

**WEEKLY MARKET
OUTLOOK**

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Fed Talked the Talk, Walked the Walk

The front-loading of interest rate hikes by the Federal Open Market Committee has begun, and this won't be the last aggressive hike by the central bank, since it is behind the curve on inflation. As widely expected, the FOMC this week raised the target range for the fed funds rate by 50 basis points to 0.75% to 1%. It was the first 50-basis point rate hike since May 2000.

There were some changes to the FOMC's post-meeting statement. What stood out is the phrase that Fed policymakers are highly attentive to inflation risks—a hawkish stance. There is a long list of inflation risks, including lockdowns in China, Russia's invasion of Ukraine, and its impact on energy and food prices. Also, the U.S. labor market is tight.

The FOMC also announced the runoff of its balance sheet beginning on June 1. The initial pace is \$47.5 billion per month, but after three months that will increase to \$95 billion. This isn't a gradual increase; the September rise will be sudden. To start, the runoff is \$30 billion for Treasuries and \$17.5 billion for mortgage-backed securities. The Fed has a ton of Treasury securities maturing over the next several months giving it the opportunity to be more aggressive on the reduction in its balance.

If the Fed sticks with its current plan, its balance sheet will decline by about \$520 billion this year. This may sound like a lot, but the balance sheet will still be massive, around 37% of nominal GDP. It was less than 20% of nominal GDP before the pandemic. And there was no mention of MBS sales.

Table of Contents

- Top of Mind** 3
- Week Ahead in Global Economy**... 5
- Geopolitical Risks**..... 6
- The Long View**
- U.S.7
- Europe 11
- Asia-Pacific13
- Ratings Roundup** 14
- Market Data** 17
- CDS Movers**..... 18
- Issuance** 21

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We noticeably altered our forecast for the fed funds rate in our April baseline, but another change could be needed in May. The effective fed funds rate is now forecast to average 2.1% in the fourth quarter, compared with 0.9% in the March baseline. The FOMC may get rates to 2% sooner than in our baseline by hiking 50 basis points at each of the next couple of meetings. The terminal fed funds rate, or where rates peak this cycle, is now 2.75%, 30 basis points higher than in the March baseline and will be hit nearly a year earlier than in the March baseline.

Powell's optimism

With the Fed front-loading hikes, the debate about a soft landing will intensify. History would suggest the odds of a soft landing are low, because 11 of the past 14 rate-hike cycles have been followed by a recession within two years. The 78% probability of a hard landing exceeds our threshold of a two-thirds probability of recession needed to adopt a downturn in the baseline.

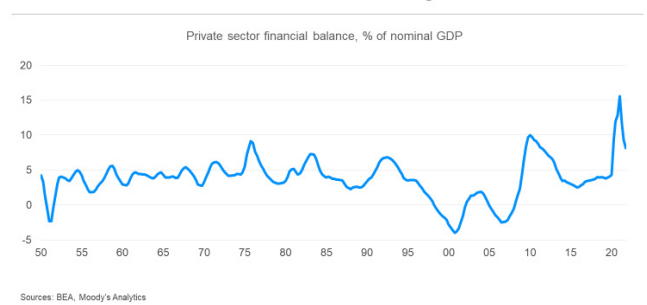
Yet, correlation doesn't mean causation. Just because a recession followed a Fed tightening cycle doesn't mean the central bank was the primary cause of the downturn. With each of the past three tightening cycles, the Fed was not the primary cause of the economic downturn.

During his post-meeting press conference, Fed Chair Jerome Powell sounded optimistic that the economy could handle the tightening in monetary policy. He acknowledged that inflation is hurting consumers and that the inflation buck stops with him. He said the Fed can hike rates and avoid a recession. He noted that there is broad support on the FOMC for 50-basis point hikes at each of the next two meetings. Unless the economy takes a turn for the worse or financial market conditions tighten significantly further, this may need to be our baseline assumption.

What about a soft landing?

Another reason to hope that the Fed can pull off a softish landing is the health of consumer and nonfinancial corporate balance sheets. Household debt service and financial obligation ratios are low, and in aggregate consumers are sitting on \$2.6 trillion in excess savings. This could help cushion consumer spending as the economy softens in response to the Fed's aggressive tightening cycle. Consumers didn't have this much cushion in past tightening cycles. Therefore, as unemployment increases while the Fed raises rates, the hit to spending could be less than in the past. This doesn't ensure a soft landing, but it does increase the odds.

A Cushion for a Soft Landing



This assessment may seem rosy given that the private-sector financial balance—the difference between private savings and private investment plus the statistical discrepancy as a share of nominal GDP—has dropped recently and is in line with the last expansion and lower than that just prior to the Great Recession. However, the bulk of the reason for the decline is the statistical discrepancy, which is the official adjustment factor in the National Income and Product Accounts that ensures equality between the income and expenditure approaches to measuring GDP. It is currently among the largest on record. The gap between private savings and investment is still above its pre-pandemic trend. This could help the Fed engineer a soft landing.

Another reason is money illusion in the financial markets. Households tend to think of their income in nominal rather than in real terms, known as money illusion. This may also apply to financial market conditions. Though the Fed is going to aggressively raise interest rates, real interest rates will remain negative. Even if fed funds futures are correct and the terminal fed funds rate this cycle is 2.7%, assumed by the market-based measures of inflation expectations, the real fed funds rate will still be negative. The real fed funds rate has been positive ahead of each of the past several recessions. However, this could be a mixed bag in terms of recession risks. With real interest rates firmly negative, the Fed could see the necessity to tighten even more than anticipated to achieve the needed financial market conditions to tame inflation.

Our model puts the probability of a U.S. recession in the next 12 months at 32%, but the financial market inputs are not adjusted for inflation. When the model was created, inflation was low and had been low for a long time. However, if we adjust financial market inputs for inflation, including the yield curve, the fed funds rate, and the equilibrium fed funds rate, the probability of recession in the next 12 months would be cut in half.

There are plenty of reasons to be worried that the Fed can't pull off a soft landing, but there are reasons that it can.

In Monetary Policy, One Size Won't Fit All

BY ADAM KAMINS

Imagine a world in which instead of the Federal Reserve, [monetary policy](#) in the U.S. was determined by state-level or regional central banks. With [labor market](#) and [inflation](#) dynamics varying noticeably in different parts of the country, a more granular approach would mean more aggressive interest rate increases in places with more extreme price growth, like the Sun Belt and Mountain West, and a more dovish approach along the coasts.

Of course, such a world does not exist outside of a fanciful thought exercise. Thus, the Fed is compelled to satisfy its dual mandate of minimizing unemployment while keeping prices stable for as much of the country as possible. But in aggressively raising interest rates to corral inflation, policymakers are leaving some winners and losers in their wake.

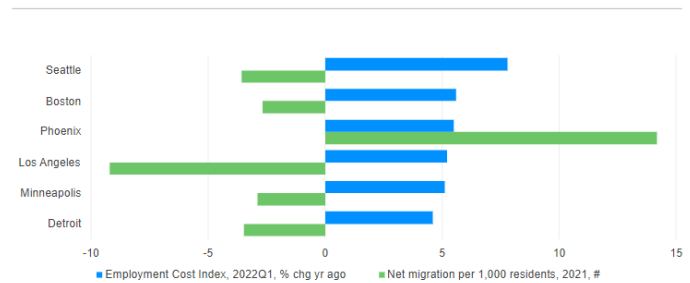
A basic relationship

Perhaps the clearest way to understand why the Fed's approach does not fit all regional economies is to consider a regional version of the Phillips curve, which plots the unemployment rate against price growth. The curve is based on the precept that those two variables tend to live in opposition to one another. While much ink was spilled last expansion over whether it has become antiquated, a plot of recent data on consumer prices and joblessness for the 22 metro areas for which figures exist show that it remains very much intact.

Comparing the unemployment rate relative to its pre-pandemic low and metro area consumer price indexes, it is clear that the Phoenix economy is running hotter than any other in the U.S. The unemployment rate is 150 basis points below its prerecession figure, while price pressures are the nation's most pronounced.

Inflation in Phoenix is also flowing into wages despite robust in-migration. As of the first quarter, the Employment Cost Index in the Valley of the Sun—which controls for industry composition and tracks wages across 15 large metro areas—was near the top of the list nationally. The other economies with especially strong wage gains saw more people move out than in, which in many cases marked a reversal from pre-pandemic trends. In other words, a shortage of workers has created upward pressure on wages across numerous large metro areas, but in Phoenix the story is largely demand-driven.

Largest Wage Increases Are (Mostly) Tied to Shrinking Worker Pool



Sources: BLS, Census Bureau, Moody's Analytics

Atlanta and Tampa also show the hallmarks of economies that are running hot. In both places, strong in-migration and resilience in the face of the pandemic have put upward pressure on prices and returned joblessness to early-2020 levels. Minneapolis appears to have the best of all worlds, with low unemployment and relatively modest inflation, but a closer look reveals that both are driven by a disappointing labor force recovery.

Large gateway markets, meanwhile, look like a more difficult needle for the Federal Reserve to thread. In New York City and San Francisco, price growth is about half that of high-inflation Sun Belt areas, while Boston and Washington DC are also far below average. Each of these remains at least a point away from its prior unemployment rate low, with Los Angeles especially far from its previous best.

In each of these metro areas, inflation remains well above its long-term target. But the urgency with which a hawkish approach has been adopted seems more tailored to the more pronounced price gains seen elsewhere. A focus on inflation-busting in some major urban centers where the recovery from COVID-19 is far from complete could prove a significant setback.

Distance from prior heights

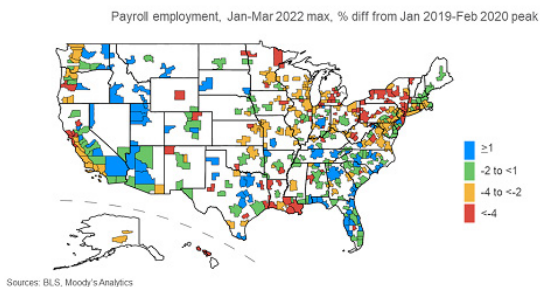
With that in mind, knowing which regional economies are farthest from expansion can help identify where the risk of tightening too rapidly is most problematic. With full employment still a ways off in those places, there is far less room to withstand a sharp increase in borrowing costs that weighs on investment by businesses and individuals.

Big cities are clearly the most vulnerable. Not only has the increased popularity of remote and hybrid work arrangements weighed on consumer spending in urban

cores, but real estate markets have suffered as well. Condo price growth in large cities pales in comparison with single-family gains in their metro areas, and rapidly rising mortgage rates mean tougher times ahead for all property types. Similarly, increasing borrowing costs represent yet another obstacle for an already hard-hit downtown office market.

Energy-dependent economies are also nowhere near a full recovery. Midland and Odessa TX, the nation's two most mining-reliant metro areas, rank near the bottom in share of lost jobs recouped, joined by much of Louisiana and other energy hubs. Rising borrowing could weigh on investment in the near term, but surging oil prices in the wake of Russia's invasion of Ukraine should promote a pickup in drilling and make hawkish monetary policy less problematic for many of these markets.

Northeast and Midwest Remain Furthest From Prior Heights



Within other categories, the story is not nearly as sanguine. College towns and tourism hubs remain far from their prior heights, and while both have rallied amid increasingly relaxed restrictions, higher interest rates could deal a fresh setback. Tourist-driven economies are far more vulnerable, given the cyclicity of both leisure and business travel. But for college towns where small businesses may still be struggling to stay afloat, higher interest payments on loans or a diminished capacity to hire and invest could also make self-sustaining expansion a bit more elusive.

From a broader regional perspective, it is little surprise that the Northeast and Midwest are farthest from prior heights. Both regions will remain off the pace in early 2023, with the Mid-Atlantic struggling most. This suggests that higher interest rates could prove especially problematic in those regions.

On the flip side, the Mountain West, Texas, and much of the South are already back to previous peaks and showing few signs of slowing down. For those parts of the country, a less

accommodating rate environment represents a challenge but one that should prove far more surmountable.

Permanent scars?

The costs of adopting an overly draconian approach to fighting inflation are clear in the short run, as recoveries are stopped in their tracks before reaching the finish line. But there can be long-term ramifications when a metro area takes a turn in the wrong direction before making a full recovery.

Economies that failed to regain their prior heights in the last expansion have performed far worse since the pandemic began. Structural weakness was largely to blame for many struggles and partly continued into this decade. But even after acknowledging the role of industrial composition, it becomes clear that the list of metro areas that did not make it all the way back is not one that any place wants to find itself on.

To see this, consider the fact that 69 of the nation's more than 400 metro areas failed to return to prior heights during the 2000s before the Great Recession struck. Among those, many of which are manufacturing hubs that struggled to adapt to globalization, nearly two in three also failed in the 2010s to match their best employment reading of the prior decade, suggesting a long-term secular decline. In contrast, among places that regained their prior peak in the 2000s, only one in six failed to do so after the Great Recession.

This suggests trouble on the horizon for big cities. As with other measures like the yield curve, the issue revolves less around failing to return to prior heights as the be-all and end-all. Instead, it reflects underlying structural weakness. A potentially diminished emphasis on the old model of a large urban core in which daytime population surges may spell a long-term decline for major urban centers in mature regions.

The news is not all bad. If another downturn awaits, it could mirror the early 1980s, when the Fed pushed the economy into recession in order to break inflation. During that period, states with high unemployment rates at the end of their expansions saw joblessness spike at an above-average clip, but they were able to return to their prior lows relatively quickly. This suggests that while entering into an expansion from a position of relative weakness is certainly not desirable, doing so may not be quite as calamitous as in more recent cycles.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar is lighter next week, but the focus will be on inflation. The April consumer price index will be released, and there should be a significant deceleration in the month-to-month growth rate, as the boost from higher energy prices in March won't be duplicated. Year-over-year growth will also decelerate, though it will remain above 8%. This is the first step in the long path to returning inflation to the Federal Reserve's target. We also get a look at producer and import prices for April. Outside of inflation, initial claims for the week ended May 7 will also be released. New filings have edged higher recently but they're still low.

Europe

U.K. GDP likely grew 0.5% q/q in the first three months of 2022. This is after a 1.3% increase in the last quarter of 2021. The economy slowed as the outbreak of the Omicron variant suppressed activity at the start of the year, and supply disruptions and rising prices weighed on households and firms. Government spending supported GDP at the start of the year, but the wind-down of the vaccination campaign and track and trace meant that by the end of the quarter the impulse was weaker. The government did commit to extra support measures heading into the second quarter, though these won't show up in direct government consumption.

Euro zone industrial output likely fell 0.6% m/m in March after a 0.7% upturn in February. We expect supply shortages weighed on total output. The Russian invasion of Ukraine sent an immediate shock as supply lines from Russia, Ukraine and Belarus were cut off. Anecdotes such as factory shutdowns by Volkswagen speak to downside risks. That said, the manufacturing PMI was still upbeat, and less exposed sectors likely continued to register growth.

Final readings of CPI in Germany, France and Spain will likely fall in line with preliminary estimates. The inflation rate in Germany likely inched up to 7.4% y/y in April from 7.3%, that in France to 4.8% from 4.5%, while Spain's fell to 8.4% from 9.8%. Energy commodity prices softened in April which alleviated the pressure in each country (Spain most due to the immediacy of pass-through from wholesale to consumer utility prices in the country).

In Russia, meanwhile, we expect the inflation rate sped up to 17.9% y/y in April from 16.7% in March. The cost of living crisis in the country therefore is continuing and showing up in indicators such as the PMI, which most recently reported lower domestic demand. A more stable ruble has helped inflation, but real supply conditions have been upturned by Russia's invasion of Ukraine, and this will keep inflation pressures on.

Following the temporary suspension of the Russian Federation's merchandise trade monthly publication by the Central Bank of Russia starting April 11, the Russian Federal Statistical Office did not publish the respective monthly series as planned on April 27. No further information is currently available, although neither the CBR nor Rosstat has changed their official publication schedules. Therefore, we are adding a forecast for both February and March. We expect the balance rose to \$22.5 billion in February and then paired back to \$19.5 billion March. Despite sanctions, trade of energy commodities, Russia's most important export, has continued. A decline in imports may even support the balance.

Asia-Pacific

Malaysia's March quarter GDP will be the highlight on the economic calendar. The Malaysian economy is forecast to have expanded 1.1% quarter on quarter in the March quarter following a 6.6% expansion in the prior quarter. The gains from a robust external position have largely extended into the March quarter. Also, a lift in private consumption after an easing of COVID-19 restrictions and policy shift towards living with COVID-19 is likely to have supported March-quarter growth. Bank Negara Malaysia is expected to keep its benchmark policy rate steady at 1.75% at its May meeting.

Inflation readings for April are expected to trend higher in Asia. India's consumer price index is likely to have risen to 7.3% y/y last month from 7% in March, reflecting higher food prices and elevated energy costs. Similarly, consumer prices in Indonesia are expected to pick up to 3% y/y in April from 2.6% previously.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
8-May	Hong Kong	Chief executive election	Low	Low
9-May	Philippines	General election/Presidential election	Low	Low
12-13-May	U.S.	U.S.-ASEAN summit	Medium	Low
21-May	Australia	Federal election	Low	Low
22-26-May	Switzerland	World Economic Forum annual meeting	Medium	Low
29-May	Colombia	Presidential election	Medium	Low
29-30-Jun	NATO	NATO Summit, hosted by Madrid	Medium	Medium
Jun/Jul	PNG	National general election	Low	Low
2-Oct	Brazil	Presidential and congressional elections	High	Medium
Oct	Indonesia	G20	Medium	Low
Oct/Nov	China	National Party Congress	High	Medium
7-Nov	U.N.	U.N. Climate Change Conference 2022 (COP 27)	Medium	Low

YTD Investment-Grade Bond Issuance tops \$625 Billion

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 151 basis points, identical to this time last week but wider than the 142 bps average in April. The long-term average industrial corporate bond spread also didn't budget at 138 bps. It averaged 129 bps in April.

The recent ICE BofA U.S. high-yield option adjusted bond spread is off its recent peak of 420 basis points but it widened from 389 bps last week to 410. The Bloomberg Barclays high-yield option adjusted spread has bounced around recently and is currently 390 bps compared with the 375 bps at this time last week. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and that implied by a VIX of 31.

Volatility in high-yield corporate bond spreads also isn't significantly higher than just prior to the pandemic, when the ebbs and flows in the economy were noticeably less than now. We reached this conclusion after calculating a 25- and 50-day rolling standard deviation in the high-yield corporate bond spread.

Defaults

The trailing 12-month global speculative-grade default rate was 2.0% at the end of March, unchanged from the prior month. This default rate calculation does not include those defaulting and non-defaulting Russian issuers whose ratings were withdrawn by Moody's in March. The March default rate would have been 3.1% if we had included those issuers. However, including these issuers in the default rate calculations would be misleading because Moody's no longer can obtain adequate information to ascertain their default status.

Two factors will be critical in driving near-term default trends: spillover severity of the Russia-Ukraine military conflict and the aggressiveness of monetary tightening in major economies. If the military conflict extends and international sanctions escalate, the higher the chances of a global recession and the greater the credit risks it introduces. Under our baseline scenario, however, we are not forecasting a global recession. One reason is that although the invasion of Ukraine is unambiguously negative for consumer confidence and economic activity, the crisis hit when the global economy was at cruising altitude. This is consistent with what high-yield spreads are indicating; they

have widened in Europe and the U.S., but they remain near or below their historical averages for now.

Against this backdrop, Moody's Credit Transition Model predicts that the global speculative-grade corporate default rate will edge lower to 1.9% for April, May and June before rising to 2.9% in March 2023. That rate, if realized, would still be below the long-term average of 4.1%. Our baseline forecasts assume that the U.S. high-yield spread will widen to 497 bps over the next four quarters from about 350 bps now. This will be partially offset by a slight improvement in the U.S. unemployment rate, which we expect to edge lower to 3.5% by the end of March 2023 from the current rate of 3.6%.

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.

Issuance softened in the third quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 5% for investment grade. U.S. denominated corporate bond issuance also fell, dropping 16% on a year-ago basis. High-yield issuance fared noticeably better in the third quarter.

Fourth-quarter 2021's worldwide offerings of corporate bonds fell 9.4% for investment grade. High-yield US\$ denominated high-yield corporate bond issuance fell from \$133 billion in the third quarter to \$92 billion in the final three months of 2021. December was a disappointment for high-yield corporate bond issuance, since it was 33% below its prior five-year average for the month.

In the first quarter of 2022, worldwide offerings of investment grade corporate bonds totaled \$901 billion, up 12% on a year-ago basis.

In the week ended April 29, US\$-denominated high-yield issuance totaled \$5 billion, a touch less than in the prior week. This brings the year-to-date total to \$78.1 billion. Investment-grade bond issuance rose \$10.7 billion in the week ended April 29, bringing its year-to-date total to \$625.4 billion. Total US\$-denominated issuance is currently tracking that seen in 2018 and 2019.

U.S. ECONOMIC OUTLOOK

Adjustments to our forecast in April were more significant than in prior months. The larger downward revision to the baseline forecast for U.S. GDP growth this year is mostly attributed to the larger adverse impact of the military conflict between Russia and Ukraine on the European economy, global energy prices, and U.S. financial market conditions.

One link between the Russian invasion and the global economy is through financial market conditions. To gauge the effect of geopolitical risk on U.S. financial markets, we leaned on a vector autoregression model that allowed us to estimate the response of equity prices, oil prices, the VIX, and high-yield corporate bond spreads. We also included some measures of economic activity. A sudden increase in geopolitical risk had a greater impact on financial markets than the economy. However, the tighter financial market conditions, with a lag, weigh on the economy.

Some other variables included in our VAR were the Federal Reserve's geopolitical risk index and economic policy uncertainty. There are two periods where both geopolitical risk and U.S. policy uncertainty increased, including the Gulf

War and 9/11. The VAR used monthly data since January 1995 and included a few lags.

Our VAR results revealed that financial market conditions have tightened in line with that implied by the rise in geopolitical risk. However, the increase in volatility and widening high-yield corporate bond spreads are sticky and will have a larger drag on growth than previously thought. Also, oil prices have been a little higher than we anticipated in the prior baseline.

Window is closing

There is still a window of opportunity for Democrats to pass a reconciliation bill, but it is closing. The new baseline forecast assumes Democrats pass a \$560 billion package that is solely focused on clean-energy tax credits and climate resilience investments. Previously, we assumed Democrats would also modestly expand the Child Tax Credit by making it fully refundable on a permanent basis, but this assumption was removed in April, reducing the size of spending under reconciliation by about \$50 billion over 10 years. There were no changes to our assumptions on the pay-for side. The package is still assumed to feature more than \$700 billion in higher taxes on well-to-do households and prescription drug savings. As a result, the reconciliation bill would lead to a net reduction of more than \$150 billion in cumulative deficits over the next decade.

For now, we are setting Memorial Day as a deadline for Democrats to arrive at some agreement over a reconciliation framework. Otherwise, we will remove this reconciliation package from the June baseline. By that time, it will be very tough for Democrats to negotiate a reconciliation package from scratch with the midterms rapidly approaching. Therefore, April and May will be crucial months in determining whether Democrats can rally around a reconciliation bill. Though the confirmation of Judge Ketanji Brown Jackson for the Supreme Court is over, there will be other priorities such as a \$10 billion COVID-19 funding bill and legislation to boost U.S. economic competitiveness with China that could distract from negotiations on a reconciliation bill. Further, getting all Democrats to agree on a reconciliation bill, no matter how slimmed down it is, could prove tricky. To get Senator Joe Manchin on board, any Democratic reconciliation bill would likely need to include investments in fossil fuel infrastructure, something that would be anathema to progressives.

COVID-19 assumptions

Changes to our epidemiological assumptions were minor in April. Total confirmed COVID-19 cases in the U.S. will be 81.35 million, compared with the 81 million in the March baseline. The number of assumed cases is still well above that assumed before the Omicron variant. The seven-day

moving average of daily confirmed cases has stabilized around 30,000 for the past several weeks.

We have replaced the concept of herd immunity with "effective immunity," which is a rolling number of infections plus vaccinations to account for the fact that immunity is not permanent. The forecast still assumes that COVID-19 will be endemic and seasonal. However, each passing wave is assumed to have a diminishing economic effect.

Energy price assumptions

Our assumption is that the oil supply disruption from Russia's military conflict with Ukraine will be between 2 million and 3 million barrels per day. The anticipated loss in Russian supply will be largely offset by increasing OPEC and non-OPEC output, demand destruction due to higher prices, and the flexibilization of sanctions on Iran and Venezuela. Our baseline forecast assumes that the global oil market remains mostly balanced throughout the year, allowing oil prices to gradually drop. The price of West Texas Intermediate crude oil averages \$85 per barrel in the year's final quarter, down from \$105 in the second quarter. Prices continue to fall in 2023 as Russia's oil supply starts to recover. Assumptions around oil prices are becoming crucial to the evolution of the baseline forecast.

Nudging GDP lower

The April baseline factors in increasing costs of higher global energy prices and tighter financial market conditions. We now expect real GDP to rise 3.2% this year, compared with the 3.5% in the March baseline. Over the past three months we have shaved 0.5 of a percentage point off our forecast for GDP growth for this year. We cut the forecast for GDP growth in 2023 from 3.1% to 2.7%. The economy is still expected to grow above its potential, which is likely between 2% and 2.5%.

The forecast for first-quarter GDP growth was nudged higher from 0.7% to 0.9% at an annualized rate, not a significant deviation from our high-frequency GDP model's estimate. For the second consecutive month, the bulk of the downward revision for this year was in the second quarter, as real GDP is now expected to increase 3.4% at an annualized rate, compared with the 4.8% annualized gain in the March baseline. Growth in the third quarter was also cut from 2.5% to 1.6% at an annualized rate. The forecast for GDP growth in the final three months of this year was revised lower by 0.5 of a percentage point to 2.3% at an annualized rate.

A good chunk of the downward revision to GDP growth this year is because of softer real consumer spending than in the March baseline. Our rule of thumb is that every \$10 increase in the price of oil increases U.S. retail gasoline prices by 30 cents a gallon. Every penny increase in retail gasoline prices

reduces consumer spending by about \$1.5 billion over the course of a year.

Our baseline forecast for real GDP growth this year is close to the Bloomberg consensus of 3.3%. The forecast for next year is 0.5 percentage point stronger than the Bloomberg consensus of 2.2%.

Business investment and housing

Heightened geopolitical uncertainty and tighter financial market conditions are weighing on real business investment in equipment. We have real business equipment spending rising 6% this year, compared with 7.3% in the March baseline. The forecast is for real business equipment spending to increase 4.6% in 2023, a percentage point weaker than in the March baseline. Other parts of business investment will do better, including nonresidential structures, now forecast to rise 14.7% this year (14.4% in the March baseline) and 11.6% in 2023 (10.9% in the March baseline). A good chunk of this is attributable to mining exploration, shafts and wells. The Bureau of Economic Analysis uses the American Petroleum Institute's weighted average of footage drilled along with rotary rig counts from Baker Hughes in its current-quarter estimate of private fixed investment in mining exploration, shafts and wells. This segment now accounts for more than 10% of nominal private fixed investment in nonresidential structures. Therefore, a rise in energy prices would lead to an increase in the number of active rotary rigs. Rig counts have risen but are still lower than pre-pandemic and less than implied by global oil prices.

Revisions to housing starts were small. Housing starts are expected to be 1.818 million, compared with 1.811 million in the March baseline. There were no revisions to housing starts next year. There are likely only so many homes that can be built each year because of labor-supply constraints and a lack of buildable lots. Some of the labor-supply issues will ease as the pandemic winds down, but the reduction in immigration is particularly problematic for homebuilders' ability to find workers. We cut the forecasts for new- and existing-home sales this year because of higher mortgage rates.

We nudged up the forecast for the FHFA All-Transactions House Price Index this year, with it rising 12%, compared with 11.5% in the March baseline. House price growth moderates noticeably in 2023, as prices are forecast to be little changed. This is attributable to rebalancing of supply and demand, which increases the risk of an outright decline in house prices.

Labor market

We have job growth averaging 376,000 per month this year, compared with the March baseline forecast of 367,000. Job

growth has averaged around 600,000 per month over the past six months. If sustained, it would take nine months to close the employment gap, or the difference between the actual level of employment and where it would have been if the recession hadn't occurred and prerecession job growth was maintained. Job growth was broad-based in March, as the only major industries notching a decline in employment were transportation/warehousing and utilities. However, labor supply is key to our near-term forecast for monthly job growth.

There was a modest change to the forecast for the unemployment rate this year; it is expected to average 3.2% in the final three months of 2022 and 3.5% in the fourth quarter of next year. We assume a full-employment economy is one with a 3.5% unemployment rate, around a 62.5% labor force participation rate, and a prime-age employment-to-population ratio a little north of 80%. All of these conditions will be met by late this summer.

Fast and furious

Because of the rise in global energy prices, there was a noticeably upward revision to year-over-year growth in the headline CPI. The forecast is for year-over-year growth to be around a full percentage point higher over the next few quarters than in the March baseline. There was also an upward revision to the forecast for growth in the PCE deflator, the Fed's preferred measure of inflation.

With the new inflation forecast and the Fed's hawkish rhetoric, we noticeably altered our forecast for the fed funds rate. The effective fed funds rate is now forecast to average 2.1% in the fourth quarter of this year, compared with 0.9%

in the March baseline. We have a 50-basis point rate hike penciled into the forecast for May, as the Fed has clearly signaled that this is likely to occur. Fed Chair Jerome Powell described the labor market as unhealthily tight. Add inflation that hasn't peaked yet, and that is going to lead to an aggressive tightening cycle. The terminal fed funds rate, or where rates peak this cycle, is now 2.75%, 30 basis points higher than in the March baseline. Also, the terminal rate has been hit nearly a year earlier than in the March baseline. The Fed is expected to start cutting rates in late 2024, as it will need to return the fed funds rate to its long-run equilibrium rate, which we estimate to be 2.5%, close to the central bank's estimate of 2.4%.

On the balance sheet, the minutes from the March Federal Open Market Committee meeting provided some color around the central bank's plan to reduce the size of its balance sheet. The minutes noted that the balance sheet reduction could start as early as May with a cap on Treasuries of \$60 billion and \$35 billion for mortgage-backed securities. This is almost double the peak rate of \$50 billion a month the last time the Fed reduced its balance sheet, from 2017 to 2019.

A more aggressive Fed and higher inflation led to an upward revision to our forecast for the 10-year Treasury yield, now expected to end this year around 3%, 60 basis points higher than in the March baseline. It is forecast to average 3.3% in the final three months of next year, compared with 3.1% in the March baseline. The 10-year yield converges with the March baseline in 2024. Changes to the forecast for the Dow Jones Industrial Average were modest. We incorporate the first-quarter actual data into the April baseline.

BoE Hikes, U.K. PMI Still Shows Expansion

BY ROSS CIOFFI

The Bank of [England](#) hiked its bank rate by 25 basis points to 1%. A third of the committee would have preferred a 50-basis point hike. Meanwhile, the BoE revised its inflation forecast. With a successive hike in the country's energy price cap, the BoE is now expecting to see a peak rate of 10% during the fourth quarter of the year. The bank does not see the inflation rate falling back to target until 2024. The outlook warrants further tightening, which is why we expect the policy rate to reach 1.5% before the end of the year.

U.K. composite PMI remains in expansionary territory

The U.K.'s composite PMI slid to 58.2 in April from 60.9 in March. Both the manufacturing and services surveys were solidly in expansionary territory, though the services PMI had a better score (at 58.9, down from 62.6) than manufacturing (at 55.8, up from 55.2). Across the economy, new business growth slowed as cost pressures intensified. Input costs rose at the fastest pace on record, as did output prices. The April PMI paints a picture of a hot economy. This chimes in with our own view that GDP will continue to grow in the second quarter, though at a slower pace than in the first.

German factory orders tumble

Factory orders in [Germany](#) dropped by 4.7% m/m in March, deepening the 0.8% decline in February. The Russian invasion of Ukraine and the tightening of lockdown measures across China triggered the sharp decline. Foreign orders from outside the euro zone tanked by 13.2% m/m, while domestic orders were down 1.8%; orders from other euro zone members mitigated the losses, rising 5.6% from the previous month. In terms of types of orders, only orders of consumer goods increased (by 6.4% m/m); those of intermediate (by 1.5%) and capital goods (by 8.3%) fell. Not only did the Russian invasion of Ukraine and the lockdowns in China directly cut into orders by constraining supply lines, but the uncertainty they create likely put a pause on investment plans by firms. Consumer goods orders were lifted, meanwhile, as countries across the euro zone shook off social distancing measures. The March release reflects the difficulties the German economy currently traverses, but it also shines a light on the trend in the euro zone as a whole—that the abatement of the pandemic will be the driving force of activity in the coming months.

Euro zone construction PMI falters

The euro zone's construction PMI tumbled to a reading of 50.4 in April from 52.8 in March. The overall index is being

held up by a strong Italian reading, which eased to 59 from 62.9 previously. Italy's sector is still benefitting from strong government supports and incentives. In Germany, the reading dropped into contractionary territory, to 46 from 50.9, while in France, the PMI recovered beyond the breakeven score of 50 to a reading of 50.7, from 48.4.

At the aggregate euro zone level, the index suffered largely from a drop in the inflow of new orders. Supply-chain bottlenecks, rising building costs, and a general climate of uncertainty held back demand and stunted firms' abilities to do business. This was all reflected in the April reading of the European Commission's Economic Sentiment Indicator: Confidence slid among builders during the month, as there was a significant share of respondents who listed materials and labor shortages as limiting factors to business. Ultimately, we see construction continuing during the year, but due to worsening supply and price conditions, the support to GDP growth will be tangibly weaker than we expected at the start of the year.

Not everyone agrees with the EC

Not all EU members agree with the European Commission's sanction proposal. Slovakia, Hungary, the Czech Republic, and Bulgaria are each requesting greater flexibility, as they are all significantly at risk of energy scarcity. Slovakia and the Czech Republic are requesting more transition time; Hungary is asking for an exemption on gas imported from pipelines. Indeed, all three landlocked countries would need to update their infrastructures in order to substitute Russian imports, and one year is not a realistic time frame to make and implement those plans. Bulgaria could more easily substitute oil imports with those from another country, but the costs would still be significant; Russia's Lukoil, for example, owns the largest oil refinery in the country and the Balkans. Moreover, news site EURACTIV reports that, although it was not part of President Ursula von der Leyen's speech Wednesday, the commission will also propose the measure that EU-owned shipping companies will be unable to work with Russian oil, even outside European territory—a possibility that allegedly provoked discord from Greece and Cyprus.

Spanish tourism kicks off in March

The inflow of tourists into [Spain](#) picked up in March to 4.03 million from 3.15 million in February. Although the figure is still low compared with the historical average, March's figure is 750% higher than it was a year earlier during the

pandemic. We expect tourism inflows to continue to increase as we move into spring and summer, and this will provide a well-needed boost to the Spanish economy. Lack of tourism has been a significant weight on Spain's growth, not just by limiting service exports, but by dissuading domestic spending by households and businesses who are either directly affected by the sector or understand its importance for the country. The tourism recovery will carry the economy through the second and third quarters.

French industrial production pulls back further

Industrial production fell for the second month in a row in [France](#), down 0.5% m/m in March and deepening the

1.2% decline in February. The more downbeat headline was primarily the result of supply disruptions, falls in consumer and business confidence due to Russia's invasion of Ukraine, and rising inflation. In March, industrial output was primarily pulled back by losses in key sectors like transport equipment manufacturing, mining/quarrying, and machinery and equipment. Looking ahead to April, we expect industrial output to remain subdued as geopolitical tensions stay put and prices rise further across the board.

RBA Rate Hike Is First Since 2010

BY KATRINA ELL

The Reserve Bank of Australia increased the cash rate by 25 basis points to 0.35%. This marked the first increase since 2010 and came in response to a changing inflation landscape that has forced other central banks to re-evaluate the preferred duration for ultra-low interest rates.

The RBA's May statement included important developments beyond the hike in the cash rate. The first was a substantial upward revision to the RBA's inflation expectations. The central bank expects headline inflation to average almost three percentage points more this year than outlined in the April forecast. That's a substantial revision in one month. Behind this change is the RBA dropping the assumption that the strong supply-side nature of inflation is temporary and driven by factors offshore. Inflation expectations in Australia have picked up and broadened, and underlying inflation is heading towards 4%. The RBA is appropriately responding to inflation being beyond comfort levels by increasing the cash rate. The bottom line is that it's no longer appropriate for the monetary stimulus introduced at the height of the pandemic to remain in place, and so the central bank has begun the process of normalising settings.

Wage growth considerations

Australia's subdued wage growth has been an important factor behind previous RBA indications that an increase in the cash rate was a way off. Obviously, the RBA has adjusted its thinking on where wage growth is actually sitting; the latest data point we have is for the December quarter, with wage growth sitting at a modest 2.4% y/y and not even close to the "three point something" the RBA was craving. The RBA now acknowledges that wage growth is likely stronger in the private sector than what the wage price index suggests. This is in line with our understanding. What

is driving that is that we've seen a dramatic increase in job changing since the pandemic; this isn't just an Australia phenomenon, it's happening globally. Employees typically see the greatest increase in their incomes when they switch jobs, and the wage price index may not be adequately picking this up. This acknowledgement is a good face-saving exercise for the RBA because improved wage growth has been a precondition for a lift in the cash rate. The problem is, we don't have the same insight into just what the RBA is seeing via its "liaison" with the private sector about how much wages have actually increased.

Australia's dollar jumps

The Australian dollar jumped because the RBA increased the cash rate by 10 basis points more than the market had priced in. That said, the more important question is what happens next. The RBA was clear in the May statement that further hikes are coming, but the pace of normalisation is uncertain. An important driver will be how consumers absorb the increase in borrowing costs. Consumer sentiment data is weak, and there's a significant disconnect between how consumers are feeling right now and how they are spending. If sentiment deteriorates, it will meaningfully dampen household consumption and spill through the broader economy.

Households are the key pressure point when it comes to higher borrowing costs, and they will face stronger headwinds over the next year; softer house price growth and higher living costs will add pressure to household budgets. This is particularly so for lower income groups, which don't have the savings buffers that others built during the pandemic.

U.S. Downgrades Outnumber Upgrades for the Latest Period

BY STEVEN SHIELDS

U.S.

U.S. corporate credit quality was mixed in the period ending May 3. Downgrades outnumbered upgrades 11 to five, but upgrades still accounted for 90% of the reported debt. These latest rating changes were spread across a diverse set of industries. All 11 downgrades were issued to speculative grade companies including Emergent BioSolutions Inc., which saw its senior unsecured rating lowered to B1 from Ba3. According to the rating actions, the downgrade reflects earnings headwinds related to declines in the contract development and manufacturing organization business caused by lower COVID-19 vaccine demand, and in the nasal naloxone franchise caused by generic competition. These challenges pressure the company's overall growth outlook and raise its financial leverage.

In terms of debt affected, the largest upgrade was issued to Eastman Chemical Company. The company's senior unsecured ratings were raised to Baa2 from Baa3 and commercial paper rating to Prime-2 from Prime-3. According to Moody's Investors Service Senior Vice President and lead analyst John Rogers, "While 2021 was a good year for many chemical companies, Eastman also reduced debt by \$300 million, which enabled it to improve credit metrics to levels that are supportive of a higher rating. We expect them to continue to generate credit metrics supportive of the Baa2 rating in 2022 despite some

headwinds from a one-time event, and higher raw material and energy costs." Following the ratings action, the Eastman's outlook was revised to stable from positive. In total, the upgrade impacted approximately \$5.2 billion in outstanding debt.

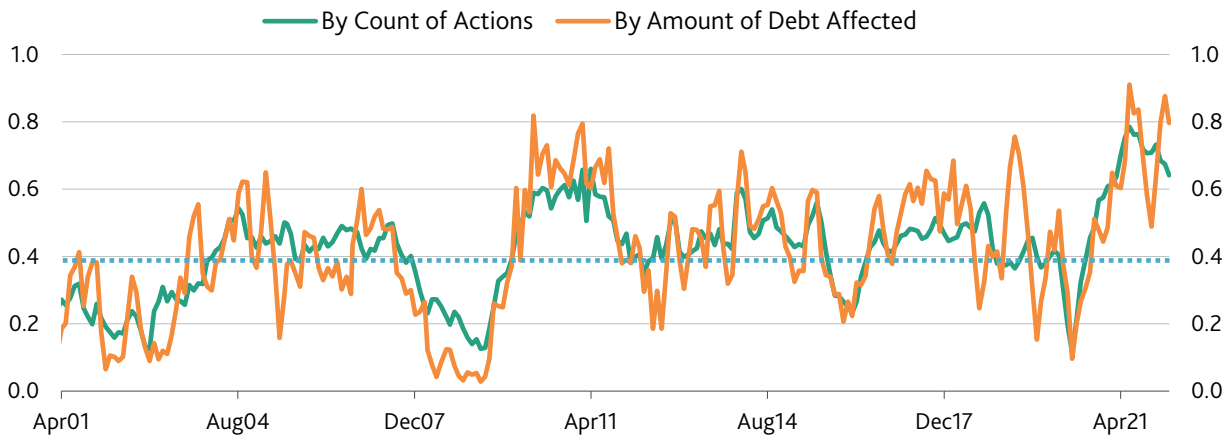
Europe

Activity was even weaker across Western Europe with downgrades responsible for 71% of the reported debt in the period. On April 29, Moody's Investors Services downgraded the corporate family rating of Jiangsu Zhongnan Construction Grp Co. Ltd. To B3 from B2. In a related action, Moody's downgraded the senior unsecured rating on the bonds issued by Haimen Zhongnan Investment Development Co. to Caa1 from B3. The outlook remains negative due to the expectation for weakened liquidity in the near term due to weakened sales and constrained access to funding.

Moody's Investors Service also downgraded SpareBank 1 SR-Bank ASA's senior unsecured ratings to Baa1 from A3. This rating action concluded the review for downgrade following the Norwegian Financial Supervisory Authority's introduction of a subordination cap when calculating Minimum Requirements for Eligible Liabilities and Own Funds. The cap will result in Norwegian banks needing to issue lower levels of additional loss-absorbing debt.

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/SG
4/27/2022	HOWMET AEROSPACE INC.	Industrial	SrUnsec/LTCFR/PDR/PS	4152.32	U	Ba2	Ba1	SG
4/27/2022	RESTORATION HARDWARE, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba2	Ba3	SG
4/27/2022	VYAIRE HOLDING COMPANY-VYAIRE MEDICAL, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
4/28/2022	BCPE EAGLE INTERMEDIATE HOLDINGS LLC-AVEANNA HEALTHCARE LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa2	SG
4/28/2022	LMBE-MC HOLDCO II LLC	Utility	SrSec/BCF		D	Ba3	B1	SG
4/28/2022	DRIVE CHASSIS HOLDCO, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG
4/28/2022	VICTORS INTERMEDIATE HOLDING II CORPORATION-ACPRODUCTS HOLDINGS, INC.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	550.00	D	Caa1	Caa2	SG
4/29/2022	EASTMAN CHEMICAL COMPANY	Industrial	SrUnsec/LTIR/CP	5184.26	U	Baa3	Baa2	IG
4/29/2022	SOFTBANK GROUP CORP.-FINCO I LLC	Financial	SrSec/BCF		D	Baa3	Ba1	IG
4/29/2022	AUTODESK, INC.	Industrial	SrUnsec	2650.00	U	Baa2	A3	IG
4/29/2022	BCPE EMPIRE TOPCO, INC.-BCPE EMPIRE HOLDINGS, INC.	Industrial	SrSec/BCF		D	B2	B3	SG
5/2/2022	SOUTHEAST SUPPLY HEADER, LLC	Utility	SrUnsec/LTCFR/PDR	400.00	D	Ba2	B1	SG
5/2/2022	EMERGENT BIOSOLUTIONS INC.	Industrial	SrUnsec/LTCFR/PDR	450.00	D	Ba3	B1	SG
5/2/2022	BLUE RIBBON, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
5/2/2022	SP PF BUYER LLC	Industrial	SrSec/BCF		D	B3	Caa1	SG
5/2/2022	ANUVU HOLDINGS 1 LLC-ANUVU HOLDINGS 2 LLC	Industrial	SrSec/BCF		U	B2	B1	SG

Source: Moody's

FIGURE 4

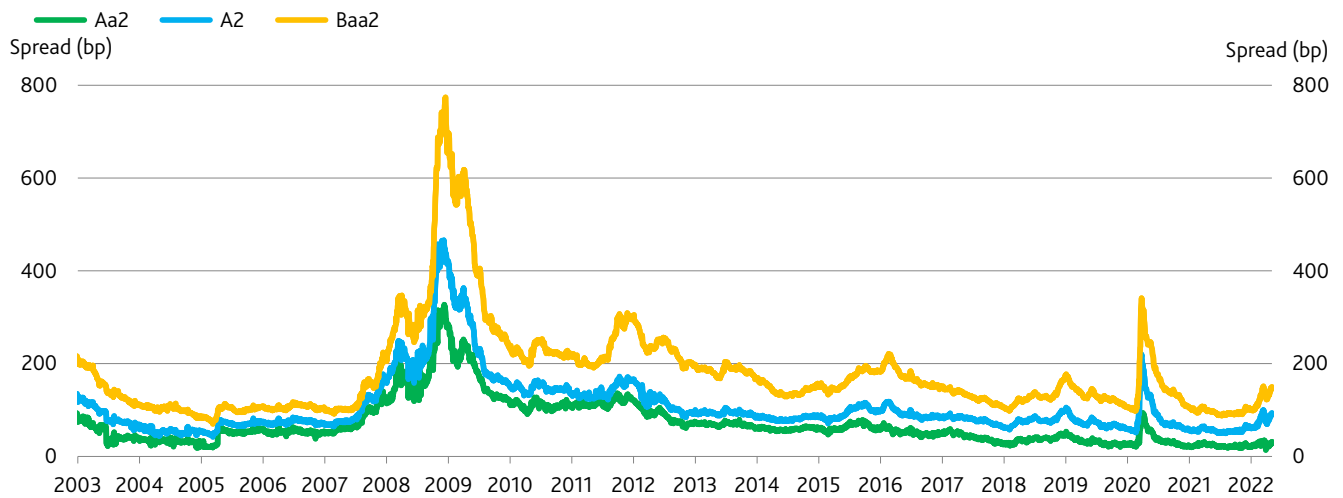
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
4/27/2022	CIDRON GLORIA HOLDING GMBH	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	GERMANY
4/27/2022	HUMLEGARDEN FASTIGHETER AB	Industrial	LTIR		U	Baa2	Baa1	IG	SWEDEN
4/28/2022	SPAREBANK 1 SR-BANK ASA	Financial	MTN	639.15	D	A3	Baa1	IG	NORWAY
4/28/2022	EUROPCAR MOBILITY GROUP S.A.	Industrial	SrSec/LTCFR/PDR	579.70	U	B2	B1	SG	FRANCE
4/28/2022	AMPHORA GROUP LIMITED-AMPHORA FINANCE LIMITED	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG	UNITED KINGDOM
4/29/2022	JIANGSU ZHONGNAN CONSTRUCTION GROUP CO., LTD.-HAIMEN ZHONGNAN INVESTMENT DEV (INTL) CO LTD	Industrial	SrUnsec/LTCFR	750.00	D	B3	Caa1	SG	BRITISH VIRGIN ISLANDS
4/29/2022	GLO HOLDCO S.C.A.-CURIUM BIDCO S.A.R.L	Industrial	SrSec/BCF		D	B2	B3	SG	LUXEMBOURG
5/3/2022	PLAYA HOTELS & RESORTS N.V.-PLAYA RESORTS HOLDING B.V.	Industrial	SrSec/BCF/LTCFR		U	Caa1	B3	SG	NETHERLANDS

Source: Moody's

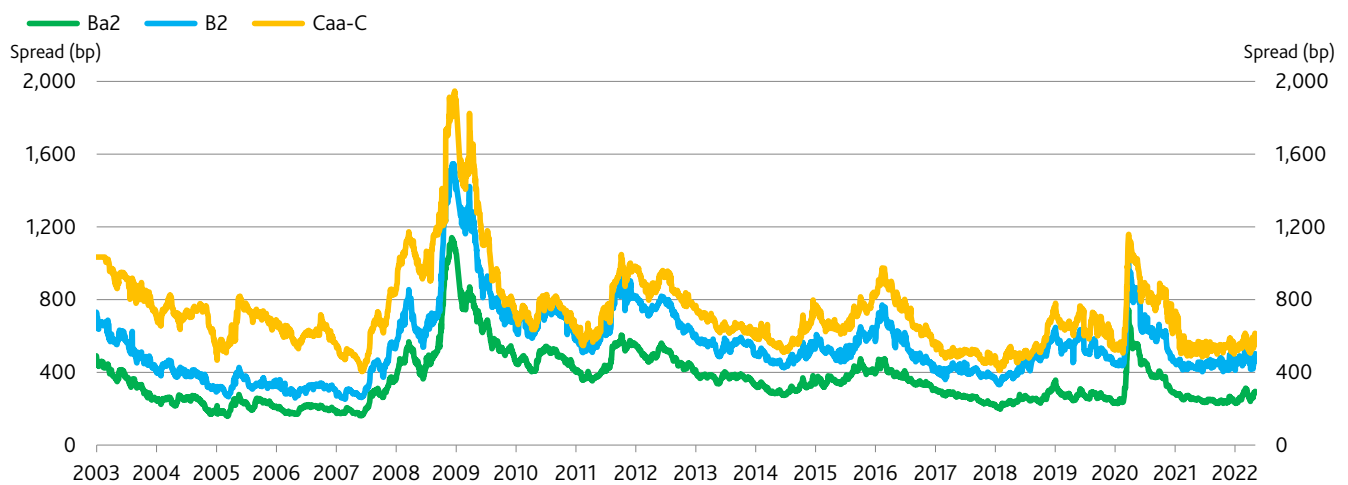
MARKET DATA

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 (April 27, 2022 – May 4, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	May. 4	Apr. 27	Senior Ratings
Issuer			
Citigroup Inc.	Baa2	Baa3	A3
McDonald's Corporation	Aa2	Aa3	Baa1
Procter & Gamble Company (The)	Aa1	Aa2	Aa3
Home Depot, Inc. (The)	Aa2	Aa3	A2
Enterprise Products Operating, LLC	A2	A3	Baa1
NextEra Energy Capital Holdings, Inc.	Baa1	Baa2	Baa1
Southern Company (The)	A2	A3	Baa2
Eli Lilly and Company	Aa1	Aa2	A2
Dominion Energy, Inc.	A1	A2	Baa2
National Rural Utilities Coop. Finance Corp.	Aa3	A1	A2

CDS Implied Rating Declines	CDS Implied Ratings		
	May. 4	Apr. 27	Senior Ratings
Issuer			
CenterPoint Energy, Inc.	Baa2	A3	Baa2
PepsiCo, Inc.	A2	A1	A1
Philip Morris International Inc.	A2	A1	A2
General Electric Company	Baa3	Baa2	Baa1
Eli Lilly and Company	Aa2	Aa1	A2
FirstEnergy Corp.	Baa3	Baa2	Ba1
Emerson Electric Company	Baa1	A3	A2
Danaher Corporation	A3	A2	Baa1
Archer-Daniels-Midland Company	A2	A1	A2
United Rentals (North America), Inc.	Ba2	Ba1	Ba2

CDS Spread Increases	Senior Ratings	CDS Spreads		
		May. 4	Apr. 27	Spread Diff
Issuer				
Rite Aid Corporation	Caa2	2,162	2,021	141
Realogy Group LLC	B2	687	574	113
Carnival Corporation	B2	581	517	64
Staples, Inc.	Caa2	1,214	1,149	64
CSC Holdings, LLC	B3	561	512	49
Hertz Corporation (The)	Caa1	442	396	45
R.R. Donnelley & Sons Company	Caa1	325	283	42
CCO Holdings, LLC	B1	281	241	41
Encompass Health Corp.	B1	261	221	41
American Airlines Group Inc.	Caa1	959	918	41

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		May. 4	Apr. 27	Spread Diff
Issuer				
Talen Energy Supply, LLC	C	6,061	6,367	-306
Pitney Bowes Inc.	B3	715	856	-141
Brunswick Corporation	Baa2	118	152	-34
K. Hovnanian Enterprises, Inc.	Caa3	1,119	1,152	-33
Travel + Leisure Co.	B1	218	243	-25
Mattel, Inc.	Ba2	272	291	-19
Beazer Homes USA, Inc.	B3	522	541	-19
Wendy's International, LLC	Caa2	163	181	-19
Interpublic Group of Companies, Inc. (The)	Baa2	94	111	-17
Hasbro, Inc.	Baa2	85	101	-16

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (April 27, 2022 – May 4, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	May. 4	Apr. 27	Senior Ratings
Issuer			
HSBC Holdings plc	Baa1	Baa2	A3
Norddeutsche Landesbank GZ	A3	Baa1	A3
EDP - Energias de Portugal, S.A.	Baa2	Baa3	Baa3
Bankinter, S.A.	Baa1	Baa2	Baa1
Orsted A/S	Aa3	A1	Baa1
United Utilities Water Limited	Aa3	A1	A3
Smiths Group plc	Baa1	Baa2	Baa2
Iceland, Government of	A2	A3	A2
EWE AG	A1	A2	Baa1
adidas AG	Aa3	A1	A2

CDS Implied Rating Declines	CDS Implied Ratings		
	May. 4	Apr. 27	Senior Ratings
Issuer			
Bayerische Landesbank	A3	A1	Aa3
de Volksbank N.V.	Baa2	A3	A2
Spain, Government of	A1	Aa3	Baa1
Lloyds Bank plc	A1	Aa3	A1
Portugal, Government of	A1	Aa3	Baa2
ING Groep N.V.	Baa1	A3	Baa1
ING Bank N.V.	Aa3	Aa2	A1
Erste Group Bank AG	A3	A2	A2
Anheuser-Busch InBev SA/NV	Baa1	A3	Baa1
Danske Bank A/S	A3	A2	A3

CDS Spread Increases	CDS Spreads			
	Senior Ratings	May. 4	Apr. 27	Spread Diff
Issuer				
Novafives S.A.S.	Caa2	1,195	1,026	169
Boparan Finance plc	Caa1	2,038	1,930	108
Casino Guichard-Perrachon SA	Caa1	1,254	1,164	90
Ardagh Packaging Finance plc	Caa1	483	423	60
Jaguar Land Rover Automotive Plc	B1	674	622	52
Vue International Bidco plc	Ca	1,244	1,196	48
Piraeus Financial Holdings S.A.	Caa1	794	749	45
de Volksbank N.V.	A2	87	62	24
Marks & Spencer p.l.c.	Ba1	287	265	22
UPC Holding B.V.	B3	325	304	21

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	May. 4	Apr. 27	Spread Diff
Issuer				
Iceland Bondco plc	Caa2	626	707	-81
Stena AB	B2	444	485	-41
Vedanta Resources Limited	B3	818	850	-31
Smiths Group plc	Baa2	72	84	-12
Norddeutsche Landesbank GZ	A3	69	78	-9
United Utilities Water Limited	A3	45	52	-7
EWE AG	Baa1	50	57	-7
Bankinter, S.A.	Baa1	80	86	-6
Iceland, Government of	A2	56	62	-5
adidas AG	A2	43	48	-5

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (April 27, 2022 – May 4, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		Senior Ratings
	May. 4	Apr. 27	
Issuer			
Malayan Banking Berhad	Baa2	Baa3	A3
Telstra Corporation Limited	A1	A2	A2
Pakistan, Government of	Caa2	Caa3	B3
Toyota Motor Corporation	Aaa	Aa1	A1
Kyoto, City of	Aaa	Aa1	A1
Development Bank of Kazakhstan	Ba1	Ba2	Baa2
Tata Motors Limited	Ba2	Ba3	B1
Mitsui O.S.K. Lines, Ltd.	A3	Baa1	B1
Japan, Government of	Aaa	Aaa	A1
China, Government of	Baa1	Baa1	A1

CDS Implied Rating Declines	CDS Implied Ratings		Senior Ratings
	May. 4	Apr. 27	
Issuer			
Commonwealth Bank of Australia	A1	Aa3	Aa3
Korea, Government of	Aa3	Aa2	Aa2
Sumitomo Mitsui Banking Corporation	Aa3	Aa2	A1
Export-Import Bank of Korea (The)	Aa3	Aa2	Aa2
MUFG Bank, Ltd.	Aa3	Aa2	A1
Macquarie Group Limited	Baa2	Baa1	A3
Macquarie Bank Limited	A2	A1	A2
Kyushu Electric Power Company, Incorporated	Aa1	Aaa	Baa1
Shinhan Bank	Aa3	Aa2	Aa3
Woori Bank	Aa3	Aa2	A1

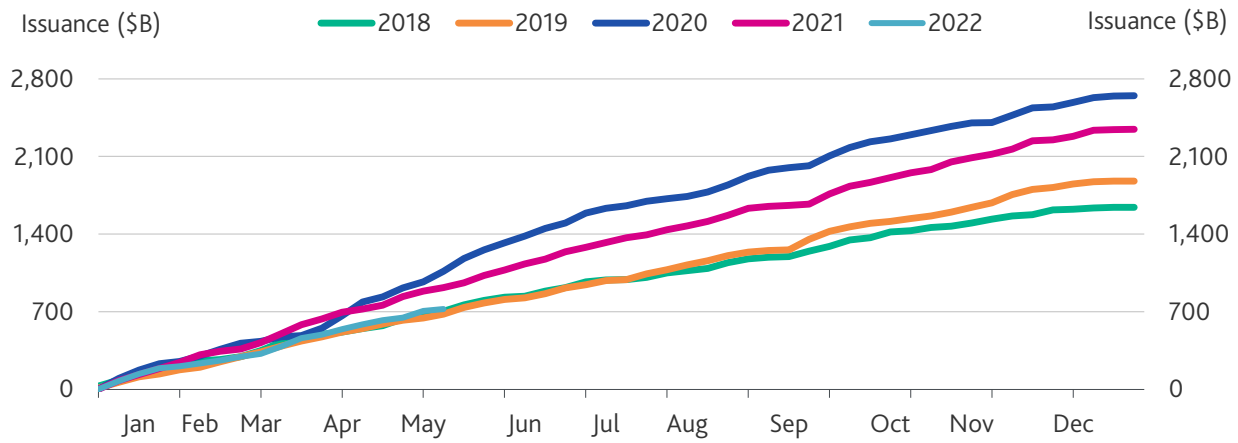
CDS Spread Increases	Senior Ratings	CDS Spreads		
		May. 4	Apr. 27	Spread Diff
Issuer				
Kazakhstan, Government of	Baa2	196	178	18
SoftBank Group Corp.	Ba3	404	392	12
India, Government of	Baa3	121	111	10
State Bank of India	Baa3	120	110	10
Flex Ltd.	Baa3	106	97	9
Kyushu Electric Power Company, Incorporated	Baa1	28	20	8
Reliance Industries Limited	Baa2	116	108	7
Hutchison Whampoa International (03/33) Ltd.	A2	67	61	6
Macquarie Group Limited	A3	83	78	5
Philippines, Government of	Baa2	111	107	4

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		May. 4	Apr. 27	Spread Diff
Issuer				
Pakistan, Government of	B3	773	808	-35
Development Bank of Kazakhstan	Baa2	216	224	-8
Tata Motors Limited	B1	288	294	-6
China, Government of	A1	74	76	-3
Nissan Motor Co., Ltd.	Baa3	176	179	-3
Australia, Government of	Aaa	19	21	-2
Kansai Electric Power Company, Incorporated	A3	41	43	-2
Sumitomo Corporation	Baa1	29	31	-2
Tenaga Nasional Berhad	A3	83	85	-2
Halyk Savings Bank of Kazakhstan	Ba2	373	374	-2

Source: Moody's, CMA

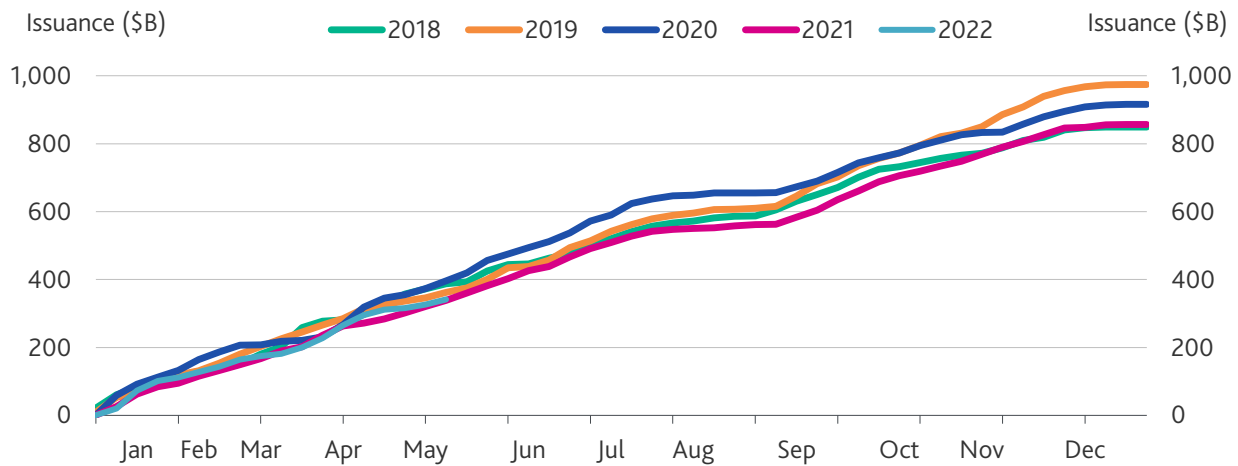
ISSUANCE

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



Source: Moody's / Dealogic

Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



Source: Moody's / Dealogic

ISSUANCE

Figure 8. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	10.713	5.025	16.844
Year-to-Date	625.375	78.101	723.531

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	14.820	0.000	14.820
Year-to-Date	313.638	20.956	341.027

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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