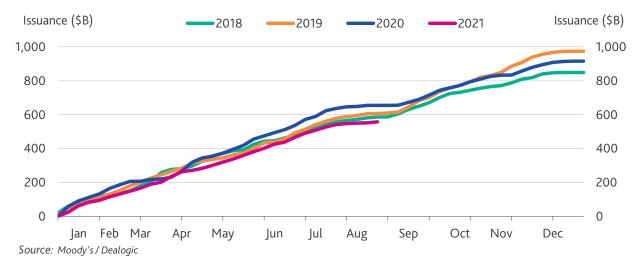


Figure 5. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated





		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	36.875	17.755	55.778
Year-to-Date	1,074.790	449.388	1,570.144
		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount	Amount	Amount
	\$В	\$B	\$B
Weekly	4.744	1.359	6.103
		108.305	558.482

Figure 7. Issuance: Corporate & Financial Institutions

 \ast Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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