

**WEEKLY MARKET  
OUTLOOK**

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# The Limits of Momentum

We will be adding the Delta variant of [COVID-19](#) to our U.S. risk matrix, but as of now, the odds that it causes significant damage are low. The number of cases in the U.K. was high over the weekend with 54,000 new cases on Saturday and 47,600 on Sunday, according to data from Johns Hopkins University. Surging cases are concerning, but the good news is that the increase in deaths has been small, which likely is due to vaccinations. In fact, the link between COVID-19 cases and hospitalizations and deaths has weakened significantly. In the U.S., 83% of COVID-19 cases are attributed to the more transmissible Delta variant, according to the Centers for Disease Control and Prevention.

Another wave of COVID-19 cases in the U.S. will likely have less economic cost.

This assessment is based on the experience in the U.K. to date. The Google Mobility measure of consumer activity in the U.K. in retail and recreation has declined modestly since the cases began to increase rapidly. In the U.K., the Google Mobility measure of consumer activity also remains well above that seen at the beginning of the year. For the U.S., a number of the high-frequency measures that we monitor have softened a little, but nothing that raises a red flag. According to YouGov, in neither the U.K. or U.S. has social distancing—avoiding going to shops or to public gatherings—changed significantly over the past several weeks.

The Delta variant is a downside risk to our forecast, and we have seen that things can change rapidly during this pandemic, but we're currently not going to reduce our near-term forecast for the U.S. economy because of the recent rise in COVID-19 cases.

**Markets still sensitive**

Financial markets are still sensitive to the downside risks to outlook from the Delta variant. Corporate credit spreads widened Monday. The Bloomberg Barclays U.S. high-yield corporate bond spread widened by 22 basis points to 304 basis points, the widest

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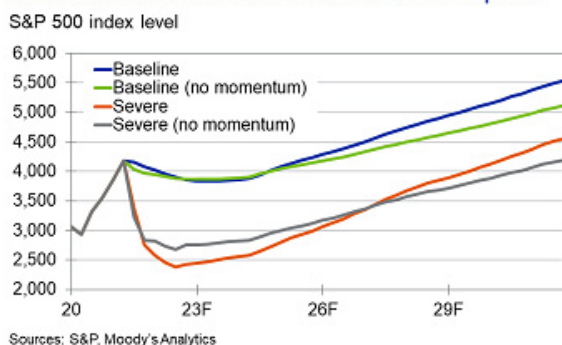
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since May but some of this has been reversed since. Investment-grade corporate credit spreads also widened on Monday, but significantly less than that seen in the high-yield market.

Based on a number of valuation metrics, U.S. stock markets are overvalued, and the forecast is for this froth to be reduced. Stock prices are forecast to steadily decline until mid-2023. We have the 10-year Treasury yield steadily rising over the next few years and stock prices don't usually perform well when interest rates are increasing. Growth has also peaked and as the economy decelerates, that will put downward pressure on equity prices. Through the second half of this year, a combination of tighter profit margins from rising inflation, uncertainty regarding the Fed tapering, and anticipation of the increase in the capital gains tax in 2022 will all contribute to the expected decline in stock prices.

Also, the support from momentum won't last forever. We capture momentum in the quarterly frequency forecast equation for the quarter average value of the S&P 500 in our global macro forecast model. The equation specification transforms the index level to a continuously compounded rate of change, or log difference, and includes the momentum term as a driver, defined as a one-quarter lagged log difference of the dependent variable. The coefficient is around 0.3, which implies that if the market increased by 1% in the previous quarter, momentum will contribute a 0.3% increase to the forecast in the current quarter. The practical effect of the momentum term on our equity index forecast can be seen by comparing forecasts where the equation is estimated with and without the momentum term.

### Modeled Momentum Has Modest Impact



However, quarter averaging daily data will introduce positive correlation between quarter changes observed over successive observations even where there is none, distorting the potential signal. To isolate a true momentum effect that

could be profitably exploited, we switch to modeling quarter end values of the index instead of average. Using the same model specification for the end as the average, equation fit is generally worse because values from a single day are much noisier than average values from a quarter.

Furthermore, the momentum term is insignificant. To recover the statistical significance of momentum, we estimate separate momentum coefficients for positive and negative return markets, based on price growth in the prior quarter, and observe that the positive return market momentum term has the expected positive and statistically significant sign, while the negative return term is negative, suggesting a contrarian impact.

The momentum effect does not operate in isolation in our model. Within the equation, additional drivers include corporate profit growth capturing market response to fundamentals, and an error-correction term that anchors the index value to an estimate of fair value over the long run. The error-correction term serves as a potential counterbalance to momentum. Growth in asset values that pushes values well above fair value will push in the opposite direction of the momentum effect. Thus, a strong bout of asset growth will likely not just recede but reverse if asset values grow out of line with fundamentals, and they have in our view. This valuation effect dominates our medium-term outlook for equities, which calls for flat or falling asset prices despite positive momentum.

### Momentum everywhere?

Momentum effects are not confined to U.S. equities alone. Researchers have found momentum in a variety of assets prices and geographies. One crude way to measure momentum to estimate the coefficient from regressing changes in price or yield on the change in the prior period and we do this for several U.S. asset classes using monthly, instead of quarter-end, data to accommodate the shorter sample and separate coefficients for positive and negative return markets. We find positive return momentum is present across U.S. asset classes, including large and small cap equities, Treasuries, and some corporate bonds, and negative momentum, or contrarian behavior, in negative return conditions.

Despite the observable presence of momentum effects across geographies and asset classes, their practical investment implications may be limited. Whether there is enough momentum to profit is questionable, especially in markets where liquidating a position can be sufficiently costly, wiping out potential gains. Furthermore, the strength of momentum effects often fluctuates. Five-year rolling regressions of the S&P 500 quarter-end values show a lot of variation in positive and negative return momentum over time. Unpredictable shifts in the strength of momentum effects could be ruinous to momentum strategies.

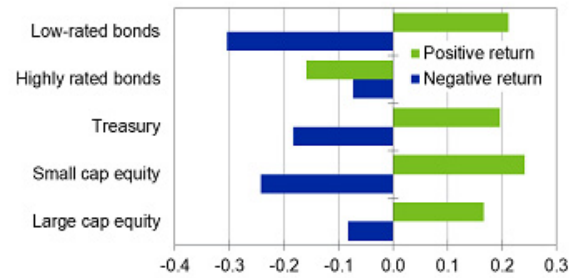
## Outlook

The impressive growth in value across many asset classes is projected to taper off within the next couple of years as supportive policy is unwound. The 10-year Treasury yield will rise above 2% by 2022 and the fiscal tailwinds will also have faded by then. Over the next couple of year this will cause the high-yield corporate bond spread to widen between 75 and 100 basis points per annum.

We expect stock market values to decline during the next few years from their current richly valued levels, with a cumulative decline in the S&P 500 of around 7%.

## Momentum Across Asset Classes

Estimated momentum coefficient



Sources: S&P, Six Financial, Federal Reserve, Moody's Analytics

# Tourism in the Age of COVID

BY ADAM KAMINS

Much like a family planning a vacation would not treat Disney World and the Grand Canyon as interchangeable, COVID-19 has treated various destinations in the U.S. very differently. It has been clear [since early on](#) that tourist destinations in general faced some of the harshest fates among metro area economies, but data for the first half of 2021 shed more light on which markets were hit hardest and why. Using two sets of measures of tourism health, one based on data from the Bureau of Labor Statistics and the other from STR, formerly Smith Travel Research, more specifics about metro areas' tourism sectors are evident. This is instructive in not only understanding what has taken place over the past year, but for informing future prospects.

## A look at leisure

Labor market data on leisure/hospitality provide the most accessible window into how tourism sectors are faring across regional economies. The BLS provides not seasonally adjusted figures for accommodations and food services in 125 metro areas or divisions. And three dozen metro areas report just accommodations employment, providing a more precise sense of what is happening within hotels and other lodging establishments. The broader category, which is represented by NAICS code 72, provides the most comprehensive look geographically, even if it may be a bit too inclusive. Regardless, a comparison of second-quarter employment in 2019, 2020 and 2021 is striking.

Ocean City NJ is the only metro area among the 125 examined where employment in the industry is above its levels from two years ago. This owes to a unique profile that consists of second and rental properties with very few hotels. As New Yorkers and Philadelphians fled cities and some suburbs last year, the data illustrate just how much the Jersey Shore benefited. A similar story emerges when looking at just the smaller set of accommodations industry figures (NAICS code 721), with Atlantic City experiencing one of the smallest two-year declines of any metro area tracked.

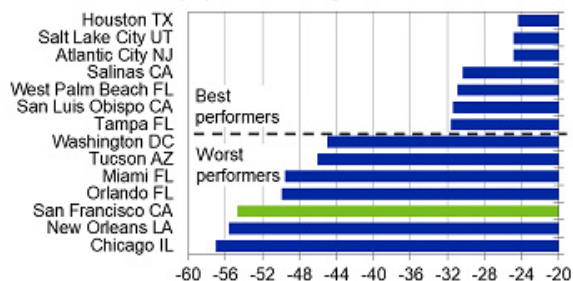
A relatively mild decline is also apparent in much of Texas as well as portions of the West and Florida. Among larger cities, Houston and Salt Lake City benefited from continued domestic in-migration and few restrictions—but neither is particularly tourist-reliant, making limited travel less of an issue for restaurants and other consumer establishments. A couple of small, coastal and tourist-

friendly California metro areas, namely Salinas and San Luis Obispo, were also among those that have fared best. The worst performances in accommodations and food services are no surprise. The mix of reduced visits and out-migration crippled dense coastal cities such as New York, Philadelphia and San Francisco. Kahului HI, which consists predominantly of the island of Maui, was also near the bottom of the list, based on a very high reliance on tourism.

But when honing in just on hotels, Chicago and New Orleans sink to the bottom of the list. Major Florida destinations, specifically Orlando and Miami, struggled as well. Washington DC, meanwhile, is an interesting contrast, performing relatively well when food services are considered but poorly after that category is removed. This indicates that while people are still out and about in the nation's capital, where more in-person business is being conducted due to the federal government, the number of visitors remains depressed.

## Losses Everywhere, but Degree Varies

Accommodation employment, % change from 19Q2 to 21Q2, NSA



Source: BLS, Moody's Analytics

More granularity is also available in figures from STR. Hotel occupancy from last January to this January—the most recent comparison available to us—indicate that the western U.S. has been hit disproportionately hard. San Francisco, Maui, and Orange County California were decimated by the pandemic's impacts on travel and broader restrictions.

Meanwhile, a more comprehensive approach and looking at revenue per available room, designated as RevPAR, add New Orleans and New York City to the list. Yet, the Big Apple fared better than some other cities, helping to put it in slightly less of a hole compared with metro areas where daytime population was not decimated as severely. Orlando again struggled using this metric but

was hit less hard than some other metro areas as a subset of travelers began to re-emerge by the beginning of this year.

The best performers, according to STR, are again the types of places with smaller tourism industries and relatively few restrictions. These include Houston, Tampa, and Virginia Beach/Norfolk. Washington DC is also on the list, but that is likely an anomaly driven largely by the presidential inauguration driving some demand in January despite the pandemic and security concerns.

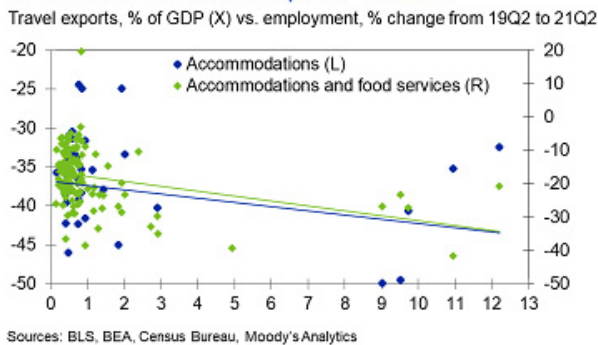
**Common threads**

So what are the ties that bind the markets where tourist-driven industries have fared best and worst? Some are relatively easy to see, with large expensive cities losing their appeal with many attractions shuttered. This remains a source of weakness, but it is gradually abating as more urban centers reopen.

Simply looking at a reliance on tourism is not terribly informative either. While the share of the economy tied to vulnerable tourist-related industries is predictive of overall economic struggles, this is due more to the composition of an area's economy than the performance of individual tourism sectors. In fact, a simple regression of tourism's share of employment against the two-year change in accommodations and food services employment is not significant and, even more striking, a regression that uses just accommodations industry employment as the dependent variable contains the wrong sign.

However, certain elements of a tourist destination's profile make it more susceptible to a slowdown. To see one of these clearly, we plotted the relationship between the change in tourism-related employment from spring 2019 to 2021 against metro area reliance on travel exports. Whether using a more expansive or limited definition of employment changes, the relationship is clearly negative.

**International Travel Spells Trouble**



The STR data do not reveal as obvious a narrative with year-over-year declines in occupancy displaying a

similarly negative relationship between travel exports and tourism reliance. But price reductions have been much more pronounced in areas that rely on international visitors, making the hit to RevPAR marginally greater. None of this is surprising when considering the fact that visitors from overseas tend to stay longer and spend more when visiting U.S. destinations. Their loss has proven devastating to some economies. The return of domestic travel has only driven a partial rebound.

**Business travel**

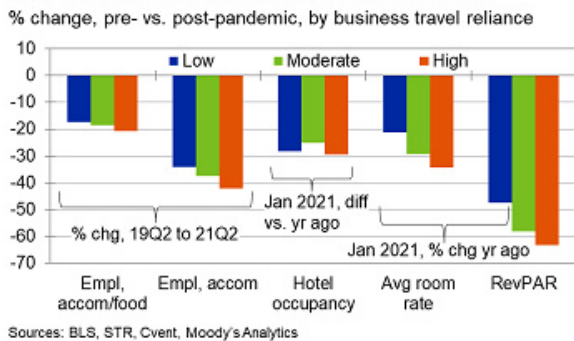
Another key element of some metro areas' struggles revolves around the types of visitors that they draw regardless of where those visitors originate. Leisure travelers have begun a meaningful return to many areas, but more profitable business travel has only barely begun to rebound. With in-person meetings remaining largely out of favor and many events potentially switching to a virtual format, business travel is likely in for continued weakness.

Unfortunately, it is very difficult to quantify the degree to which various economies are exposed, because business travel metrics are hard to come by. While some localities can determine this via surveys and other indirect metrics, there is no systematic way to examine this more broadly across metro areas and divisions using available data. In order to get around that limitation, we examined a list of the [top 50 event cities](#) from Cvent, which provides event management software. The list—based on figures from 2017—is partially subjective but aligns with general intuition about popular conference cities with Orlando, Las Vegas and Chicago at its top. Each boasts ample facilities and is a draw based on either its attractions, its convenience, or both.

Places that ranked in the top 20 for business travel or metro areas that featured more than one city were classified as highly reliant on business travel. In addition to the top three, this list includes many of the largest U.S. cities such as New York, Los Angeles, San Francisco and Houston. Other popular event locations include Atlanta, Miami, San Diego, Dallas and Phoenix. The list of moderately business travel-reliant metro areas includes Philadelphia, Seattle, Indianapolis and Tampa. Those that were not on Cvent's list were treated as low business travel metro areas.

Comparing the three categories makes it clear that a reliance on high business travel was linked to greater struggles. Again using a two-year growth rate, both accommodations-related employment categories fared noticeably worse in areas that need more business travelers; the gap was more pronounced when removing the food services component. And RevPAR is noticeably weaker in places with more business travel, driven by a much sharper decline in room rates.

## Business Travel Hubs Felt More Pain



To better understand which factor has mattered more so far, we ran a series of regressions using travel exports and a variable that was assigned a value of 1, 2 or 3 based on business travel reliance. The dependent variables reflect each BLS category and the three relevant hotel metrics. The results paint a nuanced picture, speaking to the importance of each variable. The broader measure of tourism-related employment shows that travel exports mattered more in predicting larger two-year declines. But a narrower definition that focused mostly on hotels in a smaller subset of metro areas supports the idea that reliance on business travel may actually matter more. The STR figures show that the loss of international travelers contributed far more to a decline in occupancy, but the drop in average room rates owes more to a lack of business travelers. On net then, RevPAR is hurt similarly by each with international travel exerting slightly more influence.

Put the data together, however, and a narrative emerges around hotels losing room nights as the longer stays associated with international travelers disappear and the higher rates for business travelers are no longer being charged. In other words, the channels by which each issue has hurt tourism differ, but both factors have played a significant role.

The recipe for a more complete recovery involves a rebound in both categories. And while neither is on the verge of a breakthrough, there is more reason for optimism in the medium term for international travel. Once the virus abates and fears dim, visitors from overseas should follow the path that many leisure travelers are treading in eagerly returning to U.S. destinations.

On the other hand, business travelers are already starting to return in small numbers, but their influence may be capped. Some business trips are likely to be shelved in order to save costs and increase efficiency, even after life returns to normal. This reflects one more reality of a world dominated by the impact of technology on day-to-day work and consumption.

All told, this spells a strong outlook for regional leisure destinations such as the Jersey Shore, Virginia Beach, or towns along the Pacific Coast Highway in California. But the medium-term outlook is more favorable than one might expect for international destinations with a more modest business presence, putting Hawaii in relatively good position. On the flip side, elevated travel exports and a high reliance on business travelers put Las Vegas and Orlando in a tenuous position despite favorable demographics and the return of some vacationers.

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# The Week Ahead in the Global Economy

## U.S.

Among the key data being released will be second quarter GDP, new-home sales, the Employment Cost Index, personal income/spending, PCE deflators, durable goods, initial jobless claims and the Conference Board Consumer Confidence Index. Our high-frequency U.S. GDP model has second quarter GDP rising 7.8% at an annualized rate. This could change as some additional source data will be released next week ahead of the government's advance estimate of second quarter GDP. With the new data on GDP, the Bureau of Economic Analysis will release its annual revisions.

Initial claims for unemployment insurance benefits will be for the week ended July 24, which is outside of the payroll reference period. Claims will likely be choppy over the next several weeks because of seasonal adjustment issues surrounding the annual auto retooling. The second-quarter Employment Cost Index will be key for inflation. For the transitory acceleration in inflation to turn into something else, a wage-price spiral would need to develop.

The Federal Open Market Committee will also meet. We don't expect any changes to either the Fed balance sheet or interest rate policies. We also don't expect any new information on plans for tapering asset purchases.

## Europe

Unemployment figures will dominate the economic releases next week. Overall unemployment in the euro zone is expected to hold steady at 7.9% in June. In

France, the number of job seekers is expected to fall to 3.41 million in June. The German unemployment rate is forecast to decline slightly to 5.9% in July from 6% while Spanish unemployment likely fell to 15.5% in the second quarter from 16%. However, we expect Italian unemployment will tick up 0.1 percentage points to reach 10.6% in June.

Also on the roster for next week are a mix of final estimates and preliminary GDP figures. Preliminary estimates of second-quarter GDP growth in the euro zone should show output rose 1.5% q/q, following a 0.3% contraction in the previous quarter. Output likely also picked up steam in Italy with second-quarter GDP growth estimated at 0.7% q/q, up from 0.1% q/q. However, we expect French output shrank 0.3% q/q in the second quarter. Lastly, the preliminary estimate of euro zone CPI is due next Friday. We're forecasting that inflation jumped 2.5% y/y in July after cooling somewhat to 1.9% y/y the previous month.

## Asia-Pacific

Japan's unemployment rate is likely to have remained unchanged at 3% in June, as rising raw material costs on the production side, combined with the relatively subdued confidence due to the pandemic-related uncertainty, are expected to have limited the scope for employment creation. Australia's annual inflation is likely to have risen to 3% in the June quarter, following a 1.1% reading in the prior quarter, with the uptick being driven by a low base effect, but also coming on the back of higher energy prices and strong domestic demand recovery.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
23-Jul to 8-Aug	Japan	Summer Olympics, Tokyo	Medium	Low
5-Sep	Hong Kong	Legislative Council elections	Low	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
29-May	Colombia	Presidential elections	High	Low



# An Eventual 10-Yr Rise Will Widen High-Yield Spread

BY RYAN SWEET

## CREDIT SPREADS

Moody's long-term average corporate bond spread is 98 basis points, up 1 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 110 bps by year-end 2021. The long-term average industrial corporate bond spread was unchanged over the past week, remaining at 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 132 basis points, 1 bp wider than that seen 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 by 8 bps over the past week to 135 bps.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 324 basis points widened by 14 bps and the bulk of this occurred on Monday when equity markets and the 10-year Treasury yield tumbled. The high-yield option adjusted bond spread approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread and roughly in line with the VIX of 17. The VIX has been bouncing around over the past few weeks.

## 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 fared noticeably better in the second quarter.

U.S. dollar-denominated investment-grade issuance was \$33.2 billion this week, bringing the year-to-date total to \$986.4 billion. High-yield corporate bond issuance has slowed recently, but that's typical this time of year. High-yield issuance was \$11.2 billion this week, bringing its year-to-date total to \$402.9 billion.

#### U.S. ECONOMIC OUTLOOK

There was a small downward revision to our GDP forecast for this year, the first in a while. We now look for real GDP to rise 6.7% this year, compared with the 6.9% in the June baseline. We had been consistently revising our forecast higher for GDP this year because of changes to our fiscal policy assumptions, but downward revision in the July baseline is small. Our forecast for GDP growth this year is a hair above the Bloomberg consensus for a 6.6% gain.

We made no adjustments to our forecast for GDP growth in 2022 and 2023. It remains at 5% and 2.3%, respectively. Supply issues could become a big problem, particularly for autos. Auto industrial production is trailing sales, lending downside risk to the forecast for GDP growth this year and early next.

The July forecast has real GDP surpassing its pre-COVID-19 level in the second quarter, the same as in the prior few forecasts. Year-over-year growth peaks in the second quarter for the cycle, now expected to be 12.9%, compared with the 13.2% in the June baseline.

The reason for the downward revision to GDP is a change to our fiscal policy assumptions. Recent political developments have forced us to tweak our federal fiscal assumptions in the July vintage of the baseline forecast. In late June, President Biden struck an infrastructure deal with a bipartisan group of senators to provide \$579 billion in new spending over 8 years above the expected baseline funding that Congress regularly renews. The July forecast therefore assumes that lawmakers pass this bipartisan infrastructure bill through regular order and a partisan Build Back Better package through budget reconciliation. The latter would only receive Democratic votes and would cover many other areas of Biden's fiscal agenda that were excluded from the bipartisan deal.

The baseline forecast assumes that this partisan reconciliation bill would include the following other infrastructure investments over the next decade: \$300 billion in affordable housing, schools and federal buildings; \$300 billion in manufacturing supply chains; and \$200 billion in R&D. All told, infrastructure spending under the bipartisan bill and the partisan reconciliation

measure would total \$1.4 trillion in the July forecast, down slightly from \$1.5 trillion in the June vintage. We also reduced our assumption of new social benefits spending from \$1 trillion in June to \$700 billion in July. If lawmakers pursue these two-track strategy to enacting Biden's Build Back Better proposals, core infrastructure spending, which is arguably the least contentious area of Biden's agenda, would be absent from the partisan reconciliation bill, and its absence could further complicate internal agreement within the Democratic Caucus about which social programs to spend on.

We also made a few tweaks to our Build Back Better assumptions on the tax side. Biden is only assumed to get half of the international tax changes he proposed, given the long and complicated road ahead for a global minimum tax. The tax rate on long-term capital gains for top earners would rise to 28% as Democratic Senator Joe Manchin has suggested, not the 39.6% proposed by the president. Our assumptions surrounding tax credits are unchanged from the prior month, and we still envision \$1.1 trillion in expanded tax credits over the next decade.

In sum, the July forecast assumes \$3.2 trillion in gross fiscal support via direct spending and tax credits. All but \$1 trillion of this amount would be paid for by higher taxes on corporations and well-to-do households over the next decade. However, within 15 years, the assumed Build Back Better agenda would be fully paid for. How gracefully congressional leaders can implement this two-track strategy to enacting the president's fiscal agenda is still uncertain. If the bipartisan infrastructure deal were to falter, the forecast assumes it would instead get included in a partisan reconciliation bill. What matters for the real economy is not necessarily passage, but rather implementation, of the Build Back Better proposals. Whether Congress passes one or two bills to do so, implementation is assumed to occur in early 2022.

There weren't any changes to our assumptions about monetary policy. We still expect the Fed to announce its tapering plans in September and the \$15 billion reduction to occur at each Federal Open Market Committee meeting in 2022. The Fed has signaled that it wants tapering to be on autopilot. Once its monthly asset purchases have been reduced from \$120 billion to zero, the Fed will reinvest proceeds from maturing assets to ensure its balance sheet doesn't contract, which would be contractionary monetary policy. We still look for the first rate hike in the first quarter of 2023.

Market expectations are for an earlier liftoff than either we or the Federal Open Market Committee anticipate. Markets also have a more gradual tightening cycle than in our baseline. Our more aggressive normalization in rates can't be explained by differences in projections for GDP growth, unemployment or inflation—our forecasts are almost spot-on with the FOMC's newly minted ones. It is difficult to see how policymakers could normalize rates in 2023 as slowly as the FOMC currently projects with the economy expected to be at full employment and inflation firmly above its 2% through-the-business-cycle target. If this were so, inflation expectations would almost surely move higher, and that's not something the Fed could shrug off.

There were no significant changes to the forecast for the 10-year U.S. Treasury yield, but the July baseline was posted before the sudden drop in the 10-year Treasury yield that has occurred this week. Technical factors appear to be pushing rates lower and this should be temporary as current 10-year Treasury yield of 1.3% is well below its economic fair value. We use an ordinary

least squares regression to estimate an "economic fair value" of the 10-year Treasury yield. A significant deviation from this estimate would imply that there are other forces that are driving long-term interest rates.

The five variables used in the regression are our estimate of monthly real U.S. GDP, the CPI, the current effective fed funds rate, the Fed's balance sheet as a share of nominal GDP, and a Fed bias measure that was constructed using fed funds futures.

All five variables were statistically significant with the correct sign and explained 63% of the fluctuation in the 10-year Treasury yield. The regression used monthly data. The model's implied "economic fair value" of the 10-year Treasury yield is between 1.6% and 1.65%. We still have the 10-year Treasury yield rising through the rest of the year, ending it near 1.9% but risks are weighted to the downside.

# Looking Up in the Euro Zone

BY KAMIL KOVAR

The euro zone economy's wild ride during the COVID-19 pandemic is nearing its end. The economy has been on a clear upward trajectory since April. The biggest question right now is how fast the economic bloc will regain its pre-pandemic peak, rather than whether it will grow or contract in a given quarter. The answer can be gleaned by looking at where each major sector of the economy stands relative to its pre-pandemic level and judging how fast it will grow.

In the first quarter of 2021, the euro zone GDP was 5.1% below its level in the last quarter of 2019. This number masks an historically unusual amount of disparity across countries, with Spain's shortfall almost double that of the euro zone, while Belgium and the Netherlands are faring better. There are even special cases such as Luxembourg, Lithuania and above all Ireland, where GDP is already above the pre-pandemic level.

The picture that emerges from cross-country comparison is fairly clear: The divergencies across countries at the beginning of this year are mostly related to differences in economic structure, as the pandemic was at a similar stage in all countries. Above all, the shortfall in the southern countries can be explained by their reliance on tourism and the correspondingly large size of sectors such as food and accommodation. (Greece's strong performance does not change this, as the country owes its success to a better situation in its manufacturing and construction sectors, not the tourism-related sectors.)

To understand where the 5.1% shortfall in euro zone GDP comes from, we need to look at the sectors responsible. By the first quarter of 2021, the main effect came from the trade sector, which contributed almost one-third to the overall shortfall in GDP. This reflects the trade sector's nosedive from its pre-pandemic level as well as its large share in GDP. Among the other large contributors are the other three sectors bludgeoned by pandemic restrictions—arts and entertainment, accommodation and food services, and transportation—as well as hard-hit sectors such as professional activities and administrative services.

Other sectors are either so close to their pre-pandemic level or are so small that their effect on GDP is negligible. This now applies even to construction and manufacturing, which dragged down GDP during the first few months of the pandemic. On the other hand, sectors such as finance and

information and communication are already above the pre-pandemic level.

## Onward and upward

The most likely path from here on is clearly upward. This is thanks to the vaccine rollout which, while not as rapid as in the U.S., has proceeded according to plan over the last several months. Around 55% of the total euro zone population has received at least one dose, and around 40% of the population is fully vaccinated. This has two implications. First, the government restrictions aimed at fighting the pandemic have largely been lifted, so that only restrictions on the riskiest behavior remain in place. Similarly, voluntary social distancing has been reduced. Second, the expectations of firms and households have dramatically improved, as they believe that the pandemic is finally over. These factors will push economic activity higher.

We expect euro zone GDP to surge by slightly more than 3% between the first and third quarters of 2021. Since the second quarter was still weighed down by the pandemic, the majority of the rebound will occur in the third quarter, in which GDP will increase 1.8% (nonannualized). The fourth quarter is still likely to witness rapid growth, putting output within reach of pre-pandemic levels by the end of this year. Once the pandemic recovery is complete, the growth rate will moderate somewhat, but it will remain above potential for two more years as it catches up to its pre-pandemic trend and gets a boost from the Next Generation EU program. Still, the euro zone economy is likely to remain smaller than was expected before the pandemic, unlike in the U.S., where the generous fiscal stimulus will push the economy above its pre-pandemic trend.

This outlook is not without risks. The elephant among them is the future path of the pandemic. Current focus is on the increase in new cases driven by the highly transmissible new Delta variant and the relaxation of government restrictions and voluntary social distancing. Although the surge seems worrying, it is not yet associated with a meaningful rise in hospitalizations or deaths, no doubt reflecting the fact that vulnerable age groups have largely already been vaccinated. More worrying than the Delta variant—against which vaccines are still greatly effective—is the possible emergence of a variant against which vaccines and natural immunity are largely ineffective...

# Extended Lockdowns May Ding Australia's DP

BY SHAHANA MUKHERJEE

Australia's latest outbreak is showing little sign of diminishing. Consistently high caseloads have given way to tighter restrictions being imposed in Sydney with effect from this week. The city, which continues to be at the center of the country's latest outbreak has been under a lockdown since June 26, but is now subject to more stringent movement curbs, including a pause on construction activity and all nonurgent services. Adding to concerns is that the state of Victoria is witnessing a gradual rise in cases, which has prompted a one-week extension of the state's lockdown, with South Australia treading along similar lines.

The downside risks to Australia's recovery have risen in recent weeks. Although the country's daily new cases, at a seven-day average of 120, remain a small fraction of its Asian counterparts, as well as its own previous waves, Australian authorities have struggled to ramp up the slow-paced domestic vaccine rollout, with often mixed signaling on plans to expedite the drive. This remains the single-biggest challenge in combating the threat posed by the current outbreak, which is being driven by the highly transmissible Delta variant of the virus.

With movement restrictions in New South Wales, and possibly other states, likely to remain in place beyond July 31, a moderation in retail trade is expected to intensify and drag on the spending revival through the September quarter. The renewed pause on domestic travel and tourism, and thereby, the larger hospitality and transport industries, however, can become more significant and debilitating. This is set to reverse some of the gains in employment revival since early 2021 and intensify sectoral disparities. The prompt provision of state-level fiscal support, such as the New South Wales and the Victorian governments' relief packages targeted at the

small and medium-size businesses, will play an important part in alleviating the short-term shock to cashflows and employment prospects amid the current uncertainty. But fiscal resources have limits, and interim financial assistance cannot entirely compensate for the increasing economic costs at the national level posed by snap shutdowns and the subsequent extended periods of state-border closures.

The duration, intensity and coverage of the current shutdowns will eventually determine the magnitude of the lost output. For now, assuming that restrictions in New South Wales are extended until late August but no other state is forced into a similar, long-duration lockdown, the localized hit to demand is forecast to soften real GDP growth to 0.3% in the September quarter, down by 0.3 percentage point from the pre-lockdown forecast. Contingent on the scale and duration of lockdowns, the months ahead may also see the Reserve Bank of Australia recalibrate its recently announced tapering plans and delay the unwinding of its \$200 billion quantitative easing program beyond September.

On the upside, recovering commodity prices, together with stable growth projections for China and the U.S. continue to uphold a favorable outlook for Australia's goods exports, and a strong trade position will lend support to Australia's growth through the rest of 2021. Further, at this stage, a relatively steady labour market, at the national level, also supports good potential for pent-up demand to power a post-restrictions' rebound beyond August. But weakening conditions in Victoria and other states remain additional downsides to the near-term outlook, which could necessitate further downward revisions in our growth forecast.

# Europe Sees Mixed Rating Actions

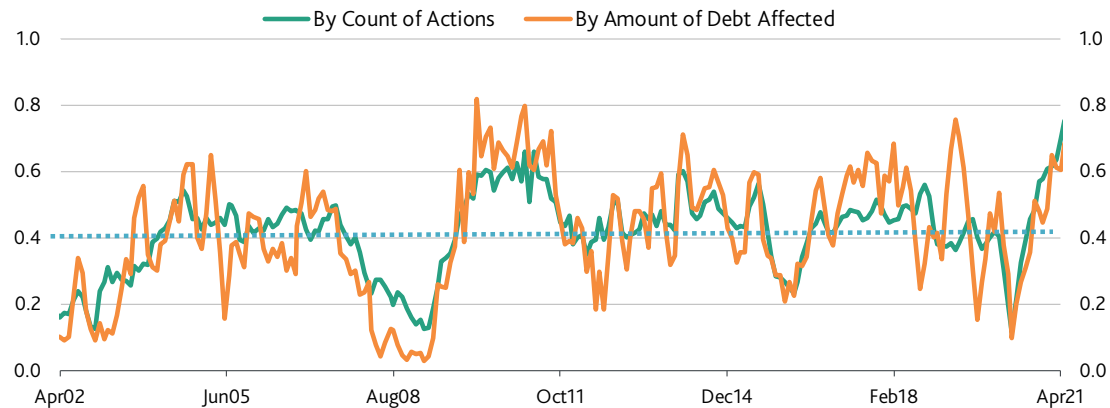
BY STEVEN SHIELDS

U.S. corporate credit quality improved in the latest period with upgrades accounting for all seven rating changes. Since the beginning of this year credit upgrades have outstripped downgrades nearly 2:1. The most notable recent upgrade was issued to Team Health Holdings Inc. with its senior unsecured notes raised to Caa3 from Ca. The upgrade, impacting approximately \$865 million in outstanding debt, reflects an improvement of the company's financial flexibility as a result of the extension of the maturity of its revolving credit facility. Meanwhile Moody's Investors Service upgraded Vista Outdoor Inc.'s Corporate Family Rating to Ba3 from B1 and its senior unsecured notes to B1 from B2. The ratings were upgraded because Vista's operating performance has materially improved and Moody's expects the company's credit metrics to remain robust over the next 12 to 18 months as strong demand for ammunition continues and the company works through its material backlog.

European ratings activity was mixed with upgrades only modestly outnumbering downgrades in the period. Among the changes, Moody's Investors Service lowered JT International Financial Services B.V.'s senior secured rating one notch to A2 from A1. The change reflects the gradual decline of the tobacco company's profitability and Moody's view of that its credit quality is not on par with that of the Government of Japan. The downgrade was the largest in terms of debt affected at roughly \$4.5 billion. The most notable upgrade was issued to Hamburg Commercial Bank AG on July 20 with roughly \$3.6 billion impacted in the process. The rating action was prompted by the upgrade of its counterparty risk assessment. The upgrade to Baa1 from Baa2 mirrors the bank's strengthened solvency profile as of year-end 2020, resulting from sustained progress toward meeting its overall transformation plan targets for the final assessment of its application as a full member by the German private banks' deposit guarantee scheme.

## 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

<b>BCF</b>	Bank Credit Facility Rating	<b>MM</b>	Money-Market
<b>CFR</b>	Corporate Family Rating	<b>MTN</b>	MTN Program Rating
<b>CP</b>	Commercial Paper Rating	<b>Notes</b>	Notes
<b>FSR</b>	Bank Financial Strength Rating	<b>PDR</b>	Probability of Default Rating
<b>IFS</b>	Insurance Financial Strength Rating	<b>PS</b>	Preferred Stock Rating
<b>IR</b>	Issuer Rating	<b>SGLR</b>	Speculative-Grade Liquidity Rating
<b>JrSub</b>	Junior Subordinated Rating	<b>SLTD</b>	Short- and Long-Term Deposit Rating
<b>LGD</b>	Loss Given Default Rating	<b>SrSec</b>	Senior Secured Rating
<b>LTCF</b>	Long-Term Corporate Family Rating	<b>SrUnsec</b>	Senior Unsecured Rating
<b>LTD</b>	Long-Term Deposit Rating	<b>SrSub</b>	Senior Subordinated
<b>LTIR</b>	Long-Term Issuer Rating	<b>STD</b>	Short-Term Deposit Rating

FIGURE 3  
Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
7/14/2021	BJS WHOLESALE CLUB INC	Industrial	SrSec/BCF/LTCFR/PDR		U	Ba3	Ba2	SG
7/15/2021	AMERICAN INTERNATIONAL GROUP, INC.-SAFG RETIREMENT SERVICES, INC.	Financial	SrUnsec/LTIR/JrSub/MTN		D	Baa1	Baa2	IG
7/15/2021	TEAM HEALTH HOLDINGS, INC.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	865	U	Ca	Caa3	SG
7/15/2021	FIRST ADVANTAGE HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG
7/16/2021	VISTA OUTDOOR INC.	Industrial	SrUnsec/LTCFR/PDR	500	U	B2	B1	SG
7/16/2021	ALBANY MOLECULAR RESEARCH, INC.	Industrial	LTCFR/PDR		D	B2	B3	SG
7/19/2021	LIGHTNING ACQUISITION, LLC-GREENWAY HEALTH, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG

Source: Moody's

FIGURE 4

## Rating Changes: Corporate &amp; Financial Institutions - Europe

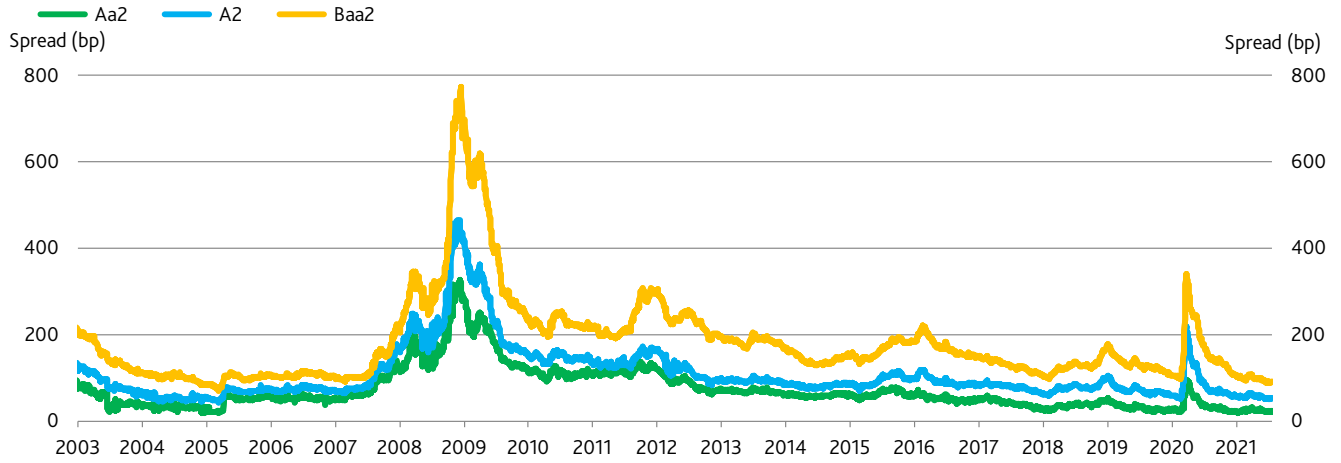
Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
7/14/2021	VIA SOLUTIONS NORD GMBH & CO. KG	Industrial	SrSec	506.77	U	Baa2	A3	IG	GERMANY
7/15/2021	VIRIDIAN GROUP HOLDINGS LIMITED- ENERGIA GROUP NI FINANCECO PLC	Utility	SrSec/SrSec/BCF/LTCFR/PDR	723.63	U	B1	Ba3	SG	UNITED KINGDOM
7/15/2021	BREITLING HOLDINGS S.A R.L.-BREITLING FINANCING S.A R.L.	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG	LUXEMBOURG
7/16/2021	TATE & LYLE PLC	Industrial	LTIR/MTN		D	Baa2	Baa3	IG	UNITED KINGDOM
7/16/2021	BNP PARIBAS-EXANE S.A.	Financial	LTIR		U	Baa2	Aa3	IG	FRANCE
7/16/2021	PRINCIPALITY BUILDING SOCIETY	Financial	LTCFR		D	A2	A3	IG	UNITED KINGDOM
7/16/2021	NOTTINGHAM BUILDING SOCIETY	Financial	STD/LTD		D	Baa2	Baa3	IG	UNITED KINGDOM
7/16/2021	GESTAMP AUTOMOCION, S.A.	Industrial	SrSec/LTCFR/PDR	472.36	U	B1	Ba3	SG	SPAIN
7/16/2021	S4B (ISSUER) PLC	Industrial	SrSec	101.40	U	Baa3	A3	IG	UNITED KINGDOM
7/19/2021	MCLAREN GROUP LIMITED-MCLAREN HOLDINGS LIMITED	Industrial	LTCFR/PDR		U	Caa2	Caa1	SG	UNITED KINGDOM
7/20/2021	JAPAN TOBACCO INC.-JT INTERNATIONAL FINANCIAL SERVICES B.V.	Industrial	SrSec/SrUnsec/LTIR/Sub/ MTN	4,497.51	D	A1	A2	IG	NETHERLANDS
7/20/2021	HAMBURG COMMERCIAL BANK AG	Financial	SrUnsec/LTIR/LTD/MTN	3,621.07	U	Baa2	Baa1	IG	GERMANY
7/20/2021	CONSORT HEALTHCARE (SALFORD) PLC	Industrial	SrSec	438.30	D	A2	Baa1	IG	UNITED KINGDOM
7/20/2021	CONSORT HEALTHCARE (TAMESIDE) PLC	Industrial	SrSec	257.35	D	A2	Baa3	IG	UNITED KINGDOM

Source: Moody's



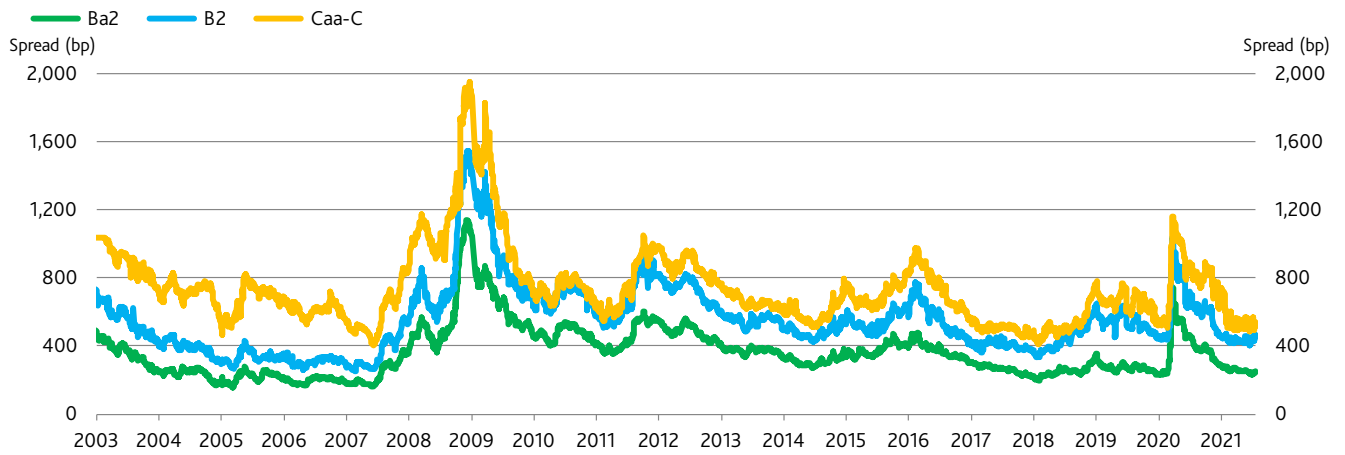
## MARKET DATA

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



Source: Moody's

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



Source: Moody's

## CDS MOVERS

Figure 3. CDS Movers - US (July 14, 2021 – July 21, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Jul. 21	Jul. 14	Senior Ratings
ERAC USA Finance LLC	Aa3	Baa3	Baa1
Emerson Electric Company	A1	Baa2	A2
Caterpillar Financial Services Corporation	A1	A2	A2
PepsiCo, Inc.	A2	A3	A1
General Motors Company	Baa3	Ba1	Baa3
Raytheon Technologies Corporation	A1	A2	Baa1
Chevron Corporation	Aa3	A1	Aa2
FedEx Corporation	A2	A3	Baa2
Tenet Healthcare Corporation	B1	B2	Caa1
Constellation Brands, Inc.	Baa2	Baa3	Baa3

CDS Implied Rating Declines	CDS Implied Ratings		
	Jul. 21	Jul. 14	Senior Ratings
Huntsman International LLC	A2	Aa2	Baa3
Burlington Resources LLC	A3	Aa3	A3
WEC Energy Group, Inc.	Baa2	A3	Baa1
Loews Corporation	A1	Aa2	A3
Alliant Energy Corporation	A3	A1	Baa2
Citigroup Inc.	Baa2	Baa1	A3
Bank of America Corporation	Baa1	A3	A2
JPMorgan Chase Bank, N.A.	A3	A2	Aa2
Morgan Stanley	Baa2	Baa1	A1
Citibank, N.A.	Baa3	Baa2	Aa3

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Jul. 21	Jul. 14	Spread Diff
Nabors Industries, Inc.	Caa2	884	744	140
Talen Energy Supply, LLC	B3	2,563	2,484	79
United Airlines, Inc.	Ba3	449	378	71
American Airlines Group Inc.	Caa1	713	649	64
Staples, Inc.	Caa1	860	797	63
K. Hovnanian Enterprises, Inc.	Caa3	717	662	55
United Airlines Holdings, Inc.	Ba3	432	382	51
Royal Caribbean Cruises Ltd.	B2	388	348	40
Occidental Petroleum Corporation	Ba2	228	191	38
Murphy Oil Corporation	Ba3	347	309	38

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Jul. 21	Jul. 14	Spread Diff
ERAC USA Finance LLC	Baa1	35	74	-39
Emerson Electric Company	A2	36	58	-22
iStar Inc.	Ba3	228	241	-13
Rite Aid Corporation	Caa3	858	870	-12
Dillard's, Inc.	Baa3	113	122	-9
HCA Inc.	Baa3	85	90	-6
Exelon Generation Company, LLC	Baa2	90	96	-6
Cardinal Health, Inc.	Baa2	53	60	-6
McKesson Corporation	Baa2	43	50	-6
Avnet, Inc.	Baa3	78	84	-6

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (July 14, 2021 – July 21, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
	Jul. 21	Jul. 14	Senior Ratings
Issuer			
DZ BANK AG	Aa1	Baa2	Aa1
Banque Federative du Credit Mutuel	Aa3	A3	Aa3
Landesbank Hessen-Thuringen GZ	A1	A2	Aa3
Banco Comercial Portugues, S.A.	Ba2	Ba3	Ba1
Deutsche Post AG	Aaa	Aa1	A3
Alliander N.V.	Aa2	Aa3	Aa3
Sappi Papier Holding GmbH	B3	Caa1	Ba2
3i Group plc	Baa3	Ba1	Baa1
Ineos Group Holdings S.A.	Ba3	B1	B2
ABB Ltd	A1	A2	A3

CDS Implied Rating Declines	CDS Implied Ratings		
	Jul. 21	Jul. 14	Senior Ratings
Issuer			
E.ON SE	A1	Aa2	Baa2
Swisscom AG	A1	Aa2	A2
Adecco Group AG	A1	Aa2	Baa1
France, Government of	Aa1	Aaa	Aa2
Credit Agricole Corporate and Investment Bank	Aa2	Aa1	Aa3
Banca Monte dei Paschi di Siena S.p.A.	B1	Ba3	Caa1
KBC Bank N.V.	Aa3	Aa2	A1
Unione di Banche Italiane S.p.A.	Baa3	Baa2	Baa3
Iberdrola International B.V.	A3	A2	Baa1
Unibail-Rodamco-Westfield SE	Ba1	Baa3	Baa2

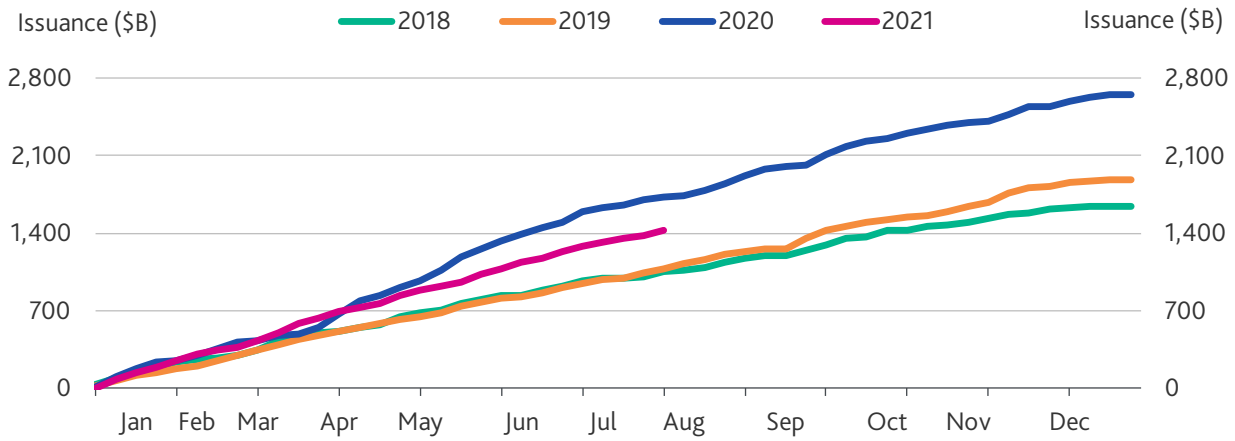
CDS Spread Increases	Senior Ratings	CDS Spreads		
		Jul. 21	Jul. 14	Spread Diff
Issuer				
Vedanta Resources Limited	Caa1	938	887	50
TUI AG	Caa1	792	747	44
Banca Monte dei Paschi di Siena S.p.A.	Caa1	234	192	41
Novafives S.A.S.	Caa2	796	754	41
Casino Guichard-Perrachon SA	Caa1	528	493	35
Piraeus Financial Holdings S.A.	Caa3	563	541	21
Deutsche Lufthansa Aktiengesellschaft	Ba2	270	254	16
Avon Products, Inc.	Ba3	230	215	15
Rolls-Royce plc	Ba3	235	224	12
Eksportfinans ASA	Baa1	331	321	10

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Jul. 21	Jul. 14	Spread Diff
Issuer				
DZ BANK AG	Aa1	24	61	-37
Banque Federative du Credit Mutuel	Aa3	35	42	-7
Banco Comercial Portugues, S.A.	Ba1	174	181	-7
Swedish Match AB	Baa2	59	62	-3
Nokia Oyj	Ba2	83	85	-2
SES S.A.	Baa2	74	77	-2
Alliander N.V.	Aa3	34	35	-2
Wm Morrison Supermarkets plc	Baa2	160	161	-2
Novartis AG	A1	10	12	-2
UPC Holding B.V.	B3	226	228	-2

Source: Moody's, CMA

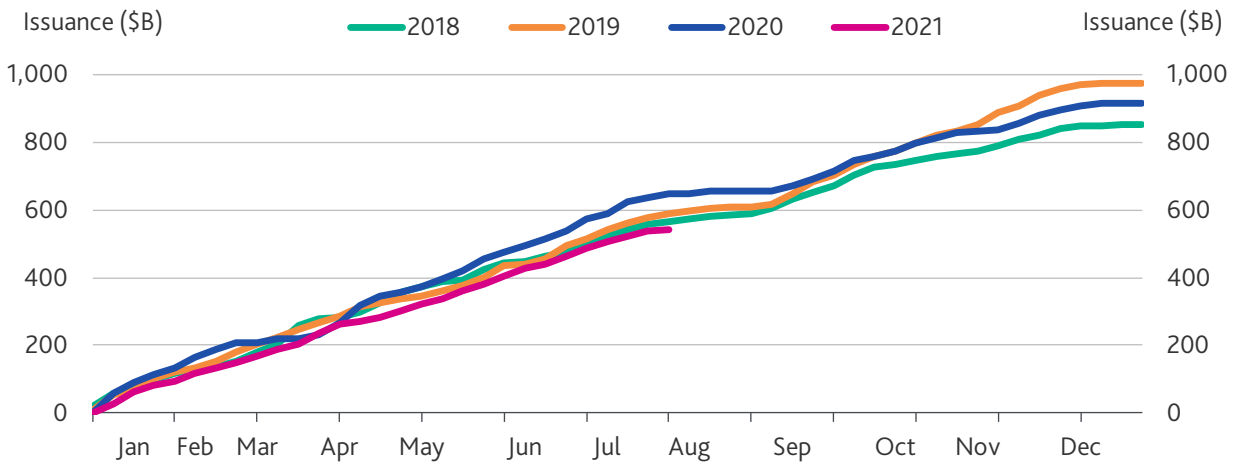
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

## ISSUANCE

**Figure 7. Issuance: Corporate & Financial Institutions**

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	33.200	11.219	46.600
Year-to-Date	986.393	402.932	1,427.428

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	2.071	2.939	5.009
Year-to-Date	421.587	105.808	541.893

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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