MOODY'S ANALYTICS

## WEEKLY MARKET OUTLOOK

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**Lead Authors**

Dante DeAntonio
Director

Cristian deRitis
Deputy Chief Economist

**Asia Pacific**

Denise Cheok
Harry Murphy Cruise
Sarah Tan
Economists

**Europe**

Ross Cioffi
Economist

**U.S.**

Matt Colyar
Bernard Yaros
Justin Begley
Steven Shields
Economists

Matt Orefice
Data Specialist

**Latin America**

Juan Pablo Fuentes
Economist


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# The Fed and Inflation

Minutes from March's Federal Open Market Committee meeting show Federal Reserve policymakers' confidence in the soundness of the financial system. This led to the conviction that the damage from a recent string of bank failures would be contained and that the Fed could continue the fight against inflation. On this front, the weeks since the committee meeting have confirmed the FOMC's faith. The Federal Reserve and U.S. Treasury's quick and dramatic interventions that were designed to shore up banks' liquidity needs are working as intended. Bank borrowing from the Fed's discount window is falling faster than the utilization of the Fed's new facility, the Bank Term Funding Program, is increasing. While hardly cause for celebration, the slowdown in borrowing suggests bank withdrawals have stabilized, and liquidity needs have not cascaded.

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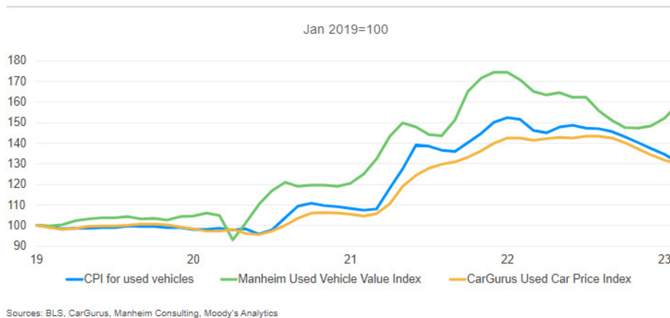
Though things have stabilized since March's bank failures, and no spillover effect has demonstrably harmed the broader U.S. economy, the uncertainty caused by the crisis threatens to kick off a slower burning and potentially more pernicious dynamic. Small and midsize banks are key sources of credit for small businesses. Since the bank failures, credit creation at these banks has slowed meaningfully. The inability to access credit stymies business investment, hiring and consumer spending.

Fed officials are keenly aware of this but are hamstrung in their ability to address it. Nudging banks to lend more would be an effort in direct opposition to their commitment to bring down inflation. First, the Fed needs to be confident that inflation has been brought to its 2% target. March's CPI data were a small step in the right direction.

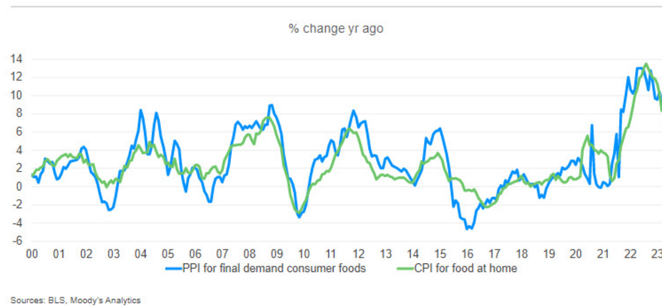

Moody's Analytics and Moody's Investors Service maintain separate and independent economic forecasts. This publication uses the forecasts of Moody's Analytics. Moody's Analytics markets and distributes all Moody's Capital Markets Research materials. Moody's Analytics does not provide investment advisory services or products. For further detail, please see the last page.

## Softer than expected

The U.S. consumer price index rose 0.1% in March, less than the 0.2% gain we and the consensus had penciled in. This comes on the heels of 0.5% and 0.4% gains in January and February, respectively. The CPI for energy was down 3.5% in March after falling 0.6% in February. Within energy, the CPI for gasoline fell 4.6%. Excluding food and energy, the CPI was up 0.4%, in line with our and consensus expectations. Within the core CPI, used-vehicle prices fell 0.9% after declining 2.8% in the preceding month, and price growth in new vehicles, transportation services, and medical care commodities accelerated.

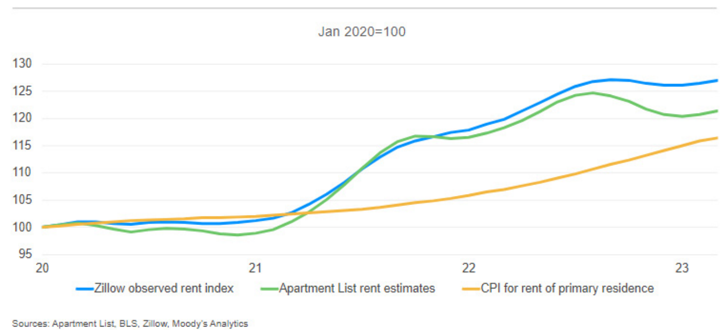



The CPI for food was unchanged in March, whereas our forecast had penciled in a deceleration from 0.4% growth in February to only 0.2% in March based on wholesale prices for finished consumer foods. It is important to emphasize that the CPI for food at home fell 0.3% in March, whereas the CPI for food away from home rose 0.6% for the third month in a row. In the first quarter, the CPI for food at home has consistently come in softer than the CPI for food away from home, as still-strong wage growth in food services and drinking places continues to put upward pressure on the latter.




From the perspective of the core CPI, consumers got limited relief in March. March's gain in the core CPI was in line with our and consensus expectations. Within the core CPI, all eyes were on the CPI for used vehicles, as used-vehicle auction prices, which typically lead retail prices by a few months, have steadily risen since November. Our forecast was for the CPI for used vehicles to have risen 0.4% in March, which would have been the first monthly gain since June. Instead, the CPI for used vehicles declined 0.9%, which was the slowest monthly drop since August. A monthly gain in the CPI for used vehicles is coming, and it will signal that the Fed can no longer count on used vehicles or overall core goods to weigh on core CPI inflation.

A silver lining in the CPI report was the deceleration in the CPI for rent of shelter, given that trends in this major component of the CPI are sticky. The CPI for homeowners' equivalent rent rose 0.5% after rising 0.7% for two straight months, while the CPI for tenant rent also increased 0.5%, down from the 0.8% gain in the previous month. Odds are that for the coming months the CPI for rent of shelter will continue to lift core CPI inflation above the rate that would be consistent with the Fed's long-run target; CPI for rent must play catch-up to market rents as measured by Zillow and Apartment List. However, rent disinflation will materialize around midyear. When it does, it will be a greater source of disinflation. At 43.3%, shelter's weight within the core CPI basket under the new expenditure weights is the largest it has been in more than two decades.




Our April baseline forecast calls for an additional 0.25-percentage point increase to the fed funds rate when the FOMC reconvenes in early May. At the June meeting, we expect policymakers to pause after what will have been 10 consecutive meetings with an announced rate hike. That sprint to sufficiently restrictive policy will bring the terminal rate, the highest rate reached during a tightening cycle, to 5%-5.25%. This is in line with the FOMC's latest projections.

TOP OF MIND

# Hit to Housing From Banking Turmoil Is Limited

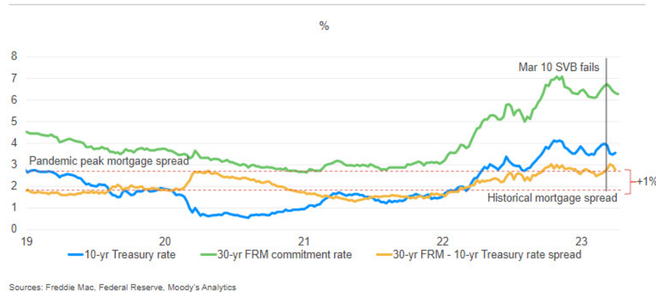
BY CRISTIAN DERITIS

Recent turmoil in the banking industry has shaken consumer confidence and increased volatility in equity and bond markets. High frequency data on U.S. housing markets show only a limited impact so far, but the effects may be lagged given the time required to prepare homes for sale, apply for mortgages, and execute purchase contracts. We review recent data on mortgage rates, mortgage applications, and home listings to take the housing market's pulse in the wake of recent bank failures.

## Mortgage rates fell but the rate spread widened

The interest rate on 10-year Treasury securities fell by roughly 50 basis points from March 8 to the end of the month as the failures of Silvergate Bank on March 8 and SVB on March 10 prompted a flight to quality. The offered rate on 30-year fixed-rate mortgages, which typically tracks the 10-year Treasury rate given a similar duration profile, fell by a similar but slightly lower amount. As a result, the mortgage rate spread increased to over 3 percentage points during the week of March 17, its widest since 1986. The spread fell to 2.78 percentage points by the end of the month as investors' fears eased but remains on par with the early days of the COVID-19 pandemic and is over 100 basis points above its historical average.

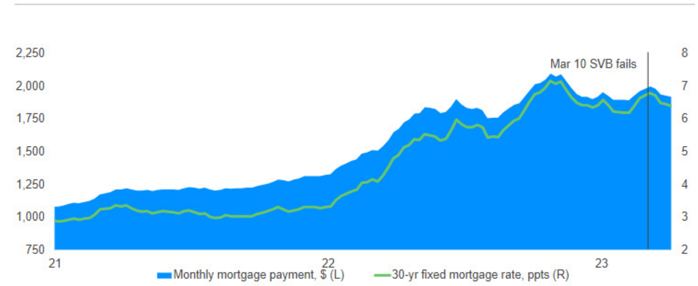
Mortgage Rates Fall Less Than 10-Year Treasury Rates




Sources: Freddie Mac, Federal Reserve, Moody's Analytics

A lower mortgage rate improves affordability and should spur housing market activity, but the impact may be muted given the high price of homes. A homebuyer purchasing a $383,000 home (the national median) with a 20% down-payment would have seen their monthly payment fall from nearly $2,000 at the start of March to $1,920 by month's end. Though significant, the monthly mortgage payment remains above February's level.

50-Basis Point Drop in Mortgage Rate Has Limited Impact on Payments




Sources: NAR, Mortgage Bankers Association, Moody's Analytics
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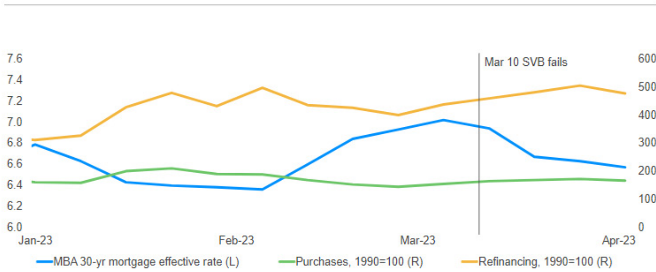
More substantive would be a reduction in the mortgage rate spread back to its historical average of 1.7 percentage points. This would be consistent with a mortgage rate near 5.2% and a reduction in monthly payments of over $200. The reasons behind the current elevated mortgage rate spread are many and unlikely to subside in the near term but should fade over time as financial markets stabilize and investors are attracted by the heightened yields on mortgage-backed securities. Even a partial reduction in the mortgage rate would allow housing markets to stabilize and consolidate.

## Mortgage applications picked up amid turmoil

The weekly index of mortgage applications from the Mortgage Bankers Association provides a nearly real-time measure of homebuying given that most home purchases are financed.

Data throughout March suggest that the recent decline in mortgage rates led to a pickup in refinancing as homeowners with higher coupons looked to lock in a lower rate. However, purchase mortgage applications were relatively unchanged throughout the month.

The lack of any significant deviation from trend suggests that consumers are taking the bank failures in stride with no change in their plans. However, the weekly data are worth watching, as the decline in the mortgage rate hasn't translated into a more significant increase in activity as would be expected.




Weekly home sales data from the National Association of Realtors provide timely insight into the revealed psychology of home sellers. The 20% decline in the number of new listings relative to last year's level reported in the weeks following SVB's failure looks alarming but was consistent with the downward trend observed over the past year.

Having locked in ultra-low mortgage rates, homeowners are in no rush to sell their homes unless absolutely necessary. Despite the slowdown in the number of new listings, the number of active listings is nearly 60% higher than a year ago as properties take longer to sell once listed. A modest reduction in the growth rate in recent weeks is consistent with the trend since the start of the year rather than a reaction to the banking turmoil.

Consistent with the extended time on market, the number of listings experiencing a price reduction has nearly doubled over the past year. The growth rate slowed throughout March but is likely more a function of base effects than anything related to the bank failures.

Regionally, new listings are stronger in the South and parts of the Midwest than in the West or the Northeast. The rate lock-in effect offers a possible explanation with weaker demand concentrated in areas with higher house prices such as California, Pacific Northwest, and certain Northeast metro areas. New construction activity may also be driving the result with homebuilders concentrating their efforts in southern metro areas.

While more homes are being listed for sale in the South, realtors are also reporting an above-average increase in the number of listings with a price cut. The growing number of listings with a price cut in parts of Florida and the Carolinas likely foreshadows declines in the Moody's Analytics House Price Index and other HPIs over the next few months, but it's important not to read too much into the data given base effects. Last year at this time, the housing market was still booming. It was a seller's market with many properties receiving multiple bids within a short period of time. Few sellers needed to reduce their list prices as a result. With prices peaking in the second quarter of 2022, reported increases in the number of price cuts may simply reflect markets returning to equilibrium after a period of exuberance.

Recent data suggest that housing market participants have not been impacted to any significant degree by recent bank failures. This is unsurprising given that most mortgages are originated by non-bank lenders with credit provided by the government through Fannie Mae, Freddie Mac or the Federal Housing Administration. For these institutions, the situation remains business as usual.

A more meaningful impact could come from shifts in consumer psychology. Should potential homebuyers lose faith in the future of the job market or worry about the security of their savings, they could develop cold feet, leading to reductions in both home sales volume and prices. So far, this doesn't appear to be the case, but data on the spring selling season bears watching for any potential signs of fallout from March's banking turmoil.

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# The Week Ahead in the Global Economy

## U.S.

The U.S. economic calendar takes a breather next week after a recent barrage of data on the labor market and inflation. We will get a first look at whether manufacturing activity continued to contract in April with the release of the New York and Philadelphia Fed manufacturing surveys.

We will also look for evidence of whether the housing market has reached a bottom with the NAHB housing market index for April and data on new residential construction—both starts and permits—for March.

New data on jobless claims will also remain important to watch as a clear upward trend has formed in recent weeks. While still well short of the break-even level—which we currently estimate to be around 270,000—claims are clearly on the rise and the ongoing spate of layoff announcements lends upside risk in the coming weeks.

Other key data to be released next week include the Fed's Beige Book and the Conference Board's leading economic index.

## Europe

Final estimates of the euro zone's harmonised index of consumer prices will likely confirm that inflation decelerated to 6.9% year on year in March from 8.5% in February. While there was a tangible month on month decline in energy prices, thanks to the considerable decline in wholesale natural gas prices that happened between January and February, much of the reason March's headline inflation rate is so much lower than February's is due to massive base effects in the energy segment.

March 2022 was when the initial spike in commodity prices that followed Russia's invasion of Ukraine first passed through. In some countries this happened more gradually, but at the euro zone aggregate there was a notable effect. Unfortunately, base effects are going to be the principal reason behind March's lower inflation rate. According to the preliminary estimate published at the start of the month, core inflation inched higher to 5.7% year over year from 5.6%, while food inflation was up at 15.4% from 15%.

Meanwhile, annual inflation in the U.K. likely ticked lower to 9.9% in March from 10.4% in February. Due to the country's gas and electricity price cap, the more significant effects from the Russian invasion on energy prices only kicked in during April, so there will not yet be such a strong base effect pushing headline U.K. inflation lower.

Inflation in both the euro zone and U.K. will continue to chip away at purchasing power and cut into consumer demand. As a result, we estimate that retail sales in the U.K. stalled in March, after a solid 1.2% rise in February. But consumers have been supported by a resilient labour market. We expect the unemployment rate held unchanged at 3.7% in the three months to February from the previous stanza. The sense of job security is allowing households to continue spending, even if disposable incomes have been squeezed.

## Asia Pacific

We expect that China's first-quarter GDP grew 2.6% year over year. This translates to a 1.3% quarter-on-quarter increase after the previous quarter's flat quarterly growth reading. Households are out and about, and businesses are increasingly finding their mojo; manufacturing and nonmanufacturing PMIs are firmly back in expansion territory. Nonetheless, retail sales have been subdued, especially compared with the reopening splurges seen elsewhere. Weaker global demand and a struggling property market round up the downside risks facing the world second-largest economy.

Japan's core consumer prices likely continued to ease in March. We see core CPI rising by 3% year on year, a touch slower than February's 3.1% increase. Government subsidies for energy together with relatively lower oil prices will continue putting a lid on prices. But deeper price metrics are still gaining steam, so inflation will stay elevated for some time to come. Separately, the "shunto" spring wage negotiations have gotten off to a good start. Nonetheless, we don't expect that this will move Japan closer to steady domestically driven 2% inflation once supply-driven inflation fades this year.

Bank Indonesia will likely keep rates unchanged in their upcoming April meeting, signalling the end of their tightening cycle. Core inflation, BI's preferred measure, rose 2.94% year over year in March, falling below the central bank's 3% target for the first time since July. Although headline inflation remains above the 2% to 4% target range, we expect prices to continue cooling into the end of this year. The rupiah has also been holding steady against the greenback since the beginning of the year, further supporting BI's likely move to stand pat on rates.

## Latin America

Mexico and Brazil will release key economic indicators for February. These will show mixed results. In Brazil, we see the index of industrial production falling 0.8% year on year after a decline of 0.6% in January. Brazilian industry remained in negative territory at the start of the year. Industrial production has been negatively impacted by the contractionary effects of the political cycle, when some public posts normally get cancelled with the change of administration. The economy was already in a deceleration

mode since late 2022 with weakness extending to the start of this year.

In Mexico, the news is somewhat more encouraging. The retail sales index likely grew 4.5% year on year in February, after growth of 5.3% in the previous month. Consumer spending received a boost from the 20% increase in the minimum wage starting in January. That has provided relief to consumers given the increasing costs generated by persistently high inflation. However, the positive effect will gradually recede in coming months as inflation remains high and the cost of credit remains elevated given the steady increase in interest rates that makes financing more expensive.

# Geopolitical Calendar

| Date | Country | Event | Economic Importance | Financial Market Risk |
|---|---|---|---|---|
| 28-Apr | Japan | Bank of Japan monetary policy announcement | Medium | Low |
| 28-Apr | EU | Eurogroup | Low | Low |
| April | Solomon Islands | General election | Low | Low |
| May | New Zealand | 2023 budget | Low | Low |
| May | Thailand | General election | Low | Low |
| 4-May | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| 5-May | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |
| 14-May | Turkey | Presidential and parliamentary elections | Low | Low |
| 14-May | Thailand | General election | Low | Low |
| 15-May | EU | Eurogroup | Low | Low |
| 19-21-May | G-7 | Summit-Japan | Low | Low |
| 30-Apr | Paraguay | General election | Low | Low |
| 15-Jun | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| 15-Jun | EU | Eurogroup | Low | Low |
| 16-Jun | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |
| 25-Jun | Guatemala | General election | Low | Low |
| 29-30-Jun | European Union | European Council summit | Low | Low |
| By Jul | Greece | General election | Medium | Low |
| 23-Jul | Cambodia | General election | Low | Low |
| 27-Jul | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| 4-Aug | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |
| 18-Aug | United States | U.S. Treasury X-date | High | High |
| 1-Sep | France | Senatorial elections | Low | Low |
| 9-10 Sep | G-20 | India hosts G-20 summit | Low | Low |
| 14-Sep | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| Sep | U.N. | General Assembly, New York | Low | Low |
| 22-Sep | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |
| By 12-Oct | Spain | General elections | Medium | Medium |
| 14-Oct | New Zealand | General election | Low | Low |
| 26-Oct | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| 26-27-Oct | EU | European Council summit | Low | Low |
| 29-Oct | Argentina | General election | Medium | Medium |
| 29-Oct | Colombia | Regional elections | Low | Low |
| Oct/Nov | ASEAN | Indonesia to host ASEAN summit | Low | Low |
| Nov | Indonesia | Association of Southeast Asian Nations | Low | Low |
| Nov | APEC | Economic leaders' meeting, to be held in San Franciso, U.S. | Low | Low |
| 3-Nov | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |
| 6-17 Nov | U.N. | COP 28, to be held in Dubai, UAE | Low | Low |
| 14-Dec | Euro zone | European Central Bank monetary policy announcement | Medium | Medium |
| 14-15-Dec | EU | European Council summit | Low | Low |
| 15-Dec | United Kingdom | Bank of England monetary policy announcement | Medium | Medium |

# Credit Spreads Consistent With Impending Downturn

BY STEVEN SHIELDS

### CREDIT SPREADS

The deterioration in credit quality combined with heightened financial market stress and recession odds have driven credit spreads higher in recent months. Still, credit spreads remain within the levels historically consistent with an impending economic downturn.

Moody's long-term average corporate bond spread currently sits at 157 basis points, reflecting an 8-basis point decline since last week. Similarly, the long-term average industrial corporate bond spread declined 9 basis points to 142.

Industrial bond spreads are currently hovering in the middle of their respective 12-month band. After peaking at a six-month high of 522 basis points in early March, the ICE BofA U.S. high-yield option-adjusted bond has declined to 462 basis points. This compares to an average high-yield spread of 1,000 basis points during recent recessions and an average of 350 outside of recessions. The high-yield option-adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread but is slightly wider than that implied by a VIX of 18.1%.

Stock market volatility has been surprisingly low following its brief spike in mid-March. The Fed minutes published Wednesday showed Federal Reserve economists now seeing a mild recession looming due to the recent upheaval within the banking sector. The minutes state that the economists predict the recession will begin later this year, followed by a recovery in the ensuing two years. While Moody's Analytics is not currently forecasting a recession in our baseline outlook, the fallout on both credit and economic growth will be meaningful and is likely to result in elevated credit spreads, particularly for lower-rated firms, over the next 12 months.

### DEFAULTS

Nine Moody's-rated corporate debt issuers defaulted in February, up from a revised six in January. The global speculative-grade corporate default rate came in at 2.8% for the trailing 12 months ended in February, unchanged from the December and January levels.

The largest default of the month was from Avaya Inc. and its parent Avaya Holdings Corp The New Jersey-based provider of unified communications, collaboration and contact center software and services filed for Chapter 11 bankruptcy protection for the second time in six years, following investigations and potential litigation surrounding the company's reporting of results and guidance in conjunction with its June 2022 debt refinancing. Moody's Investors Service had downgraded the company's CFR to Caa2 with a negative outlook in August 2022, reflecting unsustainably high financial leverage, sustained cash burn and increased near-term performance challenges. Under Avaya's prepackaged plan of reorganization, more than 90% of the secured lenders agreed to reduce its debt to about $800 million from $3.4 billion.

Besides the two defaulters within Avaya's corporate family, five other U.S. companies also defaulted in February. They were AMC Entertainment Holdings Inc., API Holdings III Corp., and Equinox Holdings Inc., which conducted distressed exchanges; and Akorn Operating Company LLC and KNB Holdings Corp., which filed for bankruptcy. Outside of the U.S., Foodco Bondco SAU of Spain did not make an interest payment on its 6.25% notes at the end of the grace period, while Luxembourg-based Altisource Sarl completed a distressed exchange.

Fifteen companies defaulted in the first two months of this year, down from 17 in the comparable period last year. Across sectors, hotel, gaming and leisure had the most year-to-date defaults, with three. Durable consumer goods, retail and telecommunications followed with two each. By region, North America had 11 defaults, all from the U.S. The rest were from Europe (three) and Latin America (one).

Moody's Investors Service predicts the global speculative-grade default rate will rise this year amid a backdrop of higher interest rates, restrictive financing conditions, lingering inflation, and the likely contraction in economic activity in some countries. However, most issuers' near-term debt maturities are manageable, and the risk of widespread defaults remains low.

Under the baseline default scenario, Moody's Investors Service expects the global speculative-grade corporate default rate to rise to 4.3% at the end of 2023 and then to increase to 4.7% by the end of February 2024. These forecasts, if realized, would surpass the long-term average of 4.1% but remain well below prior recessionary levels, including the pandemic peak of 7%. The forecasts assume the U.S. high-yield spread will range from 437 basis points to 515 bps in the coming four quarters, while the U.S. unemployment rate will rise to 4.8%. At the end of last month, the high-yield spread stood at 412 bps and the unemployment rate was 3.6%.

### U.S. CORPORATE BOND ISSUANCE

First-quarter 2021's worldwide offerings of corporate bonds revealed an annual decline of 4% for IG and an annual advance of 57% for high-yield, wherein US$-denominated offerings sank 9% for IG and advanced 64% for high yield.

Issuance weakened in the second quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 35% for investment grade. High-yield issuance faired noticeably better in the second quarter.

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 faired 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 second quarter, corporate bond issuance weakened. Worldwide offerings of investment grade corporate bonds totaled $548 billion, down 21% on a year-ago basis. US$ denominated high-yield corporate bond issuance was $38 billion in the second quarter, down from $63 billion in the first three months of the year.

Third-quarter issuance declined further as higher interest rates weighed on lending activity. Worldwide offerings of investment grade corporate bonds totaled $505 billion, down 30% year over year. US$ denominated high-yield corporate bond issuance clocked in at $21 billion in the third quarter. High-yield issuance declined approximately 84% on a year-ago basis.

Corporate debt issuance remained suppressed in the fourth quarter of 2022. US$-denominated high-yield issuance ended the year at $2.47 billion, reflecting a drastic 77% decline from 2021. Meanwhile, investment-grade bond issuance totaled $1.29 trillion in 2022, corresponding to a 20.8% decline from 2021. Over the past twelve months total US$-denominated issuance has tracked at a near-decade low.

US$-denominated investment grade debt issuance totaled $8.8 billion in the latest week, down from the $26.6 billion in the preceding period. This brings its year-to-date total to $443.7 billion and reflects at 17.8% decline in issuance over the same period last year. High-yield corporate debt issuance perked up last week at $9.3 billion but continues to track at its lowest level in more than a decade. Total corporate debt issuance over the first three months of the year was 18.8% lower relative to the same period in 2022.

### U.S. ECONOMIC OUTLOOK

Moody's Analytics made modest adjustments to the U.S. baseline forecast in March based on new data and the recent collapse of Silicon Valley Bank, Signature Bank, and Silvergate Bank. These failures raise fears of contagion to other regional banks. Fundamentally, the outlook remains essentially the same, and the pace of annual GDP growth is only modestly changed.

However, there was a material change to monetary policy assumptions this month. Strong job, spending and inflation figures have caused us to assume a higher terminal fed funds rate than last month, though the recent financial system turmoil altered the timing of the increases. New data, especially for spending and income, were strong, lifting first-quarter growth at the expense of coming quarters. In contrast, recent data suggested modestly lower oil prices than expected and caused only minor shifts in the outlook for the labor market. Fiscal policy assumptions remained unchanged, while the outlook for the 10-year Treasury is a bit lower because of recent events.

## Monetary policy

Our baseline forecast for the federal funds rate has changed materially from the previous outlook. After stronger-than-expected January jobs and inflation figures, followed by hawkish rhetoric from the Fed, we anticipate that policymakers will ultimately hike interest rates higher than in the previous baseline. But our expectations about the timing have changed. The failures of Silicon Valley Bank, Signature Bank, and Silvergate Bank have roiled the financial system, and the Fed will be under pressure to pause its rate hikes. Financial conditions are one of the factors used in Fed monetary policy decisions, and the turmoil will likely lead to a tightening in underwriting standards and less credit availability. Therefore, we assume that the Fed will pause its rate hikes in March to gauge just how much conditions have tightened, as well as the impacts on the economy and inflation. We then expect two more 25-basis point rate hikes at the May and June meetings of the Federal Open Market Committee, putting the terminal range for the fed funds rate at 5% to 5.25% in the summer. The previous outlook predicted a single 0.25-point rate hike in March and a terminal range for the fed funds rate of 4.75% to 5%. We anticipate that the Fed will keep rates at the terminal level before beginning to cut at the first FOMC meeting in 2024. Monetary policy will remain restrictive through the end of 2025. The fed funds rate will return to its neutral rate in early 2026.

Meanwhile, inflation continues to decelerate, although the progress is slower than last fall when pandemic-supply conditions and energy market frictions were fading.

Consumer prices rose 0.37% in February, nearly matching the monthly average over the last six months. However, the increase was smaller than the almost 0.6% in January. The change in core inflation slightly accelerated to 0.44% in February, highlighting price pressures for shelter and nonshelter services. Overall, at 6%, year-over-year consumer price inflation remains well above the Fed's 2% target. Various Fed governors reiterated that further interest rate hikes will be appropriate. However, they did not commit to how high the policy rate will ultimately have to go. Policymakers instead have signaled that they will stop when incoming data firmly suggest that broad-based inflation has turned. Their main bellwether remains labor market tightness. The Fed considers wage growth of 3.5% consistent with its 2% inflation target. Year-over-year growth in the employment cost index for wages and salaries was 5% in the last quarter of 2022, down from its peak of 5.7% earlier last year but still too high for policymakers to consider their job done.

The baseline outlook reflects our expectation that inflationary pressures from supply-side frictions, energy markets, shelter, and U.S. labor market conditions will continue to soften throughout the year. The path toward a soft landing for the Fed remains narrow: Policymakers cannot ease up too early and have repeatedly pointed to tight financial market conditions as the central monetary policy mechanism to dampen demand. However, as U.S. demand shows signs of sustained cooling, keeping interest rates too high for too long risks choking off the expansion and increasing unemployment. It also risks unearthing further imbalances in the financial sector.

Inflation remains the key to the baseline outlook. The March vintage has the CPI rising 4.1% in 2023 and 2.4% in 2024, a small uptick compared with 3.9% and 2.4%, respectively, in the prior baseline. The reason is that inflation in early 2023 has decelerated a bit more than expected.

Financial conditions remain unsettled as the recent market upheaval has undone some of the easing observed since inflation started to decelerate last fall. The 10-year Treasury yield briefly breached 4% in early March before falling back to 3.5%, as some investors scrambled for the exits after SVB's failure. The baseline outlook has the 10-year Treasury yield averaging 3.7% during the first three months of this year, unchanged from the previous baseline, and peaking in the first quarter of 2025 at 4.1%. Compared with the prior baseline, this marks a slight decline of less than 10 basis points for each upcoming quarter, reflecting higher investor risk aversion. We project that the 10-year Treasury yield will start to decline into 2025.

Foreign exchange markets have also started to relax since the Fed has slowed the pace of hiking. On a real broad trade-weighted basis, the U.S. dollar is still up more than 10% from its pre-pandemic level, but in February has depreciated by more than 5% from its October peak.

### Energy

Moody's Analytics has lowered its oil price forecast. Brent crude oil is expected to average $88.53 a barrel in 2023, down from $90.59 a month ago. At prices north of $80, crude oil is overvalued relative to conditions on the ground. Moody's Analytics' current and future assessment of the supply/demand balance suggests that Brent prices should be around $75 and end the year around $80.

A good bit of the tightening that we expect in the oil market, owing primarily to China's reopening, is already being priced in. It would take the full combination of a massive surge in Chinese demand—beyond the International Energy Agency's optimistic expectations—total EU compliance with the Russian energy ban, and a lack of Russian ability to reroute exports for oil to sustain $100 a barrel for an extended period this year. Given the balance of risks, we have lowered the oil price forecast, particularly in the second quarter.

However, as we get into 2024, the buffer of oversupply will be gone, the prospects for new U.S. oil are bleak, and we expect the dollar to weaken considerably. This, combined with recent comments from U.S. drillers about a lack of productive shale oil inventory, has caused us to raise our oil price forecast for 2024. We expect Brent to then average $78.92 a barrel, up from $76.67.

Moody's Analytics also continues to reduce our forecast for Henry Hub natural gas prices. We expect gas prices to average $5.18 per million BTUs for 2023, down from $5.51 a month ago. Two of the three trains at the Freeport liquefied natural gas terminal have reopened, but that has had a modest impact on prices. Mild weather conditions continue to dominate the dynamics in the gas market, responsible for the oversupply. Absent a reversal in weather conditions or a near-term recovery in prices, we will likely continue to mark down our natural gas price forecast.

### Changes to the pattern of GDP growth

The expansion in economic activity progressed in the second half of 2022 after pausing in the first half as measured by real GDP. The contribution from trade declined but inventory accumulation increased, and several other components contributed. Output rose 2.7%, following a 3.2% gain in the third quarter, according to the second report from the Bureau of Economic Analysis. The year as a whole was weak, and the economy is sure to have a difficult 2023, as it struggles under the weight of the interest rate increases orchestrated by the Federal Reserve to quell

painfully high inflation and fallout from recent problems among banks.

While the economy will struggle during the coming year in response to the Fed's actions intended to rein in the high inflation, the baseline outlook holds that the Fed will be able to accomplish this without precipitating a recession. That is, it will be able to raise rates high enough to sufficiently quell the wage and price pressures, but not so high and fast that it fully knocks the wind out of the economy. This is a scenario Moody's Analytics might call a "slowcession"—growth that comes to a near-standstill but never slips into reverse.

Revisions to the baseline forecast for real GDP are modest. The forecast for real GDP now shows only a slight dip in the first quarter of 2023, but a larger deceleration in growth in the second quarter before economic growth gradually accelerates. The strong January data contributed to this altered pattern, along with near-term concerns about the fallout from financial system issues. Annual growth rates in 2022 and 2023 are 2.1% and 1.9%, respectively, the latter a marked improvement from last month's forecast that comes at the expense of 2024. Growth in 2024 was revised lower to 1.9% and growth in 2025 was unchanged, at 2.7%. It will now take until 2025 before the economy returns to near-potential growth.

### Labor market

The February employment report underscored the labor market's resilience but also showed signs of softening. Net payroll gains came in above expectations again but slowed from January's outsize gain. The unemployment rate rose to 3.6% as the labor force posted its third straight month of impressive gains. The new data were incorporated in the March baseline forecast, which has not materially changed from February.

The strong momentum of the job market means that the marked weakening in the labor market is not expected to materialize until the second quarter of 2023 and beyond. Monthly job gains will average less than 75,000 in the second quarter, followed by gains of only about 25,000 per month during the final two quarters of 2023. Growth will pick up only modestly in 2024 as the risk of a recession remains high. High-profile layoffs by tech companies and banks have started to have an impact, and as a result, financial services and information payrolls will be among the biggest losers over the next year. Despite the housing market being pummeled by high interest rates, construction payrolls will remain mostly flat in 2023 as builders work through a significant pipeline of projects.

The unemployment rate forecast has shifted slightly given the increase in February, with the rate now expected to hold stable at around 3.5% for most of this year before increasing at year's end. The unemployment rate will soften further next year and peak at 4%. Over the next year, the increase in the unemployment rate will be right on the border of the 50-basis point increase that historically has been a reliable indicator that the economy is in a recession.

### Fiscal policy

The Treasury budget deficit will amount to 4.9% and 5.3% of GDP in fiscal 2023 and 2024, respectively, down from 5.5% in fiscal 2022. The deficit-to-GDP ratio for the current fiscal year is 0.6 percentage point higher than in the February forecast following the budget shortfall that the Treasury recorded in February, which was the largest ever for the month of February outside of the COVID-19 pandemic. Also, personal tax payments have come in lighter than expected in early 2023. Close observers of the federal budget should not be sidetracked by the improvement in deficits since fiscal 2020, as this reflects the winding down of emergency pandemic relief. The federal budget is still on an unsustainable track, and budget shortfalls will reach 6.7% by fiscal 2033. Likewise, public debt outstanding will rise from an expected 97.1% in fiscal 2022 to 115.5% in fiscal 2033.

The U.S. Treasury is quickly approaching the X-date—the day it will not have enough cash to pay all of the federal government's bills on time. Moody's Analytics assumes lawmakers will suspend or increase the Treasury debt limit before this happens, allowing the Treasury to issue more debt and pay the government's bills. The debt limit was hit on January 19, and the Treasury is using "extraordinary measures" to come up with the additional cash needed to pay its bills while staying under the statutory limit. Based on our updated assessment of the government's outlays and receipts in the coming weeks, those measures seem likely to be exhausted by mid-August. To be more precise, the X-date appears to be August 18, which is not much different from our assumption in the February vintage. Investors in short-term Treasury securities are coalescing around a similar X-date, demanding higher yields on securities that mature in late August, given worries that a debt limit breach may occur.

### Business investment and housing

The Bureau of Economic Analysis' second estimate of fourth-quarter real fixed business investment showed growth of 3.3% annualized, a measurable upward revision from 0.7% in the advance estimate. The bulk of the adjustment came from structures, which rose 8.5% annualized compared with 0.4% in the earlier publication. Drilling down further, the source appears to be that the large office segment recorded its first gain in real terms in more

than three years. However, one quarter does not make a trend.

Otherwise, the revised data on equipment spending mainly confirmed the weakness in IT, which led the overall decline. Pandemic-related spending by companies on computers and peripherals is past the peak as the proportion of the labor force working remotely stabilizes. However, the significant gains in transportation equipment spending were unchanged as supply-chain issues continue to resolve, and the upward revision in fourth-quarter growth in core industrial equipment spending to 6.1% annualized was noteworthy. Still, high-frequency data are pessimistic, with inflation-adjusted new orders for nondefense, nonaircraft capital goods steadily declining by 2.8% cumulatively over the course of 2022.

The bottom line is that the improved fourth-quarter structures spending data will help to lift the outlook for 2023 growth in business investment modestly. The new projection is that real business fixed investment will grow 3.9% on an annual average basis, up from 3.4% forecast in February. The outlook for equipment spending is largely unchanged, up 2% versus February's 1.8%. However, the unexpectedly high January CPI data mean that the Fed will tighten more than previously expected, adding downside risk to the outlook. The failure of SVB, the bank for high-tech startups, will also weaken business sentiment.

By contrast, Moody's Analytics downgraded its short-term outlook for housing permits and starts due to expectations for higher mortgage rates to persist throughout 2023. Underlying demand due to demographics continues to support increased construction activity in the long run as vacancy rates remain near their all-time lows and as the nation continues to run a significant housing deficit. Builders are expected to slow applications for new permits in 2023 as they focus on completing the large number of units under construction.

Commercial real estate price growth was revised downward given the upward revisions to interest rates, which will increase the financial burden on property owners and potential buyers. Prices for office properties are expected to decline more than other property types as more businesses adopt remote or hybrid work policies, thereby decreasing their need for office space. Apartment building prices are expected to soften because of higher interest rates as well as slowing rent growth. Property prices, rents and cap rates will come under further pressure as many multifamily buildings under construction are completed this year and add to the available supply.

# Euro Zone Industry Holds, but Warnings Flash

**BY ROSS CIOFFI**

Industrial production in the euro zone grew 1.5% month over month in February, adding to an upwardly revised 1% increase in January. Output grew solidly across goods types and countries. Once again, the euro zone's industrial sector outperformed expectations. There are warning signs flashing from other indicators, such as PMI and sentiment data, but output continues to grow as firms work through backlogs of orders and demand for intermediate goods holds up. The resilience in the industrial sector so far is a positive signal for GDP growth in the first quarter.

Indicators such as the Purchasing Managers' Index are signaling caution. In March, the score tumbled to 47.3 from 48.5 in February. The survey even reported some slight growth in output, but a significant reason why the survey is so deeply in contractionary territory is that factory orders have been falling quickly in recent months. This shows a considerable weakening of demand for the bloc's industrial goods and is not too surprising given the continued rise in interest rates and persistent decline in purchasing power amidst still-high inflation. What this means is that there are still tangible downside risks for this year when it comes to industrial production. Factories may run through their backlogs. And with just a trickle of new orders coming in, we could see a pullback in total output.

### Dutch industry recovers

Industrial production in the Netherlands gained 1.2% month over month in February, in seasonally adjusted terms, after declining 3.4% in January. Despite the good news, a rebound above the all-time peak in the headline index is not expected until next year.

Firms continue to face higher costs, a weaker economy, and tighter credit conditions. However, given a lower probability that the euro zone will fall into recession this year, Dutch business confidence and purchasing managers' indexes are tentatively recovering after bottoming out late in 2022.

Nonetheless, the country's manufacturing PMI is still flashing negative signs. While higher than November's trough, PMI readings below 50 ensure we will continue to see softness in industrial production in the months ahead. All in all, we are forecasting tentative growth for industrial production in 2023 and a return above last year's peak by the end of 2024.

### Euro zone retail slips

Retail sales in the euro zone recoiled 0.8% month over month in February, undoing an upwardly revised 0.8% increase in January. Sales registered 3% lower in year-ago terms. On a monthly basis, food and nonfood sales pulled back. Auto fuel sales also tumbled, though these blows were softened by a jump in mail order and internet sales.

Consumers are struggling in the euro zone. Even though they will benefit greatly from lower energy bills, prices for all goods and services remain well above year-ago levels and borrowing costs continue to rise. The subsequent hit to purchasing power, mixed with consumers' grim views of the economy will balance out the positive effects on spending from the bloc's record-low unemployment.

### U.K. GDP stalls

The U.K. economy held flat in February after an upwardly revised 0.4% rise in January. The sectoral breakdown details showed the construction sector saved the day, as a sharp rebound in building activities offset falls in production and services output. We caution, however, that were it not for February's strikes—especially within civil service and amongst teachers and university lecturers—services-sector output and GDP growth would have expanded. Looking ahead, broad-based industrial action also took place in March, which should keep a lid on first-quarter GDP; we expect activity to basically flatline. The economy should only slowly recover thereafter, as still-high inflation and tight financial conditions will continue to dampen growth prospects.

# China Musters Paltry Price Increases

**BY HARRY MURPHY CRUISE and SARAH TAN**

China's prices are failing to launch despite the country's reopening. We had expected price pressures to build as pent-up demand was released with the scrapping of most COVID-19 restrictions last year. Alas, that has yet to occur. Consumer prices rose just 0.7% year on year in March after rising 1% in February. Producer prices fell 2.5% from March 2022, extending February's 1.4% year-on-year fall. In seasonally adjusted terms, prices were unchanged from February. That said, consumer prices should lift through this year as the country's recovery gathers steam. We expect the CPI to average 2.3% this year, up from 2% in 2022. We expect the recovery in the global economy next year to push prices 3.2% higher.

China's recovery has been a mixed bag. Purchasing managers' indexes are showing that activity is picking up, particularly in service industries and the government-stimulated construction sector. On top of that, the property market looks to be gradually turning. But other areas of the economy are under a COVID-19 cloud. Retail sales, while robust, haven't yet set the world alight. Unemployment has also ticked up. The patchiness of the recovery appears to be holding down some price pressures.

The weakening global economy will also keep a lid on price increases. Recent foreign trade numbers have been patchy. China recorded a foreign trade surplus of $88.19 billion in March, compared with a $116.9 billion for January and February combined. Exports surprised on the upside, posting a stellar increase of 14.8% year on year, reversing the decline since October. By contrast, imports extended their slump for the sixth straight month, slipping 1.4% from a year prior. Refined oil exports led most of the gains in exports. Refining discounted crude oil contributed partly to the export strength. On the flip side, exports to the U.S. slipped 7.7% year over year on the back of brewing geopolitical tensions.

March's trade reading reaffirms our expectation that exports will be volatile this year. Despite the uptick in exports, we expect a weakening global economy and ongoing geopolitical tensions to stall demand for Chinese goods. On the imports front, we expect the spending appetite of households to be bite-sized in the first half of this year as a teetering global economy persuades many to set funds aside for a rainy day. Further, even as consumption improves through the later part of 2023, households are likely to prioritise domestic goods and services over imports.

### Aussie labor market remains tight

Stability has returned to the Australian labour market after a roller coaster few months. Jobs took a tumble in December and January, pushing unemployment up to 3.7%. But those losses were unwound in February, with jobs returning to a record high and unemployment falling back to 3.5%. Come March, a further 50,000 jobs were added to the economy, keeping unemployment constant at 3.5%.

The last few months of data have been bouncy—not because of employers changing their minds, but rather some statistical wizardry in seasonal adjustments of the data. These have now mostly washed through; the March figures are a better reflection of reality. And the reality is that the labour market is exceptionally tight. At 3.5%, unemployment remains near a five-decade low. On top of that, female participation has reached a record high.

Despite the strong result, there are glimpses of weakness emerging. Underemployment rose sharply and hours worked dipped after a rise in February. This is likely to be the trend. The combination of higher borrowing costs, elevated inflation, and very weak consumer confidence will make it harder for the Aussie labour market to defy gravity. Still, a cooling of the labour market doesn't mean a collapse. We expect a gradual lift, reaching 3.9% by the end of the year and 4.5% in December 2024.

# A Surge in Foreign Investment

**By JUAN PABLO FUENTES**

Net foreign direct investment in Latin America's largest economies jumped in 2022 despite an increasingly cautious outlook for the region. Net FDI flows reached $127 billion in the region's six largest economies—Brazil, Mexico, Argentina, Colombia, Chile and Peru—in 2022, up 47% from the previous year. Last year's FDI figures represent the highest levels since 2018, and for some countries these are the largest numbers since 2014 (before the end of the latest commodity supercycle). Not only do FDI flows help countries finance their current account deficits, but they also have a long-term positive impact on productivity and growth. Though FDI flows to the region dipped in 2020 due to the pandemic, they started recovering in 2021 but at a gradual pace, given the lingering uncertainty around the pandemic. The recovery gained traction in 2022 thanks in part to the jump in commodity prices following Russia's invasion of Ukraine.

As has been the norm in previous years, Brazil led the region in attracting FDI in 2022. Net FDI flows reached $59.9 billion, a 98.3% increase from 2021 and the highest level since 2018. When considering only FDI inflows (inward direct investment made by nonresident investors in Brazil), the nation attracted $90.6 billion last year, the largest amount in a decade. Net FDI flows also consider outward direct investment that Brazilian residents make to external economies. On the negative side, Mexico's net FDI flows dropped 32.3% in 2022, mostly due to a surge in outward direct investment made by Mexican residents. When considering only inward FDI, Mexico attracted $38.6 billion in foreign investment last year, up 15%. Argentina, Chile and Colombia all saw triple-digit growth in net FDI flows last year amid higher commodity prices; energy, agriculture and metals are typically magnets for foreign investors.

After an outstanding 2022, FDI flows will slow in 2023 as growth in the region decelerates sharply and recession risks remain elevated. Moreover, the external environment has turned bleaker following the recent banking crisis in the U.S. and Europe. Investors have turned more risk-adverse, and credit has become more expensive as a result of recent developments. Increasing political and social tensions might also keep some investors away in 2023 and beyond. However, still-high commodity prices and Latin America's abundant natural resources will continue to attract global conglomerates. Additionally, the region's growing interest in attracting private capital to finance the transition to cleaner energy will also encourage FDI flows in coming years. This transition will require not only private capital to finance it, but also the know-how that typically comes with the participation of multinational corporations.

# Corporate Credit Quality Still Improving in U.S., Deteriorating in Europe

**BY STEVEN SHIELDS**

## U.S.

U.S. corporate credit quality improved in the recent period, extending the recent resurgence in positive rating actions. For the period ended April 11, upgrades accounted for seven of 13 changes issued by Moody's Investors Service and the lion share of the affected debt. The changes issued by Moody's Investors Service spanned a diverse set of investment- and speculative-grade bonds and industrial and financial firms.

The most notable upgrade was issued to ONEOK Inc., with its senior unsecured ratings lifted to Baa2 from Baa3. According to Elena Nadtotchi, a senior vice president at Moody's Investors Service, "The upgrade of ONEOK's ratings to Baa2 reflects significant deleveraging achieved by the company and factors Moody's expectation that it will be able to maintain the improved leverage profile, supported by robust execution and expanded infrastructure assets." Following the upgrade, ONEOK's outlook was revised to stable from positive.

Meanwhile, T-Mobile USA, Inc. saw its senior unsecured ratings raised to Baa2 from Baa3. The upgrade reflects T-Mobile's strong operating performance relative to its competitors and Moody's Investors Service's expectation for continued improvement in T-Mobile's credit profile including growing free cash flow amid an uncertain economic environment.

Other notable upgrades include DCP Midstream, LLC and Jill Acquisition LLC, which saw the rating on their senior unsecured notes and corporate family rating raised to Baa2 from Baa3 and B2 from B3, respectively.

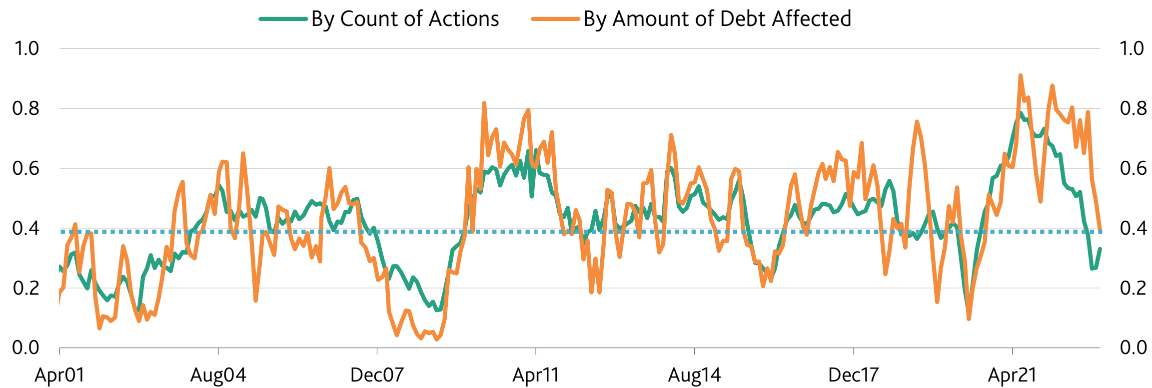
## EUROPE

Corporate credit quality deteriorated across Western Europe with downgrades making up three of the four changes in the weekly period.

Most of the affected debt stemmed from the downgrade issued to The Hospital Company (Dartford) Issuer Plc's senior secured bond rating to Baa1 from A3. The issuer is the financing vehicle for The Hospital Company (Dartford) Limited (ProjectCo). The rating action reflects the protracted uncertainties and execution risks related to outstanding estate remedial works which ProjectCo must implement as part of a Settlement and Amendment Deed finalized in 2021. In Moody's Investors Service view these uncertainties, coupled with a relatively leveraged financial profile result in a credit profile no longer consistent with the previous A3 rating.

The sole upgrade across Western Europe was issued to PeopleCert Wisdom Issuer plc., with its corporate family rating changed to B1 from B2, reflecting the company's continued strong operating performance.

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 |
|---|---|---|---|---|---|---|---|---|
| 4/5/2023 | ONEOK, INC. | Utility | SrUnsec/CP | 13185.9 | U | Baa3 | Baa2 | IG |
| 4/6/2023 | DCP MIDSTREAM, LLC | Industrial | SrUnsec/JrSub/PS | 4590 | U | Ba1 | Baa3 | SG |
| 4/6/2023 | T-MOBILE US, INC.-T-MOBILE USA, INC. | Industrial | SrUnsec | 68775 | U | Baa3 | Baa2 | IG |
| 4/6/2023 | JILL HOLDINGS LLC-JILL ACQUISITION LLC | Industrial | LTCFR/PDR | | U | B3 | B2 | SG |
| 4/6/2023 | UNITED NATURAL FOODS, INC | Industrial | | | D | | | SG |
| 4/6/2023 | OPTIV INC. | Industrial | | | U | | | SG |
| 4/6/2023 | RODAN & FIELDS, LLC | Industrial | PDR | | D | Caa3 | Ca | SG |
| 4/6/2023 | QUALTEK LLC | Industrial | | | D | Caa1 | Ca | SG |
| 4/10/2023 | UPBOUND GROUP, INC. | Industrial | | | D | | | SG |
| 4/10/2023 | SP PF BUYER LLC | Industrial | SrSec/BCF/LTCFR/PDR | | D | Caa1 | Caa2 | SG |
| 4/10/2023 | WAHOO FITNESS INTERMEDIATE HOLDINGS I L.L.C.-WAHOO FITNESS ACQUISITION L.L.C. | Industrial | SrSec/BCF/LTCFR/PDR | | D | Caa3 | Ca | SG |
| 4/11/2023 | CLEVELAND-CLIFFS INC. | Industrial | | 1750 | U | | | SG |
| 4/11/2023 | BDF ACQUISITION CORP. | Industrial | SrSec/BCF/LTCFR/PDR | | U | Caa1 | B2 | SG |

*Source: Moody's*

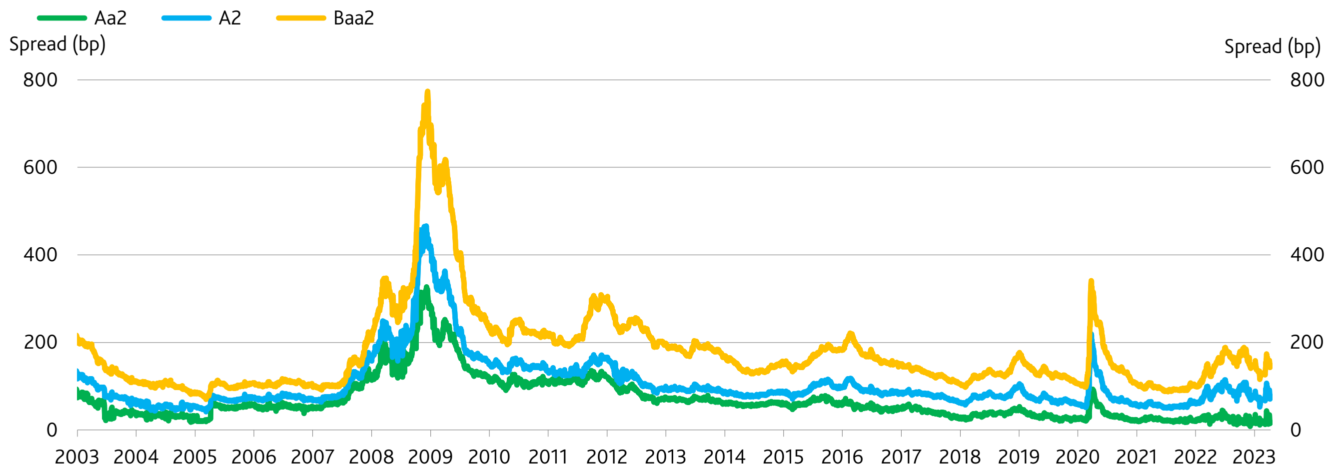
FIGURE 4

**Rating Changes: Corporate & Financial Institutions - Europe**

| Date | Company | Sector | Rating | Amount ($ Million) | Up/ Down | Old LTD Rating | New LTD Rating | IG/ SG | Country |
|---|---|---|---|---|---|---|---|---|---|
| 4/5/2023 | HOSPITAL COMPANY (DARTFORD) ISSUER PLC (THE) | Industrial | SrSec | 189.6723 | D | A3 | Baa1 | IG | UNITED KINGDOM |
| 4/5/2023 | CODERE NEW MIDCO S.A R.L.-CODERE FINANCE 2 (LUXEMBOURG) S.A. | Industrial | | 1753.278 | D | Caa1 | Ca | SG | LUXEMBOURG |
| 4/6/2023 | CD&R FIREFLY 4 LIMITED-CD&R FIREFLY BIDCO LIMITED (MFG) | Industrial | | | D | B1 | B2 | SG | UNITED KINGDOM |
| 4/6/2023 | PEOPLECERT HOLDINGS UK LTD-PEOPLECERT WISDOM ISSUER PLC. | Industrial | SrSec/LTCFR/PDR | 327.7041 | U | B2 | B1 | SG | UNITED KINGDOM |

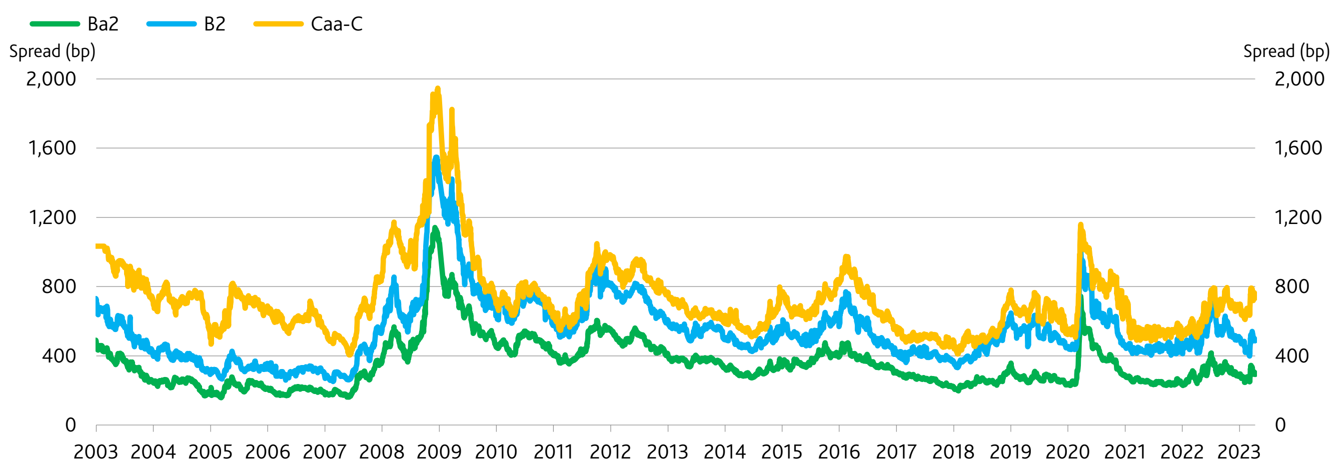
*Source: Moody's*

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 5, 2023 – April 12, 2023)**

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| Pioneer Natural Resources Company | A1 | A3 | Baa1 |
| Comcast Corporation | A1 | A2 | A3 |
| Oracle Corporation | A3 | Baa1 | Baa2 |
| Amgen Inc. | Aa3 | A1 | Baa1 |
| International Business Machines Corporation | A1 | A2 | A3 |
| Bristol-Myers Squibb Company | Aa1 | Aa2 | A2 |
| Union Pacific Corporation | Aa1 | Aa2 | A3 |
| Home Depot, Inc. (The) | Aa1 | Aa2 | A2 |
| Bank of New York Mellon Corporation (The) | A3 | Baa1 | A1 |
| Merck & Co., Inc. | Aa2 | Aa3 | A1 |

| CDS Implied Rating Declines | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| Bank of America Corporation | Baa3 | Baa2 | A2 |
| Philip Morris International Inc. | Baa2 | Baa1 | A2 |
| Capital One Financial Corporation | Ba2 | Ba1 | Baa1 |
| Southern California Edison Company | Baa3 | Baa2 | Baa1 |
| PNC Financial Services Group, Inc. | Aa3 | Aa2 | A3 |
| Nissan Motor Acceptance Company LLC | Ba3 | Ba2 | Baa3 |
| Cargill, Incorporated | Baa2 | Baa1 | A2 |
| Bank of America, N.A. | Baa3 | Baa2 | Aa2 |
| Boston Properties Limited Partnership | Ba1 | Baa3 | Baa1 |
| Texas Instruments, Incorporated | Aa3 | Aa2 | Aa3 |

| CDS Spread Increases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| Staples, Inc. | Caa2 | 1,944 | 1,852 | 92 |
| Dish DBS Corporation | B3 | 2,229 | 2,170 | 59 |
| Domtar Corporation | Ba3 | 797 | 755 | 43 |
| Lumen Technologies, Inc. | Caa1 | 2,256 | 2,220 | 36 |
| Embarq Corporation | Caa2 | 2,034 | 2,002 | 32 |
| TEGNA Inc. | Ba3 | 446 | 418 | 28 |
| Xerox Corporation | Ba2 | 437 | 413 | 24 |
| Motiva Enterprises LLC | Baa1 | 219 | 203 | 16 |
| Las Vegas Sands Corp. | Baa3 | 229 | 213 | 15 |
| Qwest Corporation | B1 | 947 | 932 | 15 |

| CDS Spread Decreases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| Liberty Interactive LLC | Caa2 | 3,905 | 4,304 | -399 |
| Rite Aid Corporation | Ca | 5,851 | 6,155 | -305 |
| Glatfelter Corporation | Caa2 | 709 | 844 | -135 |
| Carnival Corporation | B3 | 1,072 | 1,168 | -96 |
| Freedom Mortgage Corporation | B2 | 1,060 | 1,122 | -61 |
| Caesars Entertainment, Inc. | B3 | 277 | 331 | -55 |
| Gap, Inc. (The) | B1 | 606 | 648 | -42 |
| United States Cellular Corporation | Ba2 | 305 | 345 | -40 |
| Dish Network Corporation | B3 | 1,554 | 1,593 | -39 |
| Western Digital Corporation | Baa3 | 218 | 256 | -38 |

*Source: Moody's, CMA*

## CDS Movers

**Figure 4. CDS Movers - Europe (April 5, 2023 – April 12, 2023)**

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| Rabobank | Aa1 | Aa2 | Aa2 |
| BNP Paribas | A2 | A3 | Aa3 |
| Societe Generale | A3 | Baa1 | A1 |
| ING Bank N.V. | Aa2 | Aa3 | A1 |
| ING Groep N.V. | A3 | Baa1 | Baa1 |
| ENEL Finance International N.V. | A2 | A3 | Baa1 |
| Standard Chartered PLC | Baa1 | Baa2 | A3 |
| BASF (SE) | A1 | A2 | A3 |
| Merck KGaA | Aa1 | Aa2 | A3 |
| Anheuser-Busch InBev SA/NV | A1 | A2 | A3 |

| CDS Implied Rating Declines | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| ABN AMRO Bank N.V. | A2 | A1 | A1 |
| DZ BANK AG | A1 | Aa3 | Aa2 |
| Lloyds Bank plc | A2 | A1 | A1 |
| Landesbank Hessen-Thueringen Girozentrale | A3 | A2 | Aa3 |
| OP Corporate Bank plc | Baa1 | A3 | Aa3 |
| Hamburg Commercial Bank AG | Ba1 | Baa3 | A3 |
| de Volksbank N.V. | Baa2 | Baa1 | A2 |
| Vivendi SE | Baa3 | Baa2 | Baa2 |
| SAP SE | Aa3 | Aa2 | A2 |
| Allied Irish Banks, p.l.c. | Baa2 | Baa1 | A1 |

| CDS Spread Increases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| Vedanta Resources Limited | Caa2 | 2,791 | 2,715 | 76 |
| Casino Guichard-Perrachon SA | Caa2 | 5,794 | 5,765 | 29 |
| NIBC Bank N.V. | Baa1 | 187 | 160 | 27 |
| Garfunkelux Holdco 3 S.A. | Caa2 | 1,363 | 1,339 | 24 |
| Ardagh Packaging Finance plc | Caa1 | 807 | 793 | 15 |
| Dufry One B.V. | B1 | 359 | 345 | 14 |
| Hamburg Commercial Bank AG | A3 | 164 | 152 | 12 |
| United Group B.V. | Caa1 | 1,070 | 1,058 | 12 |
| Wienerberger AG | Baa3 | 126 | 115 | 11 |
| Trinseo Materials Operating S.C.A. | B2 | 897 | 886 | 10 |

| CDS Spread Decreases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| Carnival plc | B3 | 1,017 | 1,107 | -90 |
| Boparan Finance plc | Caa3 | 2,088 | 2,155 | -67 |
| Jaguar Land Rover Automotive Plc | B1 | 726 | 787 | -61 |
| Avon Products, Inc. | Ba3 | 387 | 411 | -25 |
| FCE Bank plc | Baa3 | 209 | 231 | -22 |
| thyssenkrupp AG | Ba3 | 317 | 337 | -20 |
| Eurobank Ergasias Services and Holdings S.A. | B2 | 313 | 332 | -19 |
| Virgin Media Finance PLC | B2 | 421 | 438 | -17 |
| Banco Comercial Portugues, S.A. | Baa3 | 318 | 335 | -16 |
| Deutsche Bank AG | A1 | 144 | 158 | -15 |

*Source: Moody's, CMA*

## CDS Movers

**Figure 5. CDS Movers - APAC (April 5, 2023 – April 12, 2023)**

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| China, Government of | A2 | A3 | A1 |
| Indonesia, Government of | Baa1 | Baa2 | Baa2 |
| Philippines, Government of | Baa1 | Baa2 | Baa2 |
| Malaysia, Government of | A2 | A3 | A3 |
| Aurizon Network Pty Ltd | Baa1 | Baa2 | Baa1 |
| CITIC Group Corporation | Baa2 | Baa3 | A3 |
| Japan, Government of | Aaa | Aaa | A1 |
| Korea, Government of | Aa2 | Aa2 | Aa2 |
| India, Government of | Baa2 | Baa2 | Baa3 |
| Mitsubishi UFJ Financial Group, Inc. | A2 | A2 | A1 |

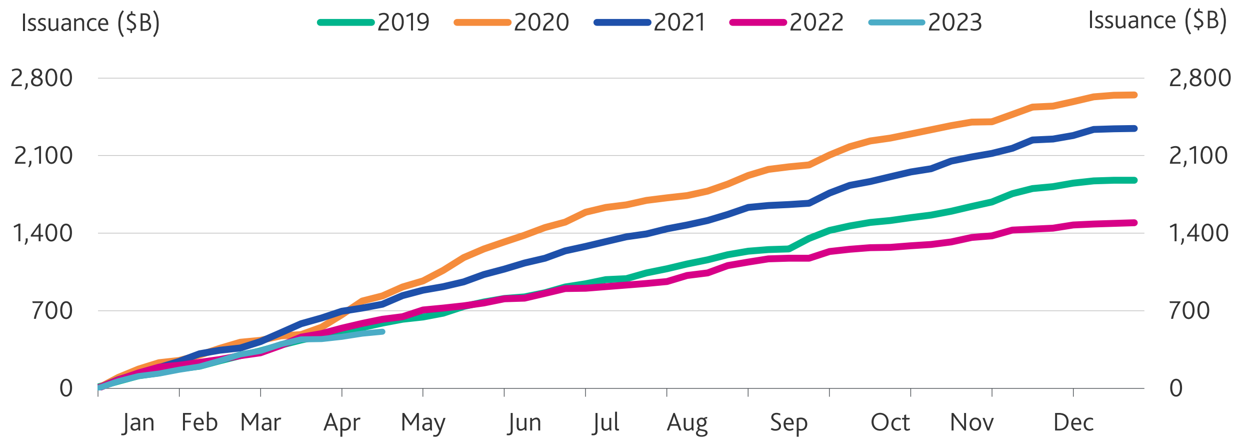
| CDS Implied Rating Declines | CDS Implied Ratings | | |
|---|---|---|---|
| Issuer | Apr. 12 | Apr. 5 | Senior Ratings |
| Australia, Government of | Aa1 | Aaa | Aaa |
| Sumitomo Mitsui Trust Bank, Limited | Baa2 | Baa1 | A1 |
| Mizuho Bank, Ltd. | Baa1 | A3 | A1 |
| Bank of East Asia, Limited | Baa3 | Baa2 | A3 |
| Nomura Holdings, Inc. | Baa3 | Baa2 | Baa1 |
| Transurban Finance Company Pty Ltd | Baa2 | Baa1 | Baa2 |
| Chubu Electric Power Company, Incorporated | Aa1 | Aaa | A3 |
| Norinchukin Bank (The) | Baa2 | Baa1 | A1 |
| Bank of China Limited | Baa2 | Baa1 | A1 |
| JFE Holdings, Inc. | A3 | A2 | Baa3 |

| CDS Spread Increases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| SK Hynix Inc. | Baa2 | 206 | 138 | 69 |
| Pakistan, Government of | Caa3 | 4,270 | 4,219 | 51 |
| Adani Green Energy Limited | B2 | 955 | 942 | 13 |
| SK Innovation Co. Ltd. | Baa3 | 273 | 262 | 11 |
| Rizal Commercial Banking Corporation | Baa3 | 142 | 133 | 10 |
| Nissan Motor Co., Ltd. | Baa3 | 177 | 169 | 8 |
| RHB Bank Berhad | A3 | 116 | 109 | 7 |
| Lenovo Group Limited | Baa2 | 159 | 154 | 5 |
| JFE Holdings, Inc. | Baa3 | 70 | 67 | 4 |
| CNAC (HK) Finbridge Company Limited | Baa2 | 217 | 213 | 4 |

| CDS Spread Decreases | | CDS Spreads | | |
|---|---|---|---|---|
| Issuer | Senior Ratings | Apr. 12 | Apr. 5 | Spread Diff |
| Development Bank of Kazakhstan | Baa2 | 239 | 257 | -18 |
| Aurizon Network Pty Ltd | Baa1 | 79 | 90 | -11 |
| CITIC Group Corporation | A3 | 107 | 117 | -10 |
| LG Chem, Ltd. | A3 | 93 | 102 | -9 |
| Boral Limited | Baa2 | 133 | 141 | -8 |
| Toyota Industries Corporation | A2 | 127 | 135 | -8 |
| Indonesia, Government of | Baa2 | 83 | 91 | -7 |
| Malayan Banking Berhad | A3 | 78 | 84 | -7 |
| China, Government of | A1 | 65 | 71 | -6 |
| Philippines, Government of | Baa2 | 82 | 89 | -6 |

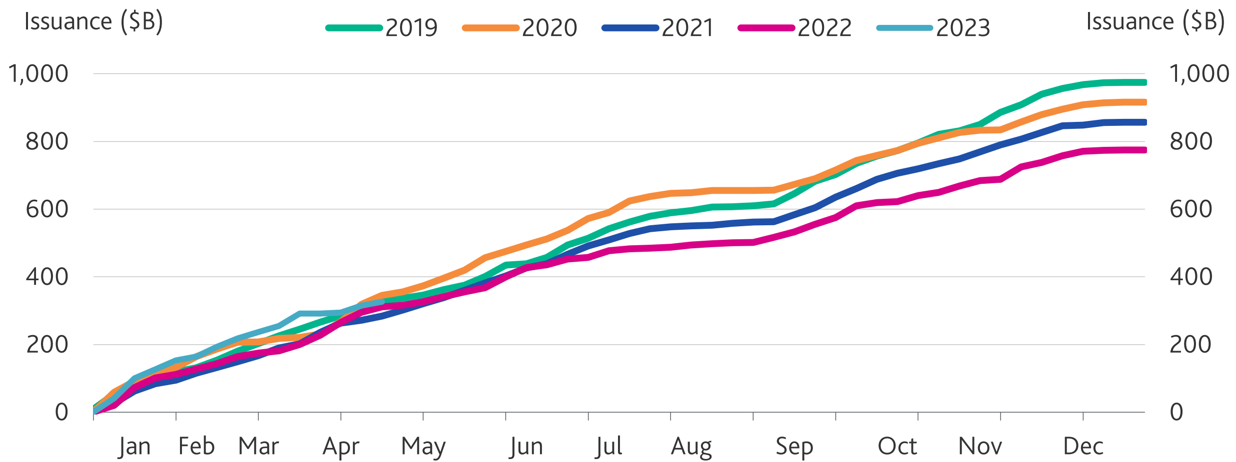
*Source: Moody's, CMA*

**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 | 8.842 | 9.338 | 18.186 |
| Year-to-Date | 443.722 | 59.378 | 511.871 |

| | Euro Denominated | | |
|---|---|---|---|
| | Investment-Grade | High-Yield | Total* |
| | Amount $B | Amount $B | Amount $B |
| Weekly | 10.931 | 0.434 | 11.365 |
| Year-to-Date | 290.137 | 22.719 | 326.247 |

* Difference represents issuance with pending ratings.

*Source: Moody's/ Dealogic*

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**Report Number: 1364468**

**Editor**
**Reid Kanaley**
helpeconomy@moodys.com

**Contact Us**
Americas
+1.212.553.1658
clientservices@moodys.com

Europe
+44.20.7772.5454
clientservices.emea@moodys.com

Asia (Excluding Japan)
+85 2 2916 1121
clientservices.asia@moodys.com

Japan
+81 3 5408 4100
clientservices.japan@moodys.com

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