

WEEKLY MARKET OUTLOOK

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Maybe This Year, Maybe Not

The July meeting minutes of the Federal Open Market Committee didn't shed light on whether the Federal Reserve will announce its tapering plans in September or November. There isn't a consensus on when it will be appropriate to start dialing back the central bank's monthly asset purchases. If it is going to taper by the end of this year, odds are the Fed will need to announce the coming move by September.

The Fed has stressed that it will provide markets plenty of advance notice, so it is unlikely to make an announcement in November and start the taper in December. Our assumptions were not changed by the July minutes. We still anticipate the initial tapering in January 2022. However, the August employment report will be key in

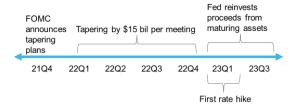
assessing if the Fed will taper sooner. The July minutes suggest that the labor market hasn't made "substantial" progress yet, and that is the last piece that the Fed wants in place before it acts.

Various July FOMC participants commented that economic and financial conditions would likely warrant a reduction in the coming months. However, several others indicated that a reduction in the pace of asset purchases was more likely to become appropriate early next year. Those participants saw prevailing conditions in the labor market as not close to meeting the committee's "substantial further progress" standard or were uncertain about the degree of progress toward the price-stability goal.

Those favoring tapering this year are likely some of the hawkish regional Fed presidents, while those who believe tapering could occur early next year likely include Fed Chairman Jerome Powell.

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Timeline for Fed Tapering



Sources: Federal Reserve, Moody's Analytics

When the Fed does announce its tapering plans, which we believe will happen later this year, the July minutes show it will try to hammer home the point that there isn't a link between tapering and the timing of the central bank's first rate hike. Markets assumed there was a link in 2013 when the taper tantrum occurred.

MBS purchases not significantly distorting markets

Our baseline forecast assumes the Fed adopts a balanced approach to tapering its monthly Treasury and mortgage-backed securities purchases, but some Fed officials favor focusing initially on reducing MBS purchases because of the red-hot housing market.

During a crisis, Fed MBS purchases support housing as a buyer of last resort. The Fed's MBS purchases since restarting them during the pandemic have helped the housing market but narrowed mortgage spreads. However, it's not just the Fed that is behind the booming housing market. Fundamentals are a bigger driver. Demographics and pent-up demand have led to a surge in home sales. Though some fear a bubble, this housing market is significantly different than during the last bubble. Lending requirements are more stringent today than 20 years ago, when the eventual tightening came in efforts to limit subprime lending. Unlike the mid-2000s, people these days can actually afford the homes they are buying.

Still, the Fed should avoid linking house price growth and MBS purchases because this could have political costs down the road. We don't believe there is a bubble in the housing market, but if one does develop, a lot of fingers will be pointed at the Fed and could have some lawmakers attempting to label the Fed's asset purchases as reckless.

The Fed's MBS purchases haven't caused enormous distortions in mortgage spreads recently. The spread between the Freddie Mac 30-year fixed mortgage rate and the 10-year U.S. Treasury yield was 156 basis points last

week. This is only modestly lower than its pre-COVID-19 average in 2018 and 2019 of 171 basis points and its historical average of 170 basis points. Therefore, outside of a crisis, the Fed's MBS purchases' impact on spreads is modest. So, when the Fed does begin to taper, there shouldn't be a huge impact on spreads, since there is plenty of investor demand for MBS. Normally, the main driver of consumer-facing mortgage rates is the 10-year Treasury yield. Spreads are affected by many other factors, including the capacity of loan originators.

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 Home Price Index and the change in the Fed's MBS holdings. However, since MBS purchases first occurred in 2009, the correlation coefficient is 0.1. We also double-checked to make sure that the MBS share of all assets held outright on the Fed's balance sheet isn't 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 times that the Fed goes on an MBS purchase binge, 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 doesn't imply causation. So, we used Granger causality tests to see if there is a causal relationship between house price growth and the Fed's MBS purchases and to see way it ran. We tested 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 isn't surprising.

Though there is a causal relationship, MBS have played a small role in the recent acceleration in house prices; therefore, the start of tapering would put only a little downward pressure on prices. 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.

Behind the widening in high-yield spreads

We have lowered our forecast for the U.S. high-yield optionadjusted corporate bond yield in the second half of the year but risks remain heavily weighted toward a tighter spread. Our August baseline has the high-yield option-adjusted corporate bond spread averaging 333 basis points in the second half of this year, 30 basis points tighter than in the July baseline.

H-Y Bonds Sold Off After June

Aa-, Baa- and high-yield OAS spreads, % p.a.

4.0
3.5
3.0
2.5
—Aa 20-yr Treasury
—Baa 20-yr Treasury
2.0
—High-yield OAS spread
1.5
1.0
0.5
Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-2

Sources: Intercontinental Exchange, Bank of America, Moody's Analytics

We expect spreads to widen in the fourth quarter, ending the year near 400 basis points. The high-yield corporate bond spread has widened over the past several weeks and should gather momentum in the final three months of the year as long-term rates increase and stock market volatility picks up because of the Fed announcing its tapering plans and a likely debt-ceiling battle. The widening coincides with a recent drop in the VIX, which seems odd. It appears that the bulk of the widening in high-yield corporate bond spreads is attributed to a drop in global oil prices.

The correlation coefficient between changes in the highyield corporate bond spread and changes in West Texas Intermediate crude oil prices is -0.63. Correlation does not imply causality. So, we used Granger causality tests to see if there is a causal relationship between the high-yield corporate bond spread and West Texas Intermediate crude oil prices. With no lags, fluctuations in WTI crude oil prices were found to Granger-cause changes in the high-yield corporate bond spread. The results showed that the causality runs one way, which isn't surprising.

Therefore, high-yield corporate bond spreads could continue to widen if the spreading Delta variant of COVID-19 reduces demand for oil. The Delta variant has infiltrated China. This has significant economic ramifications, not least due to the government's zero-tolerance approach to new infections. There are cases in around half of China's 31 provinces and the government has introduced nationwide restrictions since mid-July. Other countries in the Asia-Pacific region have also tightened restrictions to contain the spread of COVID-19. This could put some additional downward pressure on oil prices within the next couple of weeks, leading to wider U.S. high-yield corporate bond spreads.

Normally, a widening in the high-yield corporate bond spread raises a red flag because of the external finance premium—the difference between a firm's cost of borrowing and raising funds internally. Corporate yield spreads are a proxy for this premium. However, this time is likely different, as high-yield bond spreads are noticeably tighter than their historical average of 505 basis points.

TOP OF MIND

Speed Bumps to Recovery

BY MARK ZANDI

We remain optimistic regarding the U.S. economy's prospects. Real GDP grows by 6.5% this year and 4.5% next year in our baseline outlook, which is sufficient to bring the economy back to full employment by early 2023. However, the rapid emergence of the Delta variant of COVID-19 and the surge in inflation are good reminders that there will be more than a few bumps along the way.

Delta-variant threat

The economy's near-term performance appears increasingly tied to how the Delta variant plays out. While it seems unlikely the variant would be so disruptive that it would undermine the recovery, there are mounting indications that the fast-spreading variant may be more of a headwind to economic growth.

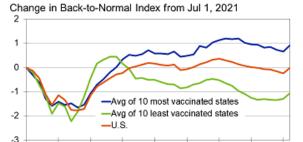
Consumers and businesses are increasingly nervous. The University of Michigan survey of consumer sentiment fell sharply in early August and is lower than it was during the worst of the pandemic last spring. While higher inflation is not helping consumers' moods, the timing of the slump in sentiment coincides with news stories of overwhelmed hospital systems in Florida and Texas, more serious illness among younger populations, and increasing breakthrough infections among those fully vaccinated. The Conference Board's survey of consumer confidence has held up much better, probably because it largely asks questions around the strength of the job market, which is robust. Yet it is clear that consumer psyches are fragile.

Our weekly business confidence index also suggests that the Delta variant may be biting. Sentiment significantly improved this spring when vaccinations ramped up and the pandemic was steadily winding down. But it has gone sideways since mid-June. Businesses' assessment of current conditions has turned particularly soft as more respondents to the survey say they are weakening than those that say they are improving. This is the first time this has happened since before the vaccines became widespread. Businesses' expectations regarding the economy's prospects for the remainder of this year remain upbeat but they have also diminished significantly in recent weeks. Respondents saying the economy will improve have declined from more than 60% to less than half, and those saying that the economy will weaken has increased from near 30% to more than 40%. This has not impacted businesses' hiring and investment decisions yet, according to our survey, but it bears close watching.

Our back-to-normal index has also slumped since peaking in late June. The index, a compilation of government statistics and third-party data including Google mobility and OpenTable restaurant bookings, measures how far the economy is from its pre-pandemic performance. It fell from its late-June high of 93.5% of normal to less than 92% in early August. Leading the decline are states with low vaccination rates and outsize increases in infections and hospitalizations. The most notable is Florida, which topped out at more than 101% of normal in late June but has backed down to less than 97%. There is a clear break in recent weeks in the back-to-normal index for states with higher vaccination rates and thus fewer infections and states with low vaccination rates that are struggling with more infections and hospitalizations.

Delta Impedes Recovery

7/11



7/21

7/26

7/31

8/10

8/5

7/16

7/6 Sources: CDC, Moody's Analytics

7/1

We have yet to incorporate any fallout from the Delta variant in our baseline outlook for the economy. We do not expect Delta to force households to shelter in place again, schools to go back online, restaurants and other venues to scale back operations, or for office workers to remain at home. However, with the Centers for Disease Control and Prevention issuing more warnings and updating its advice on mask wearing and other guidance, the odds are meaningful and rising that the outlook could quickly change.

Inflation spikes

The outlook also depends on whether the recent spike in inflation is temporary or more persistent. Inflation has surged during the past several months and is up close to 5% over the past year, depending on the inflation measure. This is the highest inflation rate since summer 2008, when surging oil prices were the issue. Then, the cost of regular unleaded gasoline soared to a record more than \$4 a gallon. Gas prices today are just over \$3 a gallon. Prior to 2008,

one must go back to the early 1990s to find inflation as high as it is today.

But we expect inflation to soon peak, and if everything sticks roughly to script, inflation will moderate to between 2% and 3% by this time next year, depending on the measure. Businesses that suffered a direct hit from the pandemic, including airlines, hotels, clothing stores and restaurants, are simply restoring prices they slashed early on to survive the pandemic. This is a onetime adjustment. To see how big an impact this is having, consider that consumer price inflation over the last two years, which abstracts from the wild pandemic-induced price swings, is up 3% annually. Still hot, but much less so.

It is also typical for inflation to get a temporary bump on the way out of a recession. Demand picks up first coming out of economic downturns, but supply is slow to catch up, and prices spike. This happened after the financial crisis a decade ago. Businesses are unsure whether the improved demand has staying power and are cautious about ramping up production. The last thing they want coming out of a recession is to be wrong-footed about demand. It takes some doing to get shuttered factories, mines, hotels, and global supply chains back up and running. However, higher prices quickly convince consumers to buy less of what costs more. And, given how much money can be made at these higher prices, businesses figure out how to iron out their supply-chain issues and increase production. Frictions that made it difficult for supply to catch up with demand are resolved, and prices moderate.

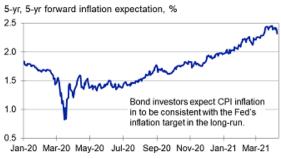
To be sure, the disconnect between demand and supply is likely to be more persistent coming out of the pandemic. Global supply chains are badly scrambled, and the pandemic is still raging in many parts of the world, especially in emerging economies, where many supply chains begin. Sorting it all out will take more than a few months, but the sorting has begun.

Stable inflation expectations

Steady inflation expectations—what investors, businesses, consumers, and economists think inflation will be in the future—are also reason to be sanguine. Inflation becomes a pernicious problem when there is widespread belief that inflation will remain high, and workers demand bigger wage increases to compensate. Businesses then pass on their higher labor costs in even higher prices. A dreaded wage-price spiral takes hold. This vicious cycle was behind the high inflation we suffered in the 1970s and 1980s. Inflation expectations are higher today than pre-pandemic, but this is a feature, not a bug. Prior to the pandemic, the Federal Reserve Board was concerned that inflation expectations and inflation were too low; both were consistently below the Fed's 2% inflation target. Not anymore. According to the most recent Federal Reserve Bank of Philadelphia survey

of professional economists, inflation over the next decade is expected to be a little more than 2%—precisely what the Fed wants. Investors are also on board, pegging future consumer price inflation consistent with the Fed's target.

Investors Expect On-Target Inflation



Sources: Federal Reserve, Moody's Analytics

There has also been hand wringing that the record number of unfilled open jobs and pressure on employers to provide signing bonuses and higher pay to help fill them will force businesses to raise prices. Wage growth has held up admirably during the pandemic, with wages and salaries for private-sector workers as measured by the reliable employment cost index up 3.5% in the year ended in the second quarter.

Wage Growth Holds Firm...

ECI, wages and salaries for private industry workers

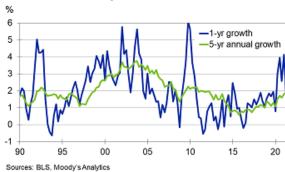


This is the strongest wage growth since just before the financial crisis. But the acute labor shortages will not last much longer. Workers who permanently lost jobs during the pandemic, likely because their employers failed, have needed time to find new employers and figure out new work arrangements. Parents stuck at home with children when schools were online will come back to work in the new school year with in-person learning. Those who have been caring for elderly parents or sick family members or friends will not need to do this much longer. They will take jobs.

Moreover, since the pandemic hit, businesses have also figured out ways to significantly increase worker productivity, lowering costs and easing pressures to raise

prices. It often takes big changes in the way businesses are organized and operate to take full advantage of new technology and investments they have made. They are reticent to do this when things are going well, but the pandemic gave many businesses no choice. They had to make big changes, and it shows in the higher productivity.





Stronger wage growth is not the catalyst for higher inflation if productivity growth keeps pace. So far, so good.

Fiscal support

Adding to inflation angst are the large fiscal packages being debated by lawmakers, including the \$550 billion in additional infrastructure spending and \$3.5 trillion in social investments over the next decade. The concern is that the additional fiscal support will further pump up the economy, pushing it past full employment; that wage growth will

accelerate, outstripping productivity gains and pushing businesses to raise prices more quickly to maintain profitability; and with the strong economy, those price increases stick. In this scenario, the economy will ultimately overheat as the Federal Reserve has no choice but to respond by quickly pushing up interest rates. This has happened in times past, and often ends in recession.

But by our calculation, the legislation along with the previous fiscal support will simply return the economy to near full employment by early 2023. Moreover, policies in the legislation, such as increased housing supply and negotiated prescription drug prices, will weigh on inflation, and more than offset policies that will put upward pressure on inflation, such as the carbon border adjustment tax and higher corporate taxes. Longer run, the legislation lifts the economy's potential growth by increasing productivity growth and labor force growth, both of which ease inflationary pressures. Productivity growth gets a boost from more infrastructure investment, including transportation infrastructure and other infrastructure ranging from research and development to housing supply, and more investments in education and training. Labor force participation and labor force growth get a lift as lower-income workers receive help with child and eldercare costs, paid family leave, expanded health insurance, and housing supply. These policies also ease the financial burden of inflation for lowerand middle-income Americans.

The Week Ahead in the Global Economy

U.S.

Its another busy week for U.S. economic data that includes new- and existing-home sales for July. The housing market data has cooled recently, but there isn't any cause for concern. Rising house prices have cut into affordability that has come at the expense of sales. We get a look at manufacturing in July with the release of durable goods orders. Durable goods orders are volatile because of fluctuations in motor vehicle and parts along with aircraft orders. The Bureau of Economic Analysis' second estimate of second-quarter GDP will also be released and currently is tracking 6.5% at an annualized rate.

Also, monthly personal income and spending will be released. The spending data takes on added importance because of the shift from goods spending, reflected in the weak retail sales data in July, toward services. The PCE deflators will also be closely watched for any signs that inflationary pressures are moderating. On the policy front, Fed Chairman Jerome Powell will speak at the annual Jackson Hole Economic Symposium. We don't believe Powell will send any strong forward guidance on the timing of the Fed's taper of asset purchases, since doing sowould be front-running the Federal Open Market Committee, something Fed chairs normally attempt to avoid.

Europe

Germany's estimate of second-quarter GDP will likely come in at 1.5% q/q, following the 1.8% contraction in the first. Household consumption likely drove the

rebound along with public spending. Germany has suffered from global supply bottlenecks which have held back its manufacturers. This in turn created backlogs of exports as well. The construction industry has also been held back by rising input costs and material shortages, according to survey data. As a result, fixed investments, inventory investments and net exports likely held back growth.

France's job seekers likely fell again in July to 3.4 million from 3.42 million in June. Progress in the jobs market may slow, since the pickup in tourism was stunted at first by the reimposition of travel restrictions by the U.K. However, according to PMI survey data, labor demand has been strong in both manufacturing and services sectors.

Asia-Pacific

Asia's economic data calendar is relatively light. Thailand's exports are likely to have powered ahead in year-on-year terms thanks to low base effects, but monthly momentum in July will be constrained by elevated local infections and movement controls that have impacted some manufacturing. This is having a flow-on to exports. Broader regional disruption is also occurring as the Delta variant triggers restrictions and business stoppages, including in China, which maintains a zero-tolerance approach to new infections. Elsewhere, South Korea's consumer sentiment likely retreated further to 100.1 in August, from 103.2 in July, as infections climbed and movement controls were extended.

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

THE LONG VIEW: U.S.

High-Yield Spreads Likely to Widen in Q4

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 97 basis points, down 4 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 narrowed by 4 bp over the past week to 89 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 130 basis points, compared with 134 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 tightened from 138 bps to 134 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 335 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 but tighter than that implied by a VIX of 21.1. 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 speculative-grade 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 \$46.3 billion in the week ended Wednesday, bringing the year-to-date total to \$1.121 trillion. High-yield corporate bond issuance rose \$15.4 billion, bringing the year-to-date total to \$464.7 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 second-quarter 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.

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THE LONG VIEW: EUROPE

A Fire Under Euro Zone Inflation

BY ROSS CIOFFI

Euro zone inflation was confirmed at 2.2% y/y in July, up from 1.9% in June. Energy prices did the heavy lifting, rising 14.3% y/y and contributing 1.3 percentage points to the headline rate. By contrast, the core inflation rate slowed during the month to 0.7% y/y from 0.9%. This was largely due to base effects that dragged down the French and Italian inflation rates. These will reverse in August and September, which means that the core rate will speed up further, particularly given the strong base effects from Germany's 3-percentage point VAT cut that will be present until the end of the year.

These base effects will combine with supply constraints and recovering demand to put a fire under inflation in the final months of 2021. But these forces will ease as we enter 2022. The base effects from oil in particular will start to turn around, gradually at first, as prices were boosted in December 2020 by the first announcements of the vaccines to fight COVID-19. Meanwhile, consumer demand will soften as post-lockdown spending sprees taper and slack remains in the labor market. Supply bottlenecks will likely persist for semiconductors and other key inputs, but these too are fundamentally temporary, as the world's producers are currently investing in expanding capacity. The European Central Bank will be privy to these dynamics and will therefore look through the temporary above-target inflation.

U.K. inflation slows

Meanwhile, U.K. inflation decelerated to 2% y/y from 2.5% y/y the previous month. Similar to the case in France and Italy, a rebound in prices in July 2020 meant that year-ago growth rates slowed this July. That said, there were strong price dynamics in certain core components such as new and secondhand vehicles. Accommodation services inflation also picked up strongly as households took advantage of looser social distancing requirements to finally take a holiday.

We expect U.K. inflation to accelerate again in the coming months. Remaining social distancing measures were lifted in mid-July, and base effects should strengthen again in the autumn, coinciding with last year's second wave of COVID-19. That said, we don't expect any change to the Bank of England's monetary policy before the second half of 2022.

Norway's central bank holds

The Norges Bank's key policy rate, the deposit rate, was unchanged at 0% in August. The policy rate has been at zero since it was cut in May 2020 in response to the COVID-19 crisis. Prior to the pandemic, the rate had been at 1.5% from October 2019 to March 2020, when it was initially lowered to 1%, and then again to 0.25% the next month. The board is keeping policy accommodative amid the country's recovery from the pandemic.

The bank still expects to hike rates in September, as there are positive signs in the economy. Although the unemployment rate edged up by 0.1 percentage point to 5.1% in the second quarter, this was because of a large increase in labor force participation. Employment increased considerably, with the rate jumping by 1.8 percentage points to 69%, flashing signals of the robust recovery in the Norwegian economy. Given the upbeat outlook for the recovery and concerns about financial imbalances, for example in the housing market, the bank will start gradually normalizing interest rates, which are currently 150 basis points below the pre-pandemic rate, in September.

Dutch labor market nearly recovered

The Netherlands' unemployment rate decreased to 3.1% in July from 3.2% in June, which is the lowest it has been since it reached 2.9% in March 2020. There were 2,000 more employed people in July than in June, while the number of unemployed dropped by 8,000 as some people left the labor force. The Netherlands still has its furlough scheme in place, but it will be ending in September. The phase-out should result in layoffs that could once again push up the unemployment rate, but the effect should be small.

Swiss industrial production looks good

Second quarter industrial production surged in Switzerland, growing by 15.7% y/y, substantially exceeding the previous quarter's 4.8% y/y increase in output. Production jumped in the secondary sector, which includes industrial production and construction. Manufacturing output soared by 16.8% y/y while construction increased by a more temperate 6.5% y/y. Although it is true that the second quarter growth rates are being highly influenced by base effects, as this period coincided with the first wave of the COVID-19 pandemic in 2020, when compared with the same three-month period in 2019, industrial output was nonetheless up 5%.

THE LONG VIEW: ASIA-PACIFIC

China's Growth Begins to Slow

BY CHRISTINA ZHU

China's economic expansion is losing momentum as major high-frequency indicators for July show clear signs of moderation. The year-over-year growth for industrial production, retail sales, and fixed-asset investment disappointed the market. More important, their two-year average growth rates, which look through the base effects of the pandemic-induced downturn, are turning south. The broad-based disruption to growth was largely attributed to the flare-ups of COVID-19 infections in more than half of China's provincial regions and extreme weather in the central Henan province and some coastal regions.

Bumpy domestic consumption

Retail trade is amongst the most vulnerable sectors to bad weather and the government's zero-tolerance COVID-19 policy. The two-year average growth of China's retail sales fell 1.3 percentage points to 3.6% in July from 4.9% in June. The retreat in Jiangsu and Henan provinces was significantly larger than the national average, an indication of how severe flooding and typhoons have hampered domestic consumption.

The widespread Delta-variant outbreaks were more detrimental to the country's services sector, particularly travel and hospitality businesses. The domestic tourism sector was looking for a rebound during the summer school holidays in July and August, but tightened virus containment measures and mobility restrictions ruined that hope. Restaurants and catering revenue declined by about 4% in

July from June, and the yearly growth in the services production index dropped to 7.8% from 10.9% previously. Nevertheless, services providers remained optimistic about the outlook as the government's stringent virus control measures again worked well and locally transmitted cases dropped to single digits on 16 August.

Another lesson learned from July's retail sales reading is that online shopping festivals can provide a temporary boost to sales, amplifying fluctuations in the data before seasonal adjustment factors can fully account for them. The stockpiling during the "6.18" shopping festival in June contributed to the sluggish sales in July. Sales of communication devices, cultural and office supplies, and home appliances and AV equipment, which recorded huge monthly gains in June, contracted by more than 30% in July.

Policy support on the way

Fiscal spending will likely ramp up in the coming months on the back of faster bond issuance, lending stronger support to the economy.

Monetary policy will stay accommodative. The government has vowed to provide more support to downstream producers and small and medium-size enterprises. Though the odds of a further easing to the reserve requirement is low after the unexpected cut in July, the central bank might use other liquidity management tools or targeted credit policy to support vulnerable sectors.

RATINGS ROUND-UP

Upgrade for \$5.4B Debt of Bath & Body Works

BY STEVEN SHIELDS

The positive trend in U.S. corporate credit quality continued for the week ending August 17. Upgrades accounted for just over half of the total changes and 79% of the affected debt. Rating changes spread across seven different industries but were confined largely to speculative-grade companies.

Bath & Body Works Inc. received the largest upgrade in terms of debt affected at \$5.4 billion. Moody's Investors Service upgraded the retail firm's senior unsecured guaranteed note rating and corporate family rating to Baa2 from Baa3. The rating action reflects governance considerations including the completion of the spin-off of Victoria's Secret into a publicly traded entity, Victoria Secret & Co., as well as Bath & Body Work's balanced financial strategies. Additionally, the firm's outlook was

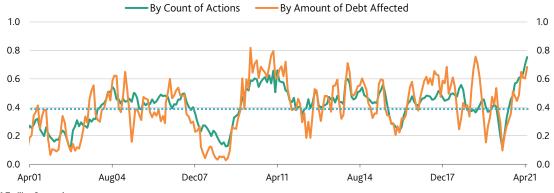
raised to positive due to its consistent performance and operating margins through varying economic conditions.

Downgrades in the latest period were headlined by Columbia Property Trust Inc., which saw its senior unsecured debt rating cut to Baa3 from Baa2. Moody's downgrade reflects the office REIT's high net debt/EBITDA, which is a function of its large and mostly unleased development pipeline as well as recent core portfolio vacancies. The outlook is negative due to Moody's expectation that the REIT will face challenges as it seeks to increase operating cash flow given the weak office environment.

There were no rating changes issued to European firms in the period.

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
8/12/2021	AGCO CORPORATION	Industrial	LTIR		U	Baa3	Baa2	IG
8/12/2021	HOVNANIAN ENTERPRISES, INC.	Industrial	LGD/LTCFR/PDR	180.60	D	Caa2	Caa1	SG
8/12/2021	BATH & BODY WORKS, INC.	Industrial	LTCFR/PDR/SrUnsec	5,414.07	U	Ba3	Ba2	SG
8/12/2021	BEAZER HOMES USA, INC.	Industrial	LTCFR/PDR		U	В3	B2	SG
8/12/2021	INTEGER HOLDINGS CORPORATION- GREATBATCH LTD.	Industrial	LTCFR/PDR		U	B1	Ba3	SG
8/13/2021	COLUMBIA PROPERTY TRUST, INC.	Industrial	SrUnsec/LTIR	700.00	D	Baa2	Baa3	IG
8/16/2021	AMERICAN AXLE & MANUFACTURING HOLDINGS, INCAMERICAN AXLE & MANUFACTURING, INC.	Industrial	SrSec/BCF		U	Ba2	Ba1	SG
8/16/2021	TRIUMPH GROUP, INC.	Industrial	LTCFR/PDR/SrSec/ SrUnsec	587.49	D	Caa3	Caa2	SG
8/16/2021	ADTALEM GLOBAL EDUCATION INC.	Industrial	LTCFR		D	Ba3	B1	SG
Source: Moody's								

FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

Date Com	mpany	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
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NO NEW DATA AVAILABLE THIS WEEK

Source: Moody's

MARKET DATA

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

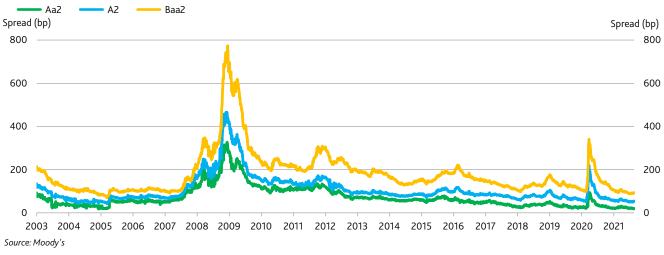
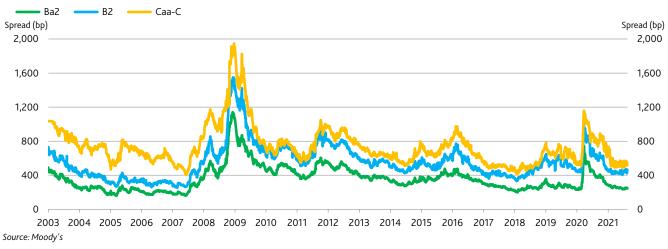


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS MOVERS

Figure 3. CDS Movers - US (August 11, 2021 – August 18, 2021)

CDS Implied Rating Rises	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 18	Aug. 11	Senior Ratings	
American Express Company	Aa2	Aa3	A3	
Cox Communications, Inc.	A3	Baa1	Baa2	
Tenet Healthcare Corporation	B1	B2	Caa1	
Kroger Co. (The)	A3	Baa1	Baa1	
Emerson Electric Company	Aa3	A1	A2	
ERP Operating Limited Partnership	Aa2	Aa3	A3	
Quest Diagnostics Incorporated	A1	A2	Baa2	
Loews Corporation	A1	A2	A3	
RPM International Inc.	Baa2	Baa3	Baa3	
Vornado Realty L.P.	Ba1	Ba2	Baa2	

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 18	Aug. 11	Senior Ratings	
Republic Services, Inc.	Baa1	A2	Baa2	
TECO Energy, Inc.	Baa1	A2	Baa1	
JPMorgan Chase & Co.	Baa1	A3	A2	
Citigroup Inc.	Baa2	Baa1	A3	
JPMorgan Chase Bank, N.A.	A3	A2	Aa2	
Toyota Motor Credit Corporation	Aa2	Aa1	A1	
Oracle Corporation	A2	A1	Baa2	
Citibank, N.A.	Baa3	Baa2	Aa3	
International Business Machines Corporation	A1	Aa3	A2	
Raytheon Technologies Corporation	A2	A1	Baa1	

CDS Spread Increases	CDS Spreads			
Issuer	Senior Ratings	Aug. 18	Aug. 11	Spread Diff
Talen Energy Supply, LLC	В3	4,133	2,263	1,869
Royal Caribbean Cruises Ltd.	B2	416	386	30
Carnival Corporation	B2	426	398	28
R.R. Donnelley & Sons Company	В3	538	518	20
American Airlines Group Inc.	Caa1	766	747	19
Scripps (E.W.) Company (The)	Caa1	286	268	18
United Airlines, Inc.	Ba3	457	439	17
Apache Corporation	Ba1	228	211	17
K. Hovnanian Enterprises, Inc.	Caa3	724	710	15
Domtar Corporation	Baa3	247	232	15

CDS Spread Decreases	CDS Spreads			
Issuer	Senior Ratings	Aug. 18	Aug. 11	Spread Diff
Rite Aid Corporation	Caa3	849	894	-45
Macy's Retail Holdings, LLC	B1	275	314	-40
American Axle & Manufacturing, Inc.	B2	388	409	-21
Beazer Homes USA, Inc.	В3	332	352	-20
Tenet Healthcare Corporation	Caa1	269	284	-15
Howmet Aerospace Inc.	Ba2	151	164	-13
NRG Energy, Inc.	Ba2	151	163	-12
Mattel, Inc.	B1	185	197	-12
United Rentals (North America), Inc.	Ba2	112	122	-11
Nabors Industries, Inc.	Caa2	1,049	1,060	-10

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (August 11, 2021 – August 18, 2021)

CDS Implied Rating Rises	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 18	Aug. 11	Senior Ratings	
Landesbank Hessen-Thueringen GZ	Aa3	A2	Aa3	
Electricite de France	A3	Baa1	A3	
Bertelsmann SE & Co. KGaA	Aa1	Aa2	Baa2	
Thales	A2	A3	A2	
CMA CGM S.A.	B2	В3	В3	
ENGIE Alliance	Aa2	Aa3	Baa1	
Italy, Government of	Baa3	Baa3	Baa3	
United Kingdom, Government of	Aaa	Aaa	Aa3	
France, Government of	Aaa	Aaa	Aa2	
Germany, Government of	Aaa	Aaa	Aaa	

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings		
Issuer	Aug. 18	Aug. 11	Senior Ratings	
Adecco Group AG	A2	Aa3	Baa1	
Intesa Sanpaolo S.p.A.	Baa2	Baa1	Baa1	
CaixaBank, S.A.	A2	A1	Baa1	
HSBC Holdings plc	Baa1	A3	A3	
Banco Comercial Portugues, S.A.	Ba3	Ba2	Ba1	
BAWAG P.S.K. AG	Baa2	Baa1	A2	
Ziggo Bond Company B.V.	B1	Ba3	В3	
UPM-Kymmene	A1	Aa3	Baa1	
Fortum Oyj	A3	A2	Baa2	
Iberdrola S.A.	A3	A2	Baa1	

CDS Spread Increases				
Issuer	Senior Ratings	Aug. 18	Aug. 11	Spread Diff
Ziggo Bond Company B.V.	В3	229	215	15
Virgin Media Finance PLC	B2	238	225	13
Deutsche Lufthansa Aktiengesellschaft	Ba2	251	241	11
Vue International Bidco plc	Ca	623	613	10
Banca Monte dei Paschi di Siena S.p.A.	Caa1	149	145	5
ArcelorMittal	Baa3	122	117	5
Hammerson Plc	Baa3	163	158	5
CaixaBank, S.A.	Baa1	39	37	3
Ardagh Packaging Finance plc	Caa1	211	208	3
Adecco Group AG	Baa1	38	35	3

CDS Spread Decreases		CDS Spreads			
Issuer	Senior Ratings	Aug. 18	Aug. 11	Spread Diff	
Vedanta Resources Limited	Caa1	769	871	-102	
Stena AB	Caa1	455	497	-43	
Casino Guichard-Perrachon SA	Caa1	485	521	-36	
Boparan Finance plc	Caa1	929	961	-31	
CMA CGM S.A.	В3	300	323	-23	
Jaguar Land Rover Automotive Plc	B1	334	344	-10	
Premier Foods Finance plc	В3	165	174	-9	
Novafives S.A.S.	Caa2	839	847	-8	
Piraeus Financial Holdings S.A.	Caa3	576	582	-6	
TUI AG	Caa1	698	703	-5	

Source: Moody's, CMA

ISSUANCE

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

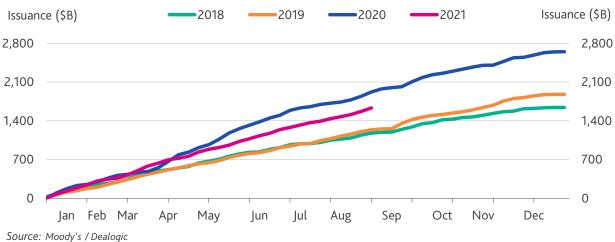
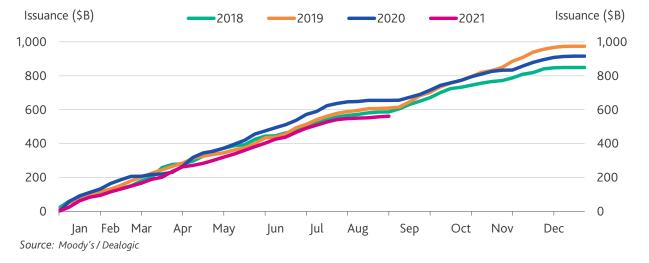


Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



ISSUANCE

Figure 7. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	46.315	15.359	62.629
Year-to-Date	1,121.105	464.747	1,632.773

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	3.173	0.000	3.173
Year-to-Date	437.038	108.305	561.655

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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