

**WEEKLY MARKET  
OUTLOOK**

AUGUST 31, 2023

**Lead Author**

Dante DeAntonio  
Director

**Asia-Pacific**

Steven Cochrane  
Chief APAC Economist

Heron Lim  
Harry Murphy Cruise  
Katrina Ell  
Denise Cheok

**Europe**

Ross Cioffi  
Olia Kuranova

**U.S.**

Adam Kamins  
Olga Bychkova

**Latin America**

Darrah Peklak  
Juan Pablo Fuentes  
Gustavo Rojas-Matute

**Inside Economics Podcast:**



[Join the Conversation](#)

[Apple Podcasts](#)

[Google Podcasts](#)

# A Win for the Doves

Federal Reserve Chair Jerome Powell last week emphasized the degree of uncertainty surrounding the outlook for monetary policy, while reasserting the central bank's commitment to not ease up on the brakes until its 2% inflation target is in sight. The Fed largely views the labor market as the most important battleground in its fight against above-target inflation. In his speech at Jackson Hole WY, Powell warned, "Evidence that the tightness in the labor market is no longer easing could also call for a monetary policy response." Incoming data on the job market on Tuesday have therefore reduced the odds the Federal Open Market Committee will raise the target range for the fed funds rate in its September meeting.

The Job Opening and Labor Turnover Survey for July revealed both job vacancies and quits are steadily declining. Job openings fell to 8.827 million in July, the lowest since March 2021, when the economy started to reopen in earnest thanks to the rollout of vaccines and the lifting of restrictions on businesses and gatherings. Moreover, June's figure was revised substantially lower from 9.582 million to 9.165 million. Consequently, the gap between labor demand (the sum of job openings and employment) and labor supply (the labor force) is shrinking and nearing the threshold below which would be consistent with the Fed's 2% inflation target. As of July, excess labor demand stands at just below 3 million; our past work has concluded that the gap between available jobs and labor needs to fall below 2 million for the Fed to be comfortable that it can achieve its inflation goal.

The reduction in the labor market's demand-supply imbalance is also evident in the ratio of job openings to unemployed persons. There are 1.5 job vacancies per jobless person, down from the record high of two job openings that was set in early 2022. More important, balance between labor demand and supply is gradually being restored without any meaningful increase in unemployment.

**Table of Contents**

**Top of Mind**..... 3

**Week Ahead in Global Economy**..... 5

**Geopolitical Risks** ..... 6

**The Long View**

    U.S. ....7

    Europe .....12

    Asia-Pacific .....13

    Latin America .....15

**Ratings Roundup** ..... 16

**Market Data**..... 18

**CDS Movers** .....20

**Issuance**.....23

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.

Arguably, the most encouraging evidence of a cooling labor market is the quits rate, which is one of, if not the best predictor of wage growth, as income gains for job switchers typically outrun those for job stayers. The quits rate fell to 2.3% in July from 2.4% in June and is in line with its annual averages for 2018 and 2019, when the labor market was tight but inflation in the labor-intensive services side of the economy was not uncomfortably strong. A decomposition of quits across major industries shows that a good chunk of the reduction in labor churn over the past year and a half is because of consumer-facing services such as retail trade and leisure/hospitality.

#### **Hollywood strike will dent August jobs numbers**

Our forecast for U.S. nonfarm employment is unchanged from last week as we expect a gain of 162,000 jobs in August. This would represent a continuation of the summer slowdown and the lowest monthly total since December

2020. The deceleration from the current three-month moving average of 218,000 jobs per month is expected given the Fed's restrictive policy but also because of the ongoing writers and actors strikes. The SAG-AFTRA strike began in mid-July and spanned the entire August survey reference period.

The Bureau of Labor Statistics uses media reports and publicly available company and union information to compile a monthly summary of strike activity during the survey reference pay period; this strike report focuses on workers directly involved in strikes involving 1,000 or more workers idled during the entire reference pay period. According to the latest strike report, the SAG-AFTRA strike will reduce reported August employment by 16,000. This coincides with an 1,800-member strike from a Southern Californian hotel workers union, leading to a total employment impact of about 18,000.

# Initial Estimate of Hurricane Idalia's Cost

By ADAM KAMINS

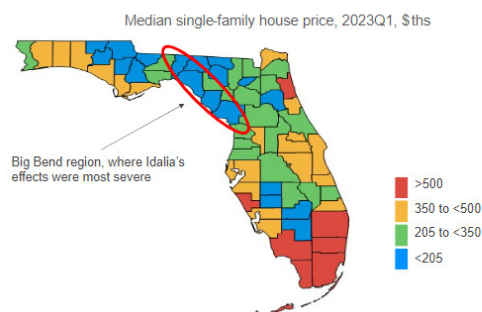
After Hurricane Idalia spent much of Wednesday lashing the southeastern U.S., its economic impact is beginning to come into focus. While the price tag will reach well into the billions, due primarily to a footprint that extended from Tampa FL to North Carolina, the storm's path and speed will keep the price tag well below that of other major hurricanes, including Ian, which battered the far busier southwest of Florida last year. The preliminary cost estimate for Idalia is between \$12 billion and \$20 billion of damage and lost output. This represents an approximate early price tag, with an official estimate of insured losses from Moody's RMS forthcoming in the next two weeks.

## Property damage

As with virtually all natural disasters, the majority of the costs associated with Idalia come from damage to property. But unlike other recent events, the bulk comes not from a handful of counties that were decimated but instead a large, multi-state area experiencing significant but not catastrophic damage.

Part of the reason is that the storm made landfall in Florida's Big Bend, which is fortuitous. Its three coastal counties—Dixie, Levy and Taylor—are three of just five among roughly three dozen on Florida's coast that are not large enough to be part of a metropolitan area. This means that the hurricane's worst impacts were felt in an area with fewer people and structures than most similar events. Given the relative lack of economic activity and relative absence of land constraints, property values in the Big Bend are lower than they are for much of the rest of the state, further suppressing costs.

Properties in Hardest-Hit Counties Are Relatively Inexpensive



The fast-moving nature of the hurricane and its path after landfall also helped to prevent a worst-case scenario. Slower-moving weather systems are far more costly given their potential to lash an area for an extended period with

damaging wind and flood-inducing rain. But Idalia was out to sea within about 24 hours of making landfall, helping to prevent the sort of catastrophic inland flooding that can occur with slower-moving systems that weaken over land.

Even so, the combination of hurricane-force winds, heavy rain, and subsequent storm surge brought significant damage to much of northern Florida and southern Georgia. Flooding was especially problematic in and around Tampa early in the event, and the storm surge also drove major flooding in Charleston SC. Along the way, downed trees and swelling rivers caused damage as well, leading to a price tag of \$10 billion to \$16 billion in property losses.

With flooding responsible for much of the damage, it will prove challenging for some affected areas to quickly get back on their feet. Typical homeowners' policies cover wind damage, but supplemental flood coverage has far lower penetration levels, which will leave some residents of areas that were hit hard holding the bag.

## Lost output

While not as dramatic as the property damage costs, lost output associated with the hurricane will drive a moderate softening in the third-quarter data for a number of economies. But the direct hit to relatively rural areas keeps this somewhat in check as well.

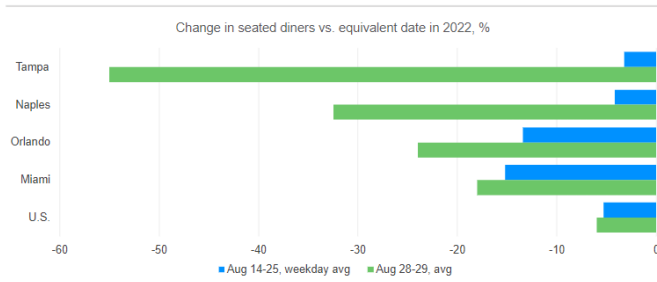
Ultimately, lost output will sum to between \$2 billion and \$4 billion. As with damage, this will be concentrated across much of the Southeast. Power outages and closures are affecting much of northern Florida east of the Panhandle as well as large swaths of southern Georgia and the coastal Carolinas. Given physical damage and limits on how quickly crews can work, it will take some time for the region to be running normally again. Similarly, the large footprint will create travel issues that may disrupt the ability to move goods and people across the region in the near term.

Still, the areas that will remain compromised for more than a few days will likely be more rural ones, preventing a more severe reduction in output. Indeed, the lost output figure from this storm comes largely from closures of one to three days across places such as Tampa, Charleston, and a number of midsize metro areas.

The impact on tourism also contributes to the output numbers. While theme parks in the Orlando area remained open, unlike in Hurricane Ian a year ago, airlines are offering

travel credits and many vacation plans are being canceled. Seated diner reservations data from OpenTable, meanwhile, show a sharp decline in eating out even in the early part of this week.

**Impact on Consumers Was Clear Even Before Storm Hit**



Sources: OpenTable, Moody's Analytics

This was most pronounced in Tampa, but southwestern and central Florida also saw reduced activity, likely owing in large part to reduced tourist traffic amid concerns about the hurricane's impacts.

None of this is to suggest that the strong outlook in Florida faces any near-term changes. But Idalia is just the latest reminder that the state and broader Southeast sit in a precarious position, with structural advantages constantly at risk of being undermined by a disaster. Idalia may not go down in history as an especially costly event, but as climate change leads to more frequent storms that can intensify rapidly, events like it will grow more common over time.

# The Week Ahead in the Global Economy

## U.S.

The U.S. economic calendar turns light next week, with a varied mix of data. The most important statistic likely will be the revision to second-quarter nonfarm business productivity. We look for second-quarter productivity growth to have been revised down from 3.7% to 2% at an annualized rate. Even with this downward revision, productivity will be on an improved trajectory relative to its pre-pandemic trend. If our forecast is correct, productivity will be 0.8% higher than its pre-virus trend (rather than the 1.2% margin indicated by the first estimate of second-quarter productivity). Productivity is the key firewall between strong wage growth and sustained inflationary pressures. There are reasons to be optimistic that productivity growth should continue to be healthy as the extraordinary number of quits and new hires in 2021 and 2022 fades further into the background and fewer workers are at the lowest stage of their learning curve.

Other key data to be released next week include factory orders, the ISM nonmanufacturing survey, and consumer credit.

## Asia-Pacific

The gloom around China is set to linger. We expect the country's trade surplus for July to fall, with weakness across the broader global economy keeping orders from key markets soft. Meanwhile, a lack of domestic consumption spend in China and lower commodity prices will drive imports lower. The lack of spending will also show up in lower August prices, although higher rice prices could result in food inflation. With little economic momentum spurring orders, producer prices are set to again tumble in year-on-year terms.

## Europe

Final estimates of the euro zone's second-quarter GDP will be released next week. We are not expecting a change from the preliminary report of a 0.3% quarterly increase. Although we do not have a detailed breakdown of the GDP figures, we estimate that net trade was the main contributor to growth during the stanza. Domestic demand will be weaker, but consumer spending will also likely provide a slight contribution to GDP growth considering the data available from individual countries.

Retail sales in the euro zone likely fell 0.6% monthly in July, deepening a 0.3% decrease in June. Consumer fundamentals

are mixed. Although the unemployment rate is low, purchasing power is still under great pressure, and consumer confidence is still deep in negative territory. To the extent that households are spending, we see signs that they are preferring services over goods. We estimate that retail sales in Italy rebounded 0.4% month over month in July after a 0.2% decline in June. But losses elsewhere in the euro zone will outweigh this increase and cause the aggregate to fall.

Meanwhile, industrial production in Germany likely rebounded marginally in July, up 0.2% on the month following a 1.5% drop in June. Output in France and Spain are also expected to have been weak, with a 0.5% contraction in France and zero growth in Spain. In each case, manufacturing PMIs lost ground during the month, signaling that the continued chill in demand will worsen output.

Finally, we expect to see Germany's annual CPI inflation rate confirmed at 6.1% in August, down from 6.2% in July. Russia's CPI inflation rate will likely have increased to 5.1% year over year from 4.3% in July.

## Latin America

Prices continue to deflate within the Latin American region, next week's indicators will show. Strong monetary restrictions will pull Mexico and Uruguay's August inflation rates lower, with Uruguay's inflation rate already within the central bank's target range. Chilean CPI most likely adjusted down and will be closer to the target range for August. The central bank will respond by cutting interest rates by another 100 basis points in its September meeting. Colombian inflation is still high and will likely post in the double digits for August, but annual inflation will moderate thanks to stable food prices.

Still, other macroeconomic indicators are reeling from still high inflation and tightening credit conditions. Brazil's industrial production in July will only advance mildly in annual terms with growth restricted by monetary conditions. Argentina's industrial production is expected to fall in July as deteriorating domestic and external conditions take a toll on output. Lastly, Chilean trade is expected to post another surplus for August as slumping domestic demand holds down imports.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk	Risk Assessment
5-6 Sep	Russia/ Central Asia	Eastern Economic Forum	Medium	Low	The forum will serve as a 'check-up' on the Russia-Asia cooperation and signal whether Russia can continue to depend on its allies in the region to withstand sanctions.
9-10 Sep	G-20	India hosts G-20 summit	Low	Low	The G-20 members represent close to 85% of global GDP, making it the premier forum for updates about global economic cooperation.
12-30 Sep	U.N.	General Assembly, New York	Low	Low	
1-Oct	United States	Potential government shutdown	Low	Low	Following a recent stand-off over the debt limit, risks of a standstill over next year's funding package lean to the upside, but history suggests the economic impact will be limited.
22-Oct	Switzerland	Federal elections	Low	Low	
26-27-Oct	EU	European Council summit	Low	Low	
29-Oct	Argentina	General election	Medium	Medium	The highly contested election might yield a drastic shift in economic policy and the country's political orientation. The ruling leftist coalition faces an uphill battle with two opposition candidates having strong showings in recent polls.
Oct/Nov	ASEAN	Indonesia to host ASEAN summit	Low	Low	Followers will watch for any policy developments regarding closer regional relations in the South China Sea, which is critical for global sea trade.
Oct/Nov	Poland	Parliamentary elections	Low	Low	
Nov	APEC	Economic leaders' meeting, to be held in San Francisco, U.S.	Low	Low	The APEC summit will be watched for the latest cooperation agenda between members on goods, services, investment and people.
6-17 Nov	U.N.	COP 28, to be held in Dubai, UAE	Low	Low	
22-Nov	Netherlands	General election	Medium	Low	After a volatile first half of 2023 for Dutch politics, this snap election will determine whether the growing populist, right-wing presence will cement itself in the nation's politics.
14-15-Dec	EU	European Council summit	Low	Low	
31-Dec	U.S.	Deadline for enactment of FY24 National Defense Authorization Act	Medium	Low	As the U.S. faces a growing set of national security challenges from competitors like China and military aggressors such as Russia, Iran and North Korea, appropriate funding has become increasingly necessary to combat external risks.
13-Jan	Taiwan	Presidential election	Medium	Medium	The election will have deep ramifications on the trajectory of U.S.-China relations.
14-Feb	Indonesia	General election (including presidential election)	Low	Low	
March	Russia	Presidential election	High	Medium	As the first presidential election in Russia since the war in Ukraine began and constitutional amendments were made in 2020, the election will be closely watched for internal instability and potential disruption, even as Vladimir Putin is highly likely to win re-election.
March	China	Two Sessions (Meetings of China's top legislative body and political advisory body)	High	Medium	The annual Two Sessions meeting sets the wider policy agenda along with economic and social goals for the world's second largest economy.
10-Apr	South Korea	General election	Low	Low	The election will determine whether President Yoon's policy agenda will continue to face opposition in the National Assembly.

# VIX Hits Its Lowest Value of the Month

By **OLGA BYCHKOVA**

## CREDIT SPREADS

Corporate credit spreads exhibited significant volatility throughout August, but by the end of the month they returned close to the levels at the start of the month and slightly below their 12-month lows. Tight credit spreads show market participants remain confident in the creditworthiness of borrowers and see the overall economy as favorable. As a result, despite monetary policy tightening worldwide, market participants see a high likelihood for a “soft landing.” This has been underpinned by healthy corporate balance sheets, persistent strength in consumer spending, and a relatively low level of corporate defaults this year. The Moody’s Investors Service long-term average corporate bond spread to the 10-year U.S. Treasury has widened by 13 basis points to 138 bps but remained below a 12-month low of 139 bps. Similarly, Moody’s long-term average industrial bond spread increased by 13 bps to 118 bps over the past week. That is still less than a one-year low of 120 bps.

Low-grade credit spreads—the difference between the yield on high-yield or below-investment-grade corporate bonds and the risk-free 10-year Treasury yield—have also trended lower since spiking to over 500 basis points in the wake of the banking crisis in March. This yield spread represents the compensation investors demand for the risk that businesses they invest in could run into financial trouble and miss making timely principal and interest payments. The U.S. Bloomberg/Barclays high-yield option-adjusted spread declined to 370 basis points from 382 bps the previous week, while the ICE BofA U.S. high-yield option-adjusted bond spread closed Wednesday at 380 bps, down 12 bps from its value last week. This compares with an average high-yield spread of 1,000 bps during recent recessions and an average 350 bps outside of recessions. The average spread since the high-yield market was established in the 1990s is about 500 bps.

The VIX index also reflects investors’ optimism: the index dropped below 14 points Wednesday, its lowest value this month. In the past, there has been a significant correlation between credit spreads and equity market volatility, as measured by the VIX. This relationship was disrupted in recent years, but the recent decline in the VIX has brought it back in line with high-yield spreads.

## GLOBAL DEFAULTS

Moody’s Investors Service reported nine corporate debt issuers defaulted in July, the second lowest this year, down from the upwardly revised count of 14 in June. Defaults fell in advanced markets but edged up in emerging markets, with stress among China’s property developers resurfacing.

The six defaulters from advanced markets were Accuride Corporation, Anchor Glass Container Corporation, Exela Intermediate LLC, JP Intermediate B LLC, Mallinckrodt International Finance S.A., and Solocal Group S.A. All are from the U.S. except Solocal Group, which is based in France. Among these six defaults, half arose from distressed exchanges and the other half were due to missed payments. The three emerging markets defaulters in July were Brazil-based Azul S.A., Indonesia-based Agung Podomoro Land Tbk (P.T.), and China-based Greenland Holding Group Company Limited.

July’s defaulters increased the year-to-date tally to 92. Across sectors, business services are the largest contributor to year-to-date defaults, with 10. Healthcare & pharmaceuticals and telecommunications followed with eight each. By region, North America had 64 defaults (62 in the U.S. and two in Canada). The rest were from Europe (16), Latin America (8) and Asia-Pacific (4).

Despite the recent slowdown in monthly defaults, the trailing 12-month global speculative-grade default rate rose to 4% at the end of July from 3.9% a month earlier. Moody’s Investors Service forecast the rate to trend higher over the remainder of 2023, reaching 4.5% in December and surpassing the long-term average of 4.1%. In 2024, the credit agency expects the default rate to peak at 4.7% in March before easing to 4.3% in July. The peak rate forecast was revised downwards from 5.1% previously due to July’s tightening in U.S. high-yield spreads and a downward revision in the high-yield spreads forecast for the second half of this year. Moody’s Investors Service’s latest baseline default rate forecasts incorporate the assumptions that the U.S. high-yield spread will widen to 528 bps over the next four quarters from about 370 bps at the end of July and that the U.S. unemployment rate will rise to 4.9% from 3.5% in the comparable period.

While U.S. economic activities remained resilient in the first half of this year, the U.S. economy is expected to slow in



upcoming quarters. This slowdown will constrain aggregate demand, putting pressure on corporate earnings and cash flows. In addition, high interest rates have significantly raised companies' debt-service burdens, particularly those that rely heavily on floating rate loans. Although the fed funds rate is probably near its peak, Moody's Investors Service expects the Federal Reserve to maintain a tight monetary policy stance this year to facilitate further steady disinflation to the central bank's target. Low-rated companies will continue to struggle to meet refinancing and liquidity needs as they contend with interest rate pressure, tight lending conditions, and worsening operating performance as the economy slows.

### CORPORATE BOND ISSUANCE

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

Corporate bond issuance proceeded to weaken in the second quarter of 2022. Worldwide offerings of investment-grade corporate bonds totaled \$548 billion, down 21% on a year-ago basis. U.S. dollar-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. High-yield issuance was down 79% on a year-ago basis.

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

Corporate debt issuance remained suppressed in the fourth quarter of 2022. U.S. dollar-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 12 months, total U.S. dollar-denominated issuance has tracked at a near-decade low.

The first quarter of 2023 saw a decline in global offerings of corporate bonds, with investment-grade offerings falling 7.9% and high-yield offerings dropping 10.1% year over year. U.S. dollar-denominated investment-grade issuance, which accounts for half of activity globally, decreased 15% on an annual basis. U.S. high-yield issuance also experienced a slow start at just \$31.5 billion, marking its slowest start to the year since 2008, and posting a 15% decline compared to the first quarter of 2022.

Issuance strengthened in the second quarter of 2023 as worldwide offerings of corporate bonds revealed a year-over-year increase of 26.8% for investment grade. High-yield issuance in the period nearly doubled the amount recorded in 2022. Approximately 60% of U.S. dollar-denominated high-yield proceeds in the period were allocated to debt refinancing.

U.S. dollar-denominated investment-grade debt issuance totaled \$4.45 billion in the most recent week, bringing the year-to-date figure to \$908.6 billion. This reflects an 11.2% decline compared with the same period in 2022.

Meanwhile, there was no high-yield debt issued in the same period, keeping the total at \$130.1 billion this year. High-yield issuance has outstripped early-year expectations, increasing 13.9% relative to last year's pace. Total U.S. dollar-denominated corporate debt issuance now tracks 9.9% below where it stood in 2022 and is 36.2% lower compared with 2021.

### U.S. ECONOMIC OUTLOOK

The U.S. economy continues to show significant resilience, consistent with our expectations but somewhat stronger than the Federal Reserve desires. Consequently, we made only modest adjustments to the U.S. baseline forecast based on new data and a small modification about our assumptions regarding future actions by the Fed. Fundamentally, however, the outlook remains essentially the same and the pace of annual GDP growth has only modestly changed, largely in response to second-quarter data.

We have not changed our estimate of the terminal fed funds rate, or when rate cuts will begin, but have altered our expectations about the pace of rate cuts as inflation moderates only gradually. We still expect increases in demand from growing economies, and actions of OPEC+ and Saudi Arabia will push oil prices higher, and therefore did not change our price outlook much despite recent increases. The strong second-quarter data result in a measurable but not huge upward revision to the outlook for business investment. Fiscal policy assumptions changed little, though the fiscal outlook continues to deteriorate somewhat more than anticipated. The outlook for the 10-year Treasury is only a little changed and mostly in the very-near term.

### Monetary policy

We made modest adjustments to the assumptions about monetary policy compared with the last update, but only to 2024 and after. As in the previous outlook, we expect that the Fed's July 25-basis point rate hike was the last of the current tightening cycle and that the policy rate has reached



its terminal range of 5.25% to 5.5%. Likewise, we anticipate that the Federal Open Market Committee will start lowering rates by June of next year. However, we now expect that the Fed will relax monetary policy more slowly than previously anticipated, cutting rates by about 25 basis points per quarter until reaching 2.75% by the fourth quarter of 2026 and 2.5% in 2027. This shift reflects more persistent than anticipated inflation in early 2023 and ongoing labor market tightness, which have caused similar revisions to the FOMC's projections.

The Fed continues to balance inflation and labor market tightness against financial conditions. The June figure for inflation in personal consumption expenditures trended in the right direction, with year-ago core inflation falling to 4%, after coming in steadily above 4.5% from last December through May. Further, job growth slowed to 218,000 on a three-month moving average basis in July, compared with 335,000 in January, but the 218,000 pace is still relatively strong. The jobless rate remains at 3.5%. While wages in the second quarter grew faster than inflation, we expect these pressures will slowly fade. Likewise, our baseline does not predict that rising oil prices since July will reignite inflation sufficiently for the Fed to hike rates further. Tighter financial conditions, meanwhile, will exert further downward pressures on demand and prices. Our baseline assumes that banks will continue to limit credit growth, but that the financial system will overall remain stable.

Inflation remains the key to our outlook. The August vintage has consumer price inflation at 3.2% year over year by the end of 2023, essentially unchanged from the previous outlook. As in the previous baseline, we anticipate inflation to approach the Fed's target range around the third quarter of 2024. We continue to expect that remaining inflation pressures from shelter and other U.S. service industries will soften. We also still believe a soft landing to be the most likely outcome for the U.S. economy, thanks to the resilience of consumers and labor markets.

Financial conditions, meanwhile, will remain tight. The 10-year Treasury yield rose from 3.85% to 4% from July through early August, averaging 3.6% in the second quarter. We anticipate that the yield will average 4% in the third quarter, and then decline slightly until 2025, averaging between 3.8% and 3.9%. However, despite rising interest rates and mixed earnings reports for the second quarter, stock prices gained more ground in July, thanks to easing inflation data.

Foreign exchange markets also continue to relax as the Fed has approached the end of the current hiking cycle, although the pace is slow. On a real broad trade-weighted basis, the U.S. dollar is still up more than 5% from its pre-pandemic

level, but in July had depreciated by more than 5% from its October peak.

### Changes to GDP growth

U.S. real GDP rose 2.4% annualized in the second quarter, according to the Bureau of Economic Analysis' advance estimate. It was the fourth consecutive quarter in which growth was at or above the economy's potential, though likely it will be the last for some time. Inventories switched from a major drag to a small support. Rising consumer spending, government spending, nonresidential business investment, and lower imports contributed to the gains. On the other hand, exports and residential investment weighed on growth. Growth exceeded the prior forecast by 0.9 percentage point annualized, lifting the outlook for the calendar year. Nonetheless, the baseline outlook remains that the Fed will accomplish its goal of slowing growth in both output and inflation without precipitating a recession.

Although consumer spending remained a source of growth, its contribution shrank compared with the first quarter of 2023 in which cost-of-living adjustments had boosted after-tax income. Still, consumer spending added 1.1 percentage points to growth. Government contributed about 0.5 percentage point with state and local spending leading the gain. Nonresidential fixed investment improved measurably, adding 1 percentage point to growth, its largest contribution since the first quarter of 2022. Residential investment continued to slide, pulling growth down by 0.2 percentage point. Trade subtracted 0.1 percentage point from growth with a 1.3-percentage point drag from exports mostly offset by falling imports.

The strong second-quarter growth will provide momentum for the third quarter, after which growth will decelerate more visibly late in the year and early next year. The forecast for third-quarter growth is higher than previously forecast for real GDP and most of its major components. Postponed inventory growth will add significantly. The net effect is stronger real GDP projected for this year, but similar next year, and weaker in 2025. On an annual average basis, growth is projected to be 2% in 2023 and 1.3% in 2024, compared with projections of 1.7% and 1.1%, respectively, in the July outlook. Growth returns to trend in 2025.

### Fiscal policy

The near-term federal fiscal outlook is worse than previously expected. The federal budget deficit will amount to \$1.7 trillion in fiscal 2023, or 6.5% of GDP. This is up from the \$1.5 trillion projected budget shortfall under the July vintage of the U.S. baseline forecast. A couple of factors are contributing to the expected deterioration in federal fiscal conditions. The 12-month rolling sum of non-withheld individual income taxes is collapsing, albeit from elevated levels, due to reduced capital gains and the postponement

of the tax filing deadline for disaster-area taxpayers in California, Alabama and Georgia from April 18 to October 16. In addition, Congress enacted an almost 10% increase in nonemergency, base discretionary funding for the current fiscal year, which has led to a noticeable acceleration in the national defense outlay.

Further, the likelihood of a government shutdown on October 1 is higher than it was immediately following the passage of the debt limit deal. In June, a small bloc of hardline Republicans, who want sharper spending cuts than the ones brokered by House Speaker Kevin McCarthy and President Joe Biden, brought legislative action on the House floor to a weeklong halt. They are threatening to block all 12 government funding bills unless fiscal 2024 appropriations are cut even lower toward fiscal 2022 levels. In the current baseline, Moody's Analytics is holding off from incorporating a shutdown, but this is subject to change in the next few months. Shutdowns are needless drags on the economy, but their economic costs are not too significant. During the Trump presidency, the 35-day shutdown, the longest on record, was estimated to have reduced the level of real GDP by only 0.1% in the fourth quarter of 2018 and 0.2% in the first quarter of 2019.

## Energy

Moody's Analytics has slightly increased its oil price forecast for the second half of 2023. Prices have been rising due to a tightening market. Saudi Arabia has voluntarily cut output by 1 million barrels per day, and Russian exports are beginning to dip under the weight of sanctions. As a result, our fourth-quarter Brent price forecast has been increased by \$2 per barrel to \$89 per barrel.

The tightening oil market was already a feature of our forecast, so the recent developments do not affect our outlook. We have assumed for most of the year that China's resurgence would increase demand, while OPEC+ output cuts and slow growth from the U.S. would limit supply. China's rebound has so far been subdued due to poorly performing manufacturing. Nonetheless, the declines in supply have been enough to keep prices moving upward.

## Labor market

The job market is now clearly slowing, a welcome sign for the Fed, as it aims to tame inflation through softer demand in the economy. Nonfarm payrolls rose a weaker-than-expected 187,000 in July, essentially matching June's downwardly revised increase. The three-month moving average of total job gains has gone from 334,000 at the start of this year to 218,000 as of July. Excluding the public sector, the slowdown has been more pronounced. Industries like manufacturing, professional/business services,

leisure/hospitality and retail have all slowed noticeably in terms of job gains since the start of the year.

The slowdown in the pace of job growth is corroborated by the household survey data, which show that although the unemployment rate ticked lower to 3.5% in July, household survey employment and labor force growth have also slowed since the year's start. Job openings, quits and hires have also declined from their all-time highs, further indicating that the labor market is loosening up. However, data on unemployment insurance claims remain at relatively low levels without any meaningful uptick recently to suggest that layoffs are accelerating.

While job growth appears to be slowing gracefully, wage growth is still too high to bring price inflation down to the Fed's 2% target. Wage growth in the payroll survey accelerated in July and has not changed meaningfully over the last seven months. Other surveys of wage inflation, which are more reliable, do show some slowing in wage growth, though that has occurred at a slower pace than anticipated. This makes the job for the Fed trickier as it attempts to fight inflation by slowing demand for core services. The bottom line is that this seems to be happening with job growth but not yet with wage growth.

The forecast for the key labor market indicators is unchanged from last month. The forecast does not expect a sub-100,000 per month increase in payrolls until the final quarter of this year. Not until 2024 will monthly job gains be very weak at fewer than 50,000 per month on average. The unemployment rate will rise to 3.7% by the end of the year as monthly job growth is enough to keep it from rising further. The rate will peak at 4.2% in mid-2025 before slowly trending lower thereafter. Wage growth will continue to decelerate and by this time next year will be approaching 3.5% as measured by the employment cost index, which is right around where it should be to reach the Fed's inflation target.

## Business investment and housing

The advance report for second-quarter GDP revealed that growth in real business investment was substantially higher than had been projected. Total real capital spending rose 7.7% annualized compared with the July forecast of just 0.7%. All major segments, equipment and structures and intellectual property, were much stronger than anticipated.

Equipment rose nearly 11% annualized compared with the July forecast of little or no gain. The largest contributor was aircraft, which rose more than 90% annualized, back to near the record peak in the fourth quarter of 2022. Airlines are investing heavily now that the pandemic is over and the previous safety issues of the Boeing 737 MAX have been

resolved. Light trucks also jumped, 75% annualized. This to a large extent reflects purchases by car rental companies since much of the segment includes vehicles available for personal use. Recent growth in vacation activity is consistent with this outcome.

Structures rose nearly 10% annualized, well above the July projection for modest growth. Virtually all the unexpected gains were construction of new factories, up more than 90% annualized, mostly reflecting the booming growth in the building of semiconductor facilities. That in turn is occurring to a large extent because of legislation such as the CHIPS Act, which provides major incentives. Otherwise, mining structures fell about as expected, consistent with the decline in active drill rigs as oil prices declined since last fall. Commercial building, which includes offices, was a bit weaker than the anticipated slow growth due to the trend toward remote working. It is noteworthy that factory building at present exceeds building of new offices and retail.

The strong second-quarter data result in a measurable but not huge upward revision to the outlook for business investment. On an annual average basis, real capital spending growth will be 3.1% in 2023 and 1.6% in 2024, compared with 1.7% and 1% in the July forecast. In addition to the higher base effect because of the strong second

quarter, the numbers suggest more optimism about business investment projects than had been reported in surveys. However, the forecasts in general remain subdued due to the Fed's efforts to tighten credit, because much of business investment is interest-sensitive.

The Moody's Analytics forecasts for the housing market were revised to account for recent trends. Specifically, the recovery in existing-home sales was delayed by several quarters to be consistent with the revised "higher for longer" mortgage rate outlook.

In addition to lowering demand due to affordability challenges, the rate environment will weigh on the supply of homes available for sale as homeowners will be reluctant to sell and give up the low interest rates on their mortgages. The Moody's Analytics forecast for house price growth has been revised upward modestly to reflect these trends. Prices are expected to remain relatively flat over the next 18 to 24 months with a small 4.5% decline from the peak as low affordability weighs on the market.

The outlook for commercial real estate prices remains negative but has not been revised materially this month. Price declines are expected to occur over multiple quarters as leases expire and as the loans backing properties come up for renewal.

# Headline Inflation Unchanged in Euro Zone

By OLIA KURANOVA

The euro zone's August [HICP inflation](#) rate was unchanged from July at 5.3% year over year, according to preliminary estimates. The reading contrasts with our own and market expectations for a deceleration. Core and food inflation rates ticked lower, matching our forecast. But energy prices, though negative on a year-over-year basis, rose more than we had expected in monthly terms.

All countries likely confronted rising petroleum and fuel prices in August, as crude oil prices stabilized at a higher level. But in France, energy prices moved further following an update to the country's price cap. We expect that utility bills in France will remain higher for longer, and the second-round effects produced by keeping production costs high will buttress core inflation.

The good news is that core inflation across the euro zone, France included, did decelerate in August. The rate was down 0.2 percentage point to 5.3%, as both core goods and services price growth softened. There are still considerable base effects keeping services inflation up, in light of German fiscal policies that lasted through last summer. When these base effects unwind in September, we should see a tangible decrease in services inflation as well. But even looking beyond those base effects, we expect demand pressures on services inflation to soften more quickly as the summer ends. Moreover, persistently low demand for retail goods will also keep core goods inflation from picking back up.

We expect that in September we will see core inflation come down more forcefully, accompanied by further declines in food inflation. This will relieve tensions around the medium-term inflation outlook. Meanwhile, our baseline forecast remains that the European Central Bank's last policy rate hike will be a 25-basis point increase in September.

Stability was the word of the day, as the euro zone unemployment rate for July remained at 6.4%, the lowest on record. The labour force and employment were on the rise, coinciding with the first increase in the number of unemployed persons in six months. The opposing forces ultimately held the unemployment rate in place.

The data from July's release, together with forward-looking information, suggest that the labour market reached peak tightness during the summer. Looking ahead, we expect a sideways move as the economy grows below potential.

During winter, we might even see a mild increase in the unemployment rate.

## German economic weakness permeates

Weak demand in the German economy is becoming more visible in the labour market. In August, the German [unemployment](#) rate was 5.7%, unchanged from July. On a seasonally adjusted basis, however, unemployment rose by 18,000. Unemployment is drifting higher and though employment continues to expand, its record level is supported by the increased use of the short-time working scheme.

Meanwhile, business surveys report that within some sectors firms are becoming more willing to consider layoffs. But a significant increase in unemployment isn't in prospect. Though the broadly flat economic conditions of the first half of the year are now expected to persist into the second half, the pace of economic growth should pick up somewhat next year.

We expect the unemployment rate to drift higher by the end of the year. But the extent of the increase will be mitigated by firms retaining employees in anticipation of demand picking up next year, when global growth should be firmer and real incomes will be recovering as inflation eases further.

Elsewhere, [German retail](#) was on shaky ground. In July, German real retail sales fell 0.8% month over month on a seasonally adjusted basis following a fall of 0.2% in June. Households remain cautious, although pressure on budgets is now easing, reflecting the decline of inflation and the acceleration of nominal wage growth. The economic outlook has weakened and the recovery in consumer confidence that unfolded in the spring stalled over the summer. Sentiment among retailers has also deteriorated. The current business situation is reported to be the weakest in nine months, and six-month-ahead expectations remain downbeat.

Among retailers, sentiment has turned gloomier in recent months. Current business conditions are the most downbeat in nine months, and six-month-ahead expectations are unusually pessimistic. Retail sales are unlikely to turn the corner until the wider economy returns to growth. We see retail sales as likely to trend lower or at best move sideways in the second half of the year.

# China Sits Out the Dance, for Now

By STEVEN COCHRANE, HARRY MURPHY CRUISE, KATRINA ELL and DENISE CHEOK

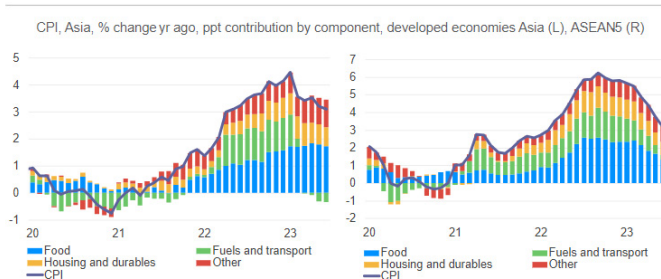
The Asia-Pacific economy is slowing under the weight of weak global trade, the uncertainty of [China](#)'s economic recovery from its zero-COVID policy, high interest rates, and some tightening of fiscal policy. It is notable that in all of APAC, only [Myanmar](#) and Sri Lanka appear to be in recession right now. Indeed, most of the economies of Southeast Asia and East Asia continue to expand. But the expansion is slowing.

One of the key factors allowing the APAC economy to expand is the reduction in inflation, ongoing since late last year. Lower energy and food prices have brought the inflation rate close to the targets of a number of central banks in the region. Lower fuel and commodity prices have been the primary reasons for the improvement in inflation.

economies such as Sri Lanka that also import a high share of their rice consumption.

Thus, Asian central banks are walking a bit of tightrope as they watch for inflation to fall further, and as they follow central bank movements in the U.S. and in Europe. In economies that have slowed recently and where inflation has rapidly moderated, such as in the [Philippines](#) and [South Korea](#), central banks may be encouraged to lower their policy rates as soon as inflation reaches their target range. On the other hand, they must watch the policy rate of the U.S. and Europe so as not to allow interest rate gaps to rise further, risking volatility in foreign exchange rates—as seen in recent weeks in Southeast Asia as the yield on the U.S. 10-year bond has risen.

**Inflation Is Past Its Peak**



Sources: National statistical offices, Moody's Analytics

Recent events, however, have caused inflation fears to rise again. First, production cuts by Saudi Arabia have raised crude oil prices to \$84 per barrel in recent weeks, up from as low as \$74 in late June. This is not inconsistent with expectations for oil to rise close to \$90 per barrel by late this year, but the increase did come earlier than expected. Yet, crude oil is not expected to rise above \$90. Saudi Arabia needs a price of about \$80-\$85 to maintain its own fiscal balance. It appears they have calibrated production well and may not cut further.

Of greater importance is the recent price of rice.

Due to dry weather in [India](#) and [Thailand](#), the price of rice has soared since the beginning of the year, rising from \$440 per tonne to an average of \$550 in June, followed by daily prices of up to \$629 through late August. All of Asia would be susceptible to higher food prices if this should continue. This would hit the more developed economies of Asia since they import most of their rice, and some emerging market

We expect central banks in APAC to hold their policy interest rates steady at least through the end of this year, and probably longer, depending upon the stability of domestic demand and their respective currencies and how quickly external demand improves from China and from the European and North American economies.

One factor that would support the APAC region would be a more rapid return of high-spending tourists from China. So far, the return has been incomplete.

Among five of the Southeast Asian economies for which there is comparable data, none have seen tourist arrivals return to pre-pandemic levels of late 2019. Some improvement is expected over the coming year as China has just recently allowed group travel arrangements for overseas travel to all of Asia. But it remains to be seen if the desire to travel and spend overseas returns to Chinese consumers.

The most significant factor holding back the Chinese economy is high debt and lack of demand within the property development industry.

Stuck with an oversupply of units after policymakers discouraged investment in real estate three years ago, construction, sales and investment in housing have plummeted with no end in sight. With sales volume down by over 50% from the peak, property developers sit deeply in debt and cannot raise additional funds in the bond market. And as much of the market had been driven by presales, developers have lost the ability to complete projects, leading to mortgage strikes by buyers. The industry has come nearly to a halt, limiting employment in construction and related industries, capping household



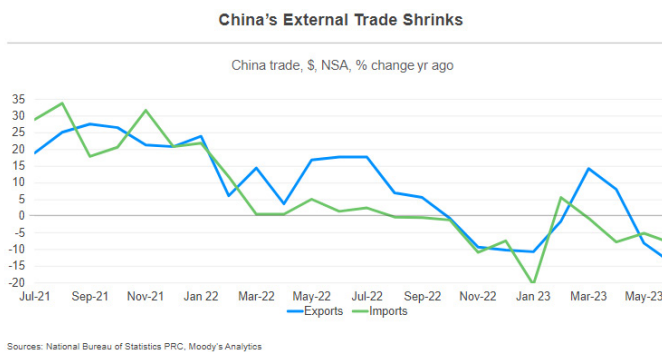
wealth, reducing consumer confidence, and creating limited demand for construction materials and equipment in domestic and overseas markets.

As housing markets as well as equity markets falter, falling household wealth creates few incentives to invest or spend. While the household saving rate appears to have peaked recently, it is still at a historical high, and it is unclear what it will take for consumers to be more comfortable to spend in the domestic economy or to travel and spend overseas.

Similarly, businesses are still nervous and shy away from new investment.

There has been little change to the level of private investment over the past two years, while state-owned enterprises have raised investment by about 10% year to year since the start of 2022. The lack of any increase in private investment is concerning because it is private investment that is the greatest job generator and the greatest contributor to productivity growth.

The greatest impact upon the rest of Asia from the economic malaise in China is via trade.



China's imports are down nearly 10% over the year and have been declining since March. Exports also are down. With both construction and manufacturing moribund, demand for imported intermediate goods, whether they be iron ore, copper, cement, auto parts, electronic components or others, the loss of such demand is felt across the entire region. Fortunately, the direct financial impact from China's economy, especially from the property market, is minimal since funding has largely come from domestic sources in China.

So, while China will not be adding any heft to the APAC economy this year, the region will manage to grow this year and next.

India and [Vietnam](#) will lead growth, though at a slower pace than last year. But that is to be expected as 2022 was the initial rapid recovery from COVID-19 shutdowns across much of the region. Both India and Vietnam are attracting foreign investment that in former days might have gone to China. China is expected to just meet policymakers' goal of about 5% growth this year, which is well above the 2022 figure since COVID-19-related shutdowns continued nearly until the end of December. However, with weak economic data through July and into August, risks are to the downside for China for this year and next.

We have already lowered our outlook for the Philippines this year. It will still be one of the regional leaders, but high inflation and interest rates along with uneven government and investment spending have slowed growth over the past three quarters, to the point that Philippine GDP declined in the second quarter from the first on a seasonally adjusted basis. Unless fiscal policy or export trade provide an extra boost, growth will remain below the central bank's target of 6% to 7%.

[Indonesia](#), [Malaysia](#) and [Hong Kong](#) round out the leaders, with growth expected from renewed exports next year, supportive fiscal policy and investment spending, including in Indonesia where public investment will continue to be put to work on the new national capital, Nusantara. Indonesia and Malaysia, as well as Thailand, are likely to also attract foreign investment as firms look to deconcentrate risk away from China.

But Thailand must wait until 2024 for a significant improvement. That is when tourist arrivals are finally expected to approach pre-pandemic levels. [Australia](#) and [New Zealand](#) will remain soft under the weight of high interest rates that are expected to remain through mid-2024. [Taiwan](#), [Singapore](#) and South Korea also should accelerate in 2024 as the global semiconductor cycle rebounds. Australia, New Zealand and [Japan](#) will maintain their modest pathways for the next two years.

South Korea, Taiwan and Singapore will get a boost in 2024 from the expected improvement in global demand for semiconductors. Australia and New Zealand will maintain modest growth under high interest rates well into 2024. And Japan's still-modest domestic consumer spending will keep the economy near its current pace of growth.

Asia will avoid recession, but a new period of robust growth won't likely commence until mid-2024.

# BRICS expansion underscores China's growing influence

By JUAN PABLO FUENTES and GUSTAVO ROJAS-MATUTE

China continues to push for increased geopolitical and economic influence in Latin America. The Asian giant began to take an active role as a key source of financing for the region in the mid-2000s in an attempt to secure a reliable source for commodities while also increasing its geopolitical clout in the region. Venezuela, Brazil, Argentina and Ecuador have received billions of dollars in credit from China in the last two decades, though political instability and repeated economic crises have prevented an even greater involvement by China.

However, China's ambitions in the region have not diminished. China's increasing trade and political tensions with the West have prompted a renewed effort to increase its influence, and last week's BRICS summit pointed in that direction. The group originally formed by Brazil, Russia, China, South Africa and India formally announced its expansion by admitting six new members: Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates.

BRICS, dominated by China, stated its intention to de-dollarize trade transactions among members and even discussed the creation of a common BRICS currency. Yet, the group fell short of announcing specific actions to achieve greater economic and financial integration. The aim for China seems to focus on using BRICS to counter the West's geopolitical and economic influence in the developing world.

We do not see the inclusion of Argentina in the group as producing any significant economic change in the short term. The two leading candidates in the upcoming presidential election sounded very unenthusiastic about Argentina's membership in the group. Yet, they might take a cautious approach if elected. China has played a key role in Argentina's financing in recent years amid the country's isolation from international financial markets.

Moreover, China has invested heavily in the development of new energy infrastructure that has started to pay off for Argentina. Both Brazil and Argentina want to keep a positive economic and diplomatic relationship with the West and are unlikely to openly support Russia and China in ongoing disputes. Increasing trade ties between South America and China are the result of market dynamics more than government policy and this will not change anytime soon.

## Pros and cons of dollarization

After the rise of Argentina's libertarian presidential hopeful Javier Milei, there's been a new discussion about dollarization. Milei has strongly supported using the dollar in Argentina. With a skyrocketing annual inflation rate of more than 100%, second only to Venezuela, and after decades of crises, the dollarization proposal is a temptation that pleases many voters. It also evokes the era of Carlos Menem's stabilization plan in the 1990s to confront hyperinflation. The so-called currency board set a U.S. dollar standard with free convertibility of the peso and a one-to-one exchange rate. However, the currency board failed to gain credibility for the peso, and the public started to convert all pesos into dollars, leading to a speculative attack early in the 2000s that resulted in the abolition of the system.

While dollarization can prevent the government from "printing money," it does not preclude inflation. Indeed, one of the significant advantages of most regional economies was that they controlled monetary policy. When global inflation surged in 2021, Latin American central banks acted promptly, hiking interest rates months before the Federal Reserve did so. The action paid off, and most of them, including those in Brazil, Mexico, Uruguay, Dominican Republic and Peru, have been able to bring down inflation to their target ranges or closer to them.

This reaction from central banks wouldn't be possible under dollarization, since countries would give up their monetary policy tools and depend on the Federal Reserve. Countries wielding their own monetary policy tools also avoided capital outflows due to the Fed hikes. Further, most countries have seen their currencies remain stable or slightly appreciate against the dollar.

Having achieved their inflation targets, some central banks in the region have begun cutting rates to prevent a recession. This is only possible when the economy has control of its monetary policy. Thus, having witnessed the successes of monetary policy in Latin America, there are fewer arguments in favor of dollarization. Countries should take note of what worked here. For instance, among the best practices observed, central banks today have a monetary policy committee and survey inflation expectations among firms and professional forecasters to guide their monetary policy decisions.



# Upgrades Lead on Both Sides of the Atlantic

By **OLGA BYCHKOVA**

## U.S.

U.S. corporate credit rating activity was light in the latest weekly period with upgrades outnumbering downgrades. Upgrades comprised three of the five rating changes and 98% of affected debt. The changes issued by Moody's Investors Service spanned a diverse set of investment- and speculative-grade bonds and industrial and utility firms.

The largest upgrade, accounting for 88% of debt affected in the period, was issued to global pharmaceutical company AbbVie Inc with its senior unsecured long-term ratings raised to A3 from Baa1 and its short-term commercial paper rating affirmed at Prime-2. The outlook is stable. According to Moody's Investors Service senior vice president Michael Levesque, "The rating upgrade results from ongoing debt reduction and strong operating performance in core products like Skyrizi, Rinvoq and the aesthetics and neuroscience franchises. These positive credit drivers position AbbVie to absorb the impact of declining sales of Humira while maintaining solid credit ratios." Governance considerations were a key driver of the rating action, reflecting factors related to management credibility and track record, the rating agency said. It added that those factors include a combination of strong operating performance, successful integration of the Allergan acquisition, and a consistent focus on debt reduction in excess of original targets.

Another notable upgrade was made to the largest North American natural gas producer EQT Corp., which saw its senior unsecured notes ratings raised to Baa3 from Ba1. Moody's Investors Service also withdrew EQT's Ba1 corporate family rating, Ba1-PD probability of default rating, and SGL-1 speculative grade liquidity rating. The outlook was changed to stable from positive. According to Moody's Investors Service senior credit officer John Thieroff, "The upgrade to Baa3 reflects the considerable deleveraging EQT has achieved since late 2021, its improved capital efficiency and the expectation for continued debt reduction through 2024, aided by attractively priced hedges on a substantial amount of its natural gas production over the next 12 months. The recently completed acquisition of the upstream assets of THQ Appalachia I, LLC and gathering and processing assets of THQ-XcL Holdings I, LLC from Quantum Energy Partners further enhances EQT's scale in its core Southwest Appalachia operations and provides greater cash flow durability." The change impacted 7% of debt affected in the period. The stable outlook is based on the credit agency's expectation that EQT will continue to prioritize debt repayment to reach its debt target of \$3.5 billion expeditiously.

## EUROPE

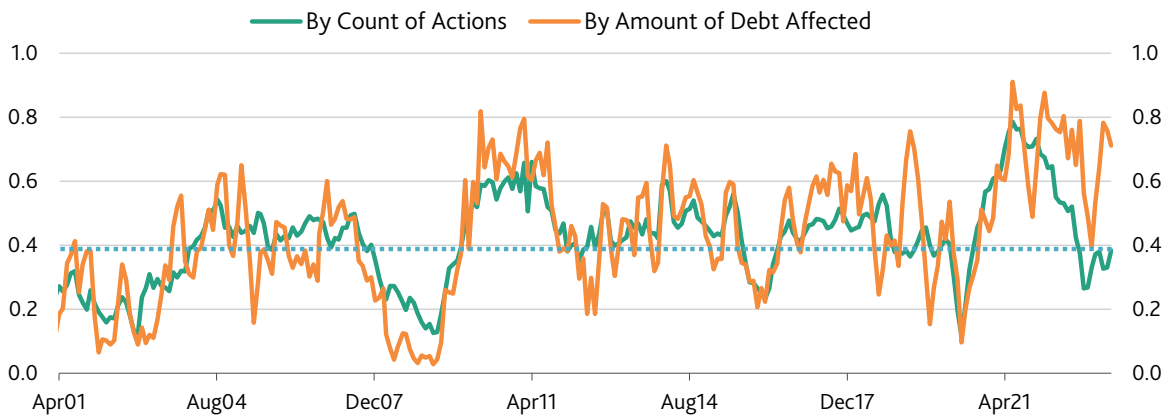
Across Europe, corporate credit rating change activity was similar to the U.S. with two upgrades and one downgrade issued to the diverse set of investment-grade bonds and industrial and financial companies.

Upgrades were headlined by a leading provider of information services solutions and analytics RELX PLC, which saw its long-term issuer ratings raised to A3 from Baa1. Moody's Investors Service also upgraded to A3 from Baa1 the long-term backed senior unsecured debt ratings of RELX Finance B.V., RELX Capital Inc and RELX Inc and affirmed the Prime-2 short-term backed commercial paper rating of RELX Finance B.V., RELX Inc and RELX (Investments) plc. The upgrades impacted 100% of debt affected in the period. The outlook of all entities remains stable. The rating actions reflect the company's scale, leading market positions in all four of the operating business segments—risk, scientific, technical and medical (STM), legal and exhibitions—and track record in integrating sophisticated technology in the shift to electronic format; a stable earnings base underpinned by recurring subscription and transactional revenues, some of which occur over multiple periods and earnings growth supported by a tilt in the business mix to analytics; and Moody's Investors Service's expectation that the company will maintain a prudent financial policy, balancing the company's commitment to credit metrics in line with a solid investment-grade rating and a strong liquidity position with shareholder returns.

The rating agency said upward pressure on the rating may arise if there is a material growth in scale, measured by annual revenue, or a visible increase in RELX's organic revenue growth rate whilst maintaining operating profit margins in at least the mid-thirties and the company publicly commits to a more conservative financial policy. An upgrade would also require the company to meet Moody's Investors Service's expectations for a P-1 short-term rating, including, but not limited to alternative liquidity provision through committed bank facilities at least as large as total short-term debt (generally based on Moody's estimate of maximum anticipated commercial paper issuance), access to same-day-available funds in the market of commercial paper issuance, and no restrictions related to material adverse changes in the borrower's financial condition. At the same time, downward pressure on the rating could occur if there is evidence of a material change in financial policy to favor shareholder returns that leads to a sustained deterioration in credit metrics.

## RATINGS ROUND-UP

FIGURE 1  
Rating Changes - US Corporate & Financial Institutions: Favorable as a % of Total Actions



\* Trailing 3-month average

Source: Moody's

FIGURE 2  
Rating Key

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

FIGURE 3

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

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/S G
8/23/2023	LIFE TIME GROUP HOLDINGS, INC.-LIFE TIME, INC.	Industrial	SrSec/SrUnsec/SrSec/BCF/LTCFR/PDR	1400	U	B2	B1	SG
8/24/2023	EQT CORPORATION	Utility	SrUnsec/MTN	4690.054	U	Ba1	Baa3	SG
8/25/2023	SCOTTS MIRACLE-GRO COMPANY (THE)	Industrial	SrUnsec/LTCFR/PDR	1600	D	B1	B2	SG
8/28/2023	ABBVIE INC.	Industrial	SrUnsec/LTIR	58049.96	U	Baa1	A3	IG
8/28/2023	MAVENIR SYSTEMS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG

Source: Moody's

FIGURE 4

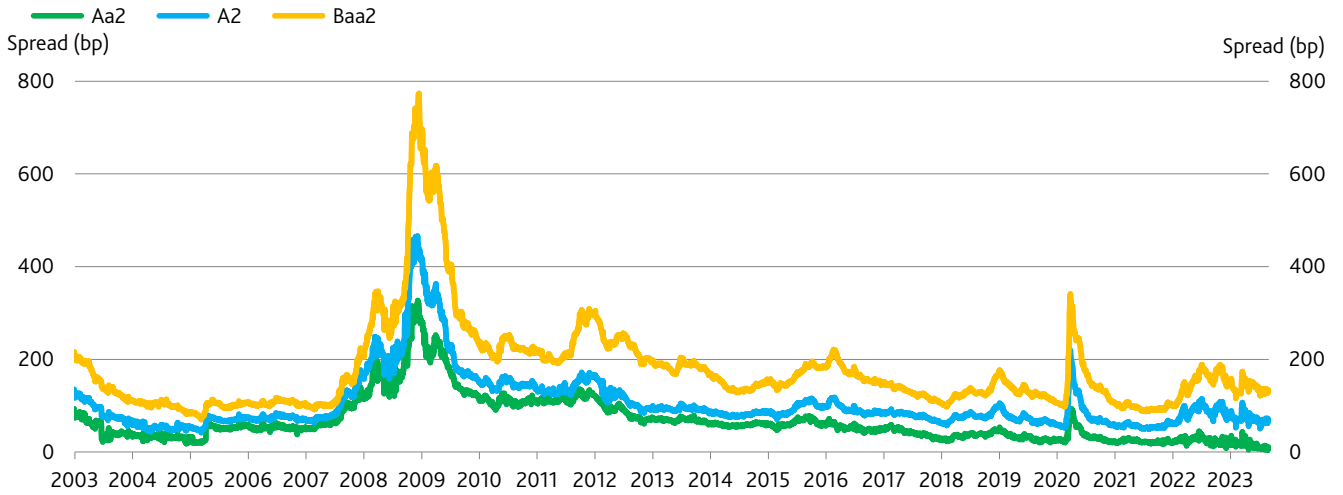
## Rating Changes: Corporate &amp; Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
8/24/2023	ERSTE GROUP BANK AG-ERSTE BANK HUNGARY ZRT.	Financial	LTD		U	Baa1	A3	IG	HUNGARY
8/24/2023	RELX PLC-RELX FINANCE B.V.	Industrial	SrUnsec/LTIR	7992.967	U	Baa1	A3	IG	NETHERLANDS
8/29/2023	MALLINCKRODT PLC-MALLINCKRODT INTERNATIONAL FINANCE S.A.	Industrial	PDR		D	Ca	D		LUXEMBOURG

Source: Moody's

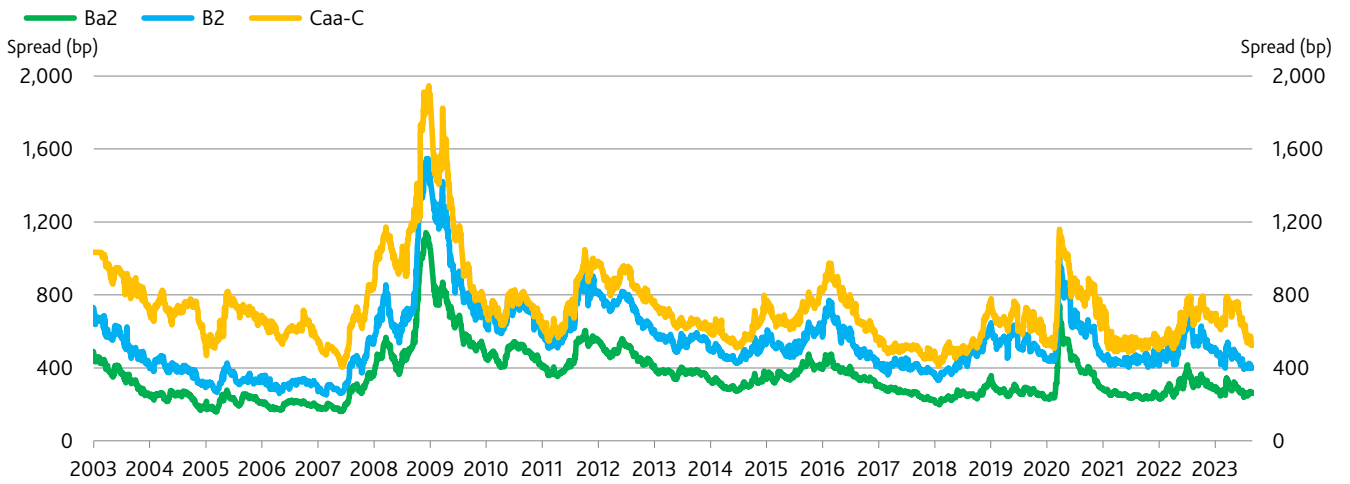
MARKET DATA

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 (August 23, 2023 – August 30, 2023)

Issuer	CDS Implied Ratings		Senior Ratings
	Aug. 30	Aug. 23	
Emerson Electric Company	A2	Baa2	A2
Bristol-Myers Squibb Company	Aa1	Aa2	A2
Thermo Fisher Scientific Inc.	Aa2	Aa3	A3
Fidelity National Information Services, Inc.	Baa1	Baa2	Baa2
Stryker Corporation	A2	A3	Baa1
General Electric Company	Baa1	Baa2	Baa1
Exelon Corporation	Aa2	Aa3	Baa2
Archer-Daniels-Midland Company	A2	A3	A2
Texas Instruments, Incorporated	Aa2	Aa3	Aa3
Hewlett Packard Enterprise Company	Baa2	Baa3	Baa2

Issuer	CDS Implied Ratings		Senior Ratings
	Aug. 30	Aug. 23	
American Honda Finance Corporation	A3	A1	A3
Republic Services, Inc.	A2	Aa3	Baa1
NiSource Inc.	A3	A1	Baa2
Ralph Lauren Corporation	A2	Aa3	A3
JPMorgan Chase & Co.	A3	A2	A1
Citigroup Inc.	Baa2	Baa1	A3
JPMorgan Chase Bank, N.A.	A2	A1	Aa2
Morgan Stanley	Baa2	Baa1	A1
John Deere Capital Corporation	A2	A1	A2
Microsoft Corporation	Aa1	Aaa	Aaa

Issuer	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Rite Aid Corporation	Ca	30,148	22,116	8,032
Lumen Technologies, Inc.	Caa3	4,164	3,939	224
Embarq Corporation	Caa2	3,352	3,182	171
Qwest Corporation	B3	1,863	1,763	100
Macy's Retail Holdings, LLC	Ba2	415	364	51
Bristow Group Inc.	B3	374	341	33
Liberty Interactive LLC	Caa2	2,463	2,435	28
Anywhere Real Estate Group LLC	B3	1,049	1,023	26
Advance Auto Parts, Inc.	Baa2	169	145	23
United States Cellular Corporation	Ba2	192	170	22

Issuer	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Pitney Bowes Inc.	B3	1,320	1,425	-104
Brandywine Operating Partnership, L.P.	Baa3	397	467	-70
Dish DBS Corporation	Caa2	1,731	1,794	-63
Gap, Inc. (The)	B1	427	487	-59
Dish Network Corporation	Caa2	1,474	1,527	-53
Carnival Corporation	B3	450	496	-46
Staples, Inc.	Caa2	2,853	2,898	-46
CSC Holdings, LLC	B2	1,903	1,944	-41
PENN Entertainment, Inc.	B3	280	317	-37
Nordstrom, Inc.	Ba1	505	542	-37

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (August 23, 2023 – August 30, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	Aug. 30	Aug. 23	Senior Ratings
Issuer			
Ireland, Government of	Aaa	Aa1	Aa3
UBS Group AG	Baa2	Baa3	A3
Veolia Environnement S.A.	Aa3	A1	Baa1
Norddeutsche Landesbank Girozentrale	Baa2	Baa3	A3
UBS AG	Baa1	Baa2	Aa3
Mundys S.p.A.	Ba1	Ba2	Ba2
Iberdrola International B.V.	Aa3	A1	Baa1
Autoroutes du Sud de la France (ASF)	Aa2	Aa3	A3
Renault S.A.	Ba2	Ba3	Ba1
Bouygues S.A.	Aa3	A1	A3

CDS Implied Rating Declines	CDS Implied Ratings		
	Aug. 30	Aug. 23	Senior Ratings
Issuer			
DZ BANK AG	A2	Aa3	Aa2
EWE AG	Baa2	A3	Baa1
Greece, Government of	Baa2	Baa1	Ba3
NATIXIS S.A.	A3	A2	A1
Nordea Bank Abp	A2	A1	Aa3
UniCredit S.p.A.	Baa3	Baa2	Baa1
DNB Bank ASA	Baa1	A3	Aa2
Danske Bank A/S	Baa1	A3	A3
Dexia Credit Local	Baa1	A3	Baa3
Nationwide Building Society	Baa1	A3	A1

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Issuer				
TK Elevator Holdco GmbH	Caa1	532	496	36
CPI Property Group	Baa3	563	543	19
Wm Morrison Supermarkets Limited	B2	745	726	19
Investec plc	Baa1	158	141	17
Stagecoach Group Limited	Baa3	195	179	16
Cirsa Finance International S.a r.l.	Caa2	328	314	14
Hamburg Commercial Bank AG	A3	117	106	11
Bankinter, S.A.	Baa1	68	58	10
Wienerberger AG	Baa3	119	109	10
Dufry One B.V.	Ba3	213	204	9

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Issuer				
Casino Guichard-Perrachon SA	C	69,239	72,296	-3,056
Garfunkelux Holdco 3 S.A.	Caa2	1,398	1,499	-101
Boparan Finance plc	Caa3	1,596	1,681	-85
United Group B.V.	Caa1	625	680	-54
Carnival plc	B3	427	470	-44
Telecom Italia S.p.A.	B1	291	310	-19
thyssenkrupp AG	Ba3	200	217	-18
Bellis Acquisition Company PLC	Caa2	591	608	-17
Valeo S.E.	Baa3	217	233	-16
Stena AB	B1	316	332	-16

Source: Moody's, CMA

## CDS Movers

Figure 5. CDS Movers - APAC (August 23, 2023 – August 30, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	Aug. 30	Aug. 23	Senior Ratings
Issuer			
Mitsubishi UFJ Financial Group, Inc.	Aa2	Aa3	A1
NIPPON STEEL CORPORATION	Aa2	Aa3	Baa2
Marubeni Corporation	Aa2	Aa3	Baa1
Japan, Government of	Aaa	Aaa	A1
China, Government of	Baa2	Baa2	A1
Australia, Government of	Aa1	Aa1	Aaa
Korea, Government of	Aa1	Aa1	Aa2
Commonwealth Bank of Australia	A1	A1	Aa3
Indonesia, Government of	Baa2	Baa2	Baa2
Export-Import Bank of Korea (The)	Aa2	Aa2	Aa2

CDS Implied Rating Declines	CDS Implied Ratings		
	Aug. 30	Aug. 23	Senior Ratings
Issuer			
Stockland Trust Management Limited	Baa2	A3	A3
India, Government of	Baa3	Baa2	Baa3
China Development Bank	Baa3	Baa2	A1
Westpac Banking Corporation	A3	A2	Aa3
National Australia Bank Limited	A2	A1	Aa3
Philippines, Government of	Baa2	Baa1	Baa2
Macquarie Bank Limited	Baa1	A3	A1
NBN Co Limited	A3	A2	Aa3
Development Bank of Japan Inc.	A3	A2	A1
Thailand, Government of	A2	A1	Baa1

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Issuer				
Vanke Real Estate (Hong Kong) Company Limited	Baa2	822	799	24
CNAC (HK) Finbridge Company Limited	Baa2	202	187	15
JSC Halyk Savings Bank of Kazakhstan	Ba2	377	362	15
Adani Green Energy Limited	B2	746	736	10
RHB Bank Berhad	A3	103	96	7
China Development Bank	A1	87	82	6
Kirin Holdings Company, Limited	Baa1	26	20	6
SoftBank Group Corp.	Ba3	239	234	5
Stockland Trust Management Limited	A3	69	64	5
Petroliam Nasional Berhad	A2	61	57	4

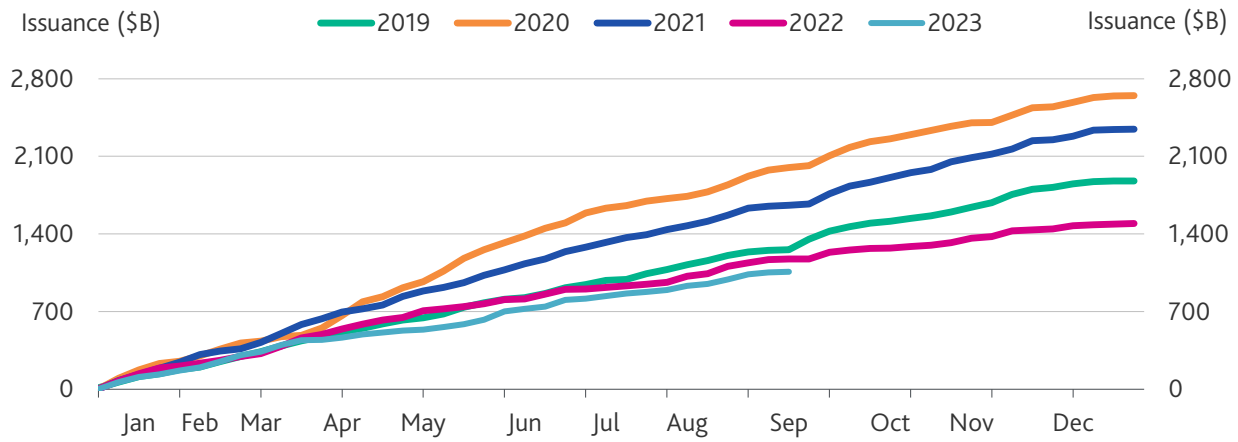
CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Aug. 30	Aug. 23	Spread Diff
Issuer				
Sydney Airport Finance Company Pty Ltd	Baa1	90	106	-16
Toyota Industries Corporation	A2	97	113	-16
Transurban Finance Company Pty Ltd	Baa2	85	94	-9
Lenovo Group Limited	Baa2	132	141	-9
Nissan Motor Co., Ltd.	Baa3	105	112	-7
Development Bank of Kazakhstan	Baa2	169	175	-6
Boral Limited	Baa2	138	144	-6
Amcor Pty Ltd	Baa2	105	109	-5
Kazakhstan, Government of	Baa2	125	130	-4
BDO Unibank, Inc.	Baa2	120	124	-4

Source: Moody's, CMA



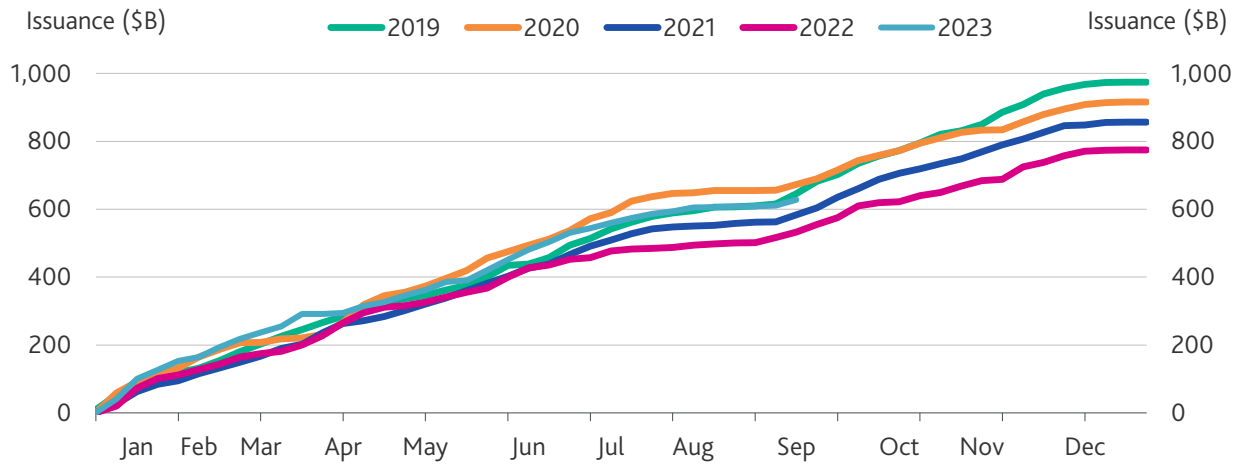
ISSUANCE

**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	4.450	0.000	4.739
Year-to-Date	908.613	130.063	1,057.289

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	16.590	0.000	16.601
Year-to-Date	562.423	42.700	627.780

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

---

To order reprints of this report (100 copies minimum), please call 212.553.1658.

---

**Report Number: 1380141**

---

**Editor**

**James Hurd**

[helpeconomy@moodys.com](mailto:helpeconomy@moodys.com)

---

**Contact Us**

Americas

+1.212.553.1658

[clientservices@moodys.com](mailto:clientservices@moodys.com)

Europe

+44.20.7772.5454

[clientservices.emea@moodys.com](mailto:clientservices.emea@moodys.com)

Asia (Excluding Japan)

+85 2 2916 1121

[clientservices.asia@moodys.com](mailto:clientservices.asia@moodys.com)

Japan

+81 3 5408 4100

[clientservices.japan@moodys.com](mailto:clientservices.japan@moodys.com)

© 2023 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody.com](http://www.moody.com) under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJJK") is a wholly owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly owned credit rating agency subsidiary of MJJK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJJK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3, respectively.

MJJK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJJK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJJK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJJK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.