

**WEEKLY MARKET
OUTLOOK**

MARCH 9, 2023

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Still Open for Business

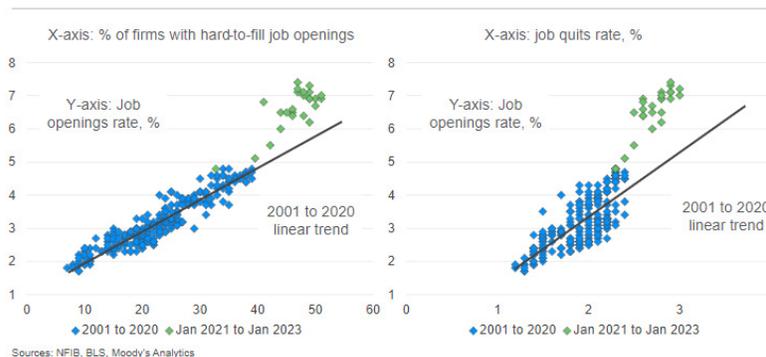
The January Job Openings and Labor Turnover Survey report showed job openings falling again but continues to signal a significant amount of excess demand in the labor market. Job openings fell back below 11 million but declined by less than expected and did not fully reverse the large increase in December. The hiring rate picked up slightly to 4.1% and has been little changed in recent months as firms still look to fill open positions. In a small sign that the labor market is cooling, the quits rate moved lower to 2.5%, the lowest reading since February 2021.

Given the current environment, a strong JOLTS report is bad news for the Federal Reserve, as a softening labor market will help take some of the pressure off inflation. In that sense, the January report provided mostly good news with job openings and quits both falling, though the improvement is still slower than we might like. The quits rate remains elevated compared with the pre-pandemic trend but has fallen to its lowest point in nearly two years. The Atlanta Fed's wage growth tracker shows job switchers have hauled in far-stronger pay increases since mid-2021. A sustained reduction in the quits rate would signal that a key source of upward pressure on wages is moderating.

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Job Openings Higher Than Other Measures Would Predict



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The report also provides a preview of the February payroll report, since the JOLTS survey includes data through the end of January and straddles the payroll report, which captures activity at mid-month. Following an outsize gain of 517,000 in January, we expect job growth to return closer to its prior trend and total around 250,000 in February. However, the strength of the JOLTS data lends some upside risk to that forecast. Net job gains from the JOLTS report amount to 470,000, up from 345,000 in December. However, we believe most of that outsize gain was already accounted for in the strong January jobs report.

In a bit of surprising news, layoffs appear to have broken out of the narrow range they were operating in since early 2021. Layoffs eclipsed 1.7 million in January, the highest total since December 2020 and compares with an average of about 1.4 million in the second half of 2022 and 1.8 million per month prior to the pandemic.

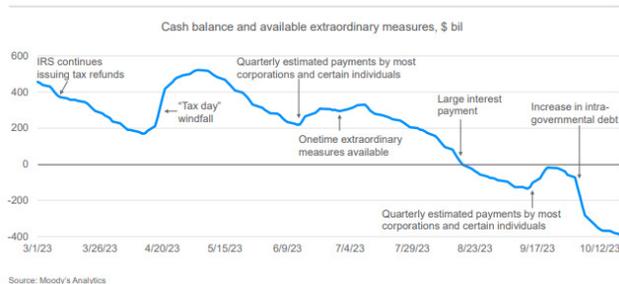
This suggests that there is still some reluctance from employers to lay off workers, since firms struggled mightily to fill openings in recent years. While many companies have announced cutbacks, often these can be achieved by freezing hiring. Because there are so many unfilled openings, were the economy to weaken further, layoffs could still remain relatively low.

Debt Limit Clouds on the Horizon

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. The debt limit was hit on January 19, and the Treasury is now using “extraordinary measures” to come up with the additional cash needed to pay its bills.

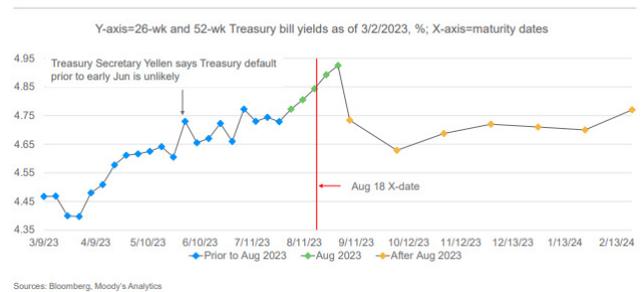
Based on our assessment of the government’s outlays and receipts in the coming weeks, those measures seem likely to be exhausted by mid-August. To be more precise, the X-date appears to be August 18.

Chart 1: X-Date Is August 18 Give or Take



Investors in short-term Treasury securities are coalescing around a similar X-date, demanding higher yields on securities that mature just after the date given worries that a debt limit breach may occur.

Chart 2: Investors Also Expect a Mid-August X-Date



Moody's Analytics has estimated the economic pain that would result in the following three scenarios, among others: a constitutional crisis in which President Biden invokes the 14th Amendment, a brief debt limit breach in which the Treasury is forced to prioritize bondholders, and a prolonged breach of the statutory limit.

Constitutional crisis

In this scenario, we assume that lawmakers are unable to reach an agreement, and with a debt-limit breach imminent, President Biden invokes Section 4 of the 14th Amendment and orders the Treasury to keep issuing bonds and paying the government’s bills. A constitutional crisis would ensue with the Supreme Court taking up the matter. In this scenario, we assume the court determines that Biden’s move is constitutional, effectively revoking the debt limit law.

The extraordinary uncertainty created by the constitutional crisis leads to a selloff in financial markets until the Supreme Court rules. GDP and jobs are briefly diminished during this period, but the economy avoids a recession and quickly rebounds. Long term, Treasury yields are a few basis points lower as the debt limit is no longer a threat to the budget process and the nation’s finances.

Payment prioritization

A more worrisome scenario is that the debt limit is breached, and the Treasury prioritizes who gets paid on time and who does not. The department almost certainly would pay investors in Treasury securities first to avoid defaulting on its debt obligations.

A Troubled Asset Relief Program moment would likely occur. This harkens to the dark days in autumn of 2008 when Congress initially failed to pass the TARP bailout of the banking system, and the stock market and other financial markets cratered. A similar crisis, characterized by spiking interest rates and plunging equity prices, would be ignited. It was a matter of days for Congress to reverse itself and vote for TARP, which is about the amount of time we assume is needed to convince this Congress to reverse itself and vote for a debt limit increase.

Despite lawmakers' quick reversal in this scenario, the economy suffers a mild recession beginning late this year. Real GDP declines by nearly 0.5 percentage point peak to trough, employment declines by close to 1 million jobs, and the unemployment rate rises from 3.4% to a peak of almost 5%. The long-term fallout on the economy is marginal, although global investors continue to demand several basis points more in interest on Treasury debt to compensate for the meaningful risk that lawmakers may breach the debt limit again in the future.

Prolonged breach

This leads to the darkest scenario. In it, lawmakers breach the debt limit and trigger a TARP moment but then fail to respond and immediately reverse course. Instead, the political impasse drags on for weeks.

The blow to the economy would be cataclysmic. Immediately, the federal government would have no option but to slash its outlays, since outlays could be no greater than revenues the Treasury collects. As these cuts work through the economy, the hit to growth would be overwhelming.

Adding to the economic turmoil would be the damage to consumer confidence. Political brinkmanship over the operations of the federal government has been frightening for Americans to watch. In the 2011 and 2013 debt limit episodes, households were closely attuned to the political hardball being played in Washington, and consumer sentiment slumped.

The economic downturn that would ensue would be comparable to that suffered during the global financial crisis. That means real GDP would decline beginning late this year and through much of 2024, falling more than 4% peak to trough, costing the economy more than 7 million jobs, and pushing the unemployment rate to more than 8%. Stock prices would fall by almost a fifth at the worst of the selloff, wiping out \$10 trillion in household wealth. Treasury yields, mortgage rates, and other consumer and corporate borrowing rates would initially spike until the debt limit is resolved. They would then decline during the subsequent deep recession but ultimately remain elevated as investors demand compensation for the risk of a future breach.

Homebuilders' Show Cautious Optimism

BY SHANNON BROBST

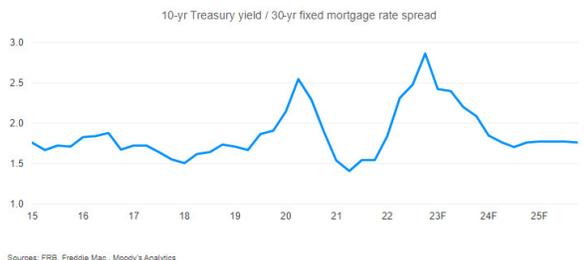
The U.S. homebuying frenzy that took place during the pandemic recovery and pushed house price growth to all-time highs came to a grinding halt in 2022 as the Fed aggressively began hiking interest rates to fight high inflation. Exceptional house price growth and high mortgage rates exacerbated the nation's housing shortage and affordability crisis, pushing the single-family housing market into a recession. However, some housing market indicators appear to have bottomed out, and builder confidence is on the rise.

Mortgage calculations

Buyer demand is poised to improve in the short term thanks to improving housing affordability and positive demographic trends. Our forecast calls for the 30-year fixed mortgage rate to average around 6.5% in the second quarter before declining in the second half of the year and throughout 2024. Lower mortgage rates will improve affordability significantly for buyers who are particularly sensitive to rate changes. For example, mortgage applications increased mid-January when mortgage rates fell to near 6%. Once mortgage rates jumped back up above 6.5% in February, mortgage applications fell back toward their 28-year low.

Our forecast expects the 30-year fixed mortgage rate to edge down in the short term. This is even with the Fed hiking interest rates by 25 basis points three more times in the first half of the year before holding interest rates steady in the second half of 2023 and decreasing rates through 2024. This is due to the above-average spread between the 10-yr Treasury yield and the 30-year fixed mortgage rate.

The Spread Will Narrow Short Term



Historically, the spread has hovered around 175 basis points, but recently it has been closer to 300 basis points. The gap widens when investors either leave the market or perceive higher interest rate risk, but our forecast assumes investors will return in the short term. As a result, even with the 10-year Treasury rate expected to rise, the 30-year mortgage

rate may fall in the short term, reducing the spread back toward its historical average.

Meanwhile, house price declines will be a plus for affordability. The Moody's Analytics House Price Index peaked in July and has since fallen 2%, mainly due to a lack of demand. House prices will endure a correction in the short term, but it will be a far cry from the crash that followed the 2000's housing bubble. Our forecast expects house prices to decline around 10% from their peak over the next two years. Even so, when house price declines stop in 2025, single-family house prices will still be 25% above pre-pandemic levels. Better affordability will bring buyers off the sidelines since the underlying demographics are positive with the bulk of millennials in their prime homebuying years.

House Price Correction Will Be Modest Given Recent Gains



After troughing in December, the National Association of Home Builders Housing Market Index, which measures builder confidence, has improved significantly to just under 50 points. While the reading continues to suggest that building conditions are poor, the increase from 31 in December to 42 in February is a positive sign for the residential construction market. Permit data and the NAHB's confidence index typically track one another, indicating permits may have bottomed.

Although new single-family housing permits dropped off last year due to the decline in purchase activity, builders are still working through a backlog of projects, keeping the number of units under construction elevated. Supply-chain issues and labor shortages are improving, alleviating some of the construction bottlenecks. Furthermore, a large number of builders at the recent International Builder's show in Las Vegas reported more activity than expected. New-home sales began the year on a high note and have increased for two consecutive months. While new-home sales will remain below their 15-year high in 2023, new-home construction will be elevated short term.

Builder confidence improved in the first two months of 2023 in all four U.S. regions, though no region has surpassed the 50-point threshold. Short-term building conditions are expected to be the best in the Northeast and South and worst in the Midwest and West.

Northeast

The Northeast's economic performance and affordability remain in line with the national average. However, house prices in the Northeast are not greatly overvalued and will endure the smallest short-term house price declines, a plus for builders' profit margins. Additionally, the number of housing units currently under construction remains well below the other regions, meaning fewer units will come on line in the short term leaving more room for builders to run. Consequently, single-family permits and starts should be stronger than average in the Northeast.

South

Similarly, building conditions in the South are improving faster than in other regions. U.S. new-home sales increased in January only because of the significant increase in new-home sales in the South, which offset declines in all other regions. Above-average population growth is helping support demand, even though housing affordability is on par with the U.S. average. Builders have more affordable building lot choices compared with other regions based on data from the Federal Housing Finance Agency.

West

On the other hand, building conditions in the West are more somber than other parts of the country. Builders must

contend with fewer affordable lot choices since the West has the highest land costs. Meanwhile, well below-average housing affordability weighs heavily on demand. The West posted the fastest HPI growth before the housing recession and is more overvalued than other regions. As a result, the West will endure the largest short-term house price correction. This will improve affordability, bringing back buyer demand, but will weigh on builders' profitability.

Midwest

The Midwest's building prospects are among the worst regionally. While the region has the best affordability and low land costs, builder confidence is the lowest here. Poor demographic trends weigh on demand, while the Midwest's economic recovery has taken much longer than the nation as a whole. Additionally, income growth will be the weakest in the Midwest over the coming quarters, further limiting demand.

Overall, house prices will endure a modest correction in the short term, but this will help improve affordability, bringing buyers back to the market. While the housing market will struggle against the headwinds of higher interest rates and a slowing economy in 2023, the strength of underlying fundamentals and a still-large housing deficit should prevent the market from falling much further than it already has. Building conditions in the South and Northeast will be better than other regions for the short term. We remain cautiously optimistic that the housing market is approaching a turning point, which will support single-family residential construction in the near term.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar is jam-packed. The release of February data for the consumer price index will be the highlight of the week ahead and has significant implications for the next meeting of the Federal Open Market Committee. While inflation is set to continue moderating, it may not be enough improvement to keep the Fed from returning to a 50-basis point rate hike.

Retail sales data on Wednesday will also provide key insight into how well consumer spending is holding up in the face of ongoing inflation and heightened economic uncertainty. We will also get an early read on March consumer sentiment from the University of Michigan survey.

And we will continue to pay close attention to initial jobless claims as the timeliest indicator of changes in the labor market. Claims edged off their recent lows this week, and while they remain historically low, layoffs can happen quite quickly. An uptick in announced layoffs in January and February presents some risk that claims could pick up in a more meaningful way.

Other key data to be released next week include the NFIB small business survey, producer prices, business inventories, import prices, housing starts, and industrial production.

Europe

Euro zone releases will top headlines, though the European Central Bank meeting will not offer many surprises. The governing council has spoken consistently about a 50 basis point rate hike. The meeting may offer clues to what the ECB is thinking for the subsequent meeting on 4 May, and we think the tone will skew hawkish in light of the February inflation numbers. Indeed, the final estimate of the HICP will be released next week, and we are not expecting any changes from the preliminary report. Inflation likely inched lower to 8.5% year over year from 8.6% in January.

Meanwhile, there will be figures posted for euro zone industrial production in January and the currency area's external trade balance for February. We think industrial production will have recovered in January by 1.3% month on month after slumping 1.1% in December. So far, the news from Germany is encouraging, with a strong increase in production there. We foresee positive effects on energy-intensive industries, stemming from the significant decline in wholesale natural gas prices. The manufacturing PMI was still in contractionary territory during January—not a fully positive signal; however, the reading improved considerably from the previous month, pointing toward better performance in output. Likewise, we expect Italian production to continue growing at a solid 1% monthly pace.

We expect a modest improvement in the euro zone's nonseasonally adjusted external trade balance, to a deficit of €7 billion in January, up from a deficit of €8.8 billion in December. This, moreover, will be an improvement on the deficit of €28.8 billion in January 2022.

Asia Pacific

New Zealand's fourth-quarter GDP is expected to rise 0.1% from the prior quarter as rate hikes through 2021 and 2022 bite. Growth in household consumption and business investment is expected to be close to zero. Households have pulled back spending considerably in order to service their mortgages. Credit card spending in seasonally adjusted terms has been weak. New Zealand has a high proportion of mortgages on a fixed rate. Households that borrowed at the end of 2020 were facing rates of about 4.4%, but they will be refinancing at rates around 7.9%. That 350-basis point difference represents an increase of around NZ\$1470 per month in repayments on a mortgage of NZ\$500,000. Growth will come from exports as demand for tourism rebounded in the quarter.

Bank Indonesia is near the end of its tightening cycle. With core inflation cooling, we expect the central bank to hold rates steady at its coming meeting. This will leave its seven-day reverse repo rate at 5.75%, where it's been since January. Recent core inflation, BI's favoured measure of assessing price stability, eased to 3.1% year on year in February from 3.3% in January; both figures are within its target range of 2% to 4%. Governor Perry Warjiyo said in January that BI would pause on rate hikes once inflation shows signs of coming back into line with target. Warjiyo's second term as governor could be confirmed as early as this month, although his current term runs to May. President Joko Widodo has nominated him to serve a second term out to May 2028—an appointment that will need parliamentary approval.

Latin America

The upcoming week in Latin America is a light one on the data front and we expect few major surprises. The spotlight will be on Argentina, where we look for inflation to have broken into triple digits amid surging food prices and signs of indexation by businesses. With almost all of the hard data on the performance of the Argentine economy in the fourth quarter now in the books, we look for a marked deceleration in GDP on a quarterly and year-ago basis. Industrial production in Colombia, Mexico, and Peru round out the week's data dump. We look for meager growth in January, consistent with our call for a broad slowdown across the region in the first half of this year.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
March	Beijing	National People's Congress	High	Medium
7-Mar	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
10-Mar	Japan	Bank of Japan monetary policy announcement	Medium	Low
13-Mar	EU	Eurogroup	Low	Low
16-Mar	Euro zone	European Central Bank monetary policy announcement	Medium	Low
17-Mar	United Kingdom	Bank of England monetary policy announcement	Medium	Low
23-24-Mar	European Union	European Council summit	Low	Low
2-Apr	Finland	General election	Medium	Low
4-Apr	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
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
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
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 Francisco, 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

Corporate Credit Markets Yet to Signal Impending Recession

BY STEVEN SHIELDS

CREDIT SPREADS

Despite the inverted Treasury yield curve, corporate credit markets have yet to flash warning signals of an impending recession. Moody's Investors Service's long-term average corporate bond spread is 132 basis points, 6 bps tighter than at this time last week. It is still narrower than the 149 and 139 bps averaged over January and February. The long-term average industrial corporate bond spread narrowed by 5 bps to 113. It averaged 120 bps in February.

The recent ICE BofA U.S. high-yield option adjusted bond spread narrowed from 418 to 409 basis points and remains anchored near a six-month low. The Bloomberg Barclays high-yield option adjusted spread also tightened this past week to 389 bps. Aside from briefly hitting 385 bps in early February, this reflects the lowest spread since May 2022. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and that implied by a VIX of 20. The VIX has ticked higher over the past week but remains in line with its 30-day moving average of 19.8.

DEFAULTS

Five Moody's Investors Service-rated corporate debt issuers defaulted in January, down from eight in December. The global speculative-grade corporate default rate came in at 2.8% for the trailing 12 months ended in January, unchanged from the December 2022 level.

The January defaulters include two retail companies: U.S.-based Party City Holdings Inc. and Brazil-based Americanas SA. Party City is one of a number of retailers that have experienced financial difficulties recently. In the fourth quarter of 2022, four rated retailers defaulted, including Rite Aid Corp. and Bed Bath & Beyond Inc. Party City filed for Chapter 11 bankruptcy protection after contending with high supply-chain costs, helium shortages and softening customer demand, all of which have led to an unsustainable weakening of leverage, coverage and liquidity metrics. Party City has signed a transaction support agreement with more than 70% of its first-lien noteholders. The company expects to convert a material portion of its senior secured first-lien and senior unsecured notes to equity.

Americanas SA did not make the January interest payment on its senior unsecured notes that will mature in 2033. Soon after, a Brazilian court approved the company's judicial recovery request, the closest equivalent to the Chapter 11 process in the US. The default came shortly after the

company disclosed accounting inconsistencies that involved the recognition of roughly BRL20 billion in previously undisclosed suppliers' financing lines to Americanas as debt. This recognition will increase the company's leverage and reduce its interest coverage compared with its latest financial statements in September 2022.

Outside of the retail sector, U.S.-based Serta Simmons Bedding LLC (durable consumer goods) filed for bankruptcy protection in January while Cooper-Standard Automotive Inc. (automotive), also based in the U.S., and Vue International Bidco plc (hotel, gaming, & leisure) of the U.K. completed distressed exchanges, a type of default under Moody's Investors Service's definition.

The global speculative-grade corporate default rate to rise in 2023 as slowing economic growth, higher input costs and rising interest rates reduce consumer and business demand, pressure corporate earnings and hamper free cash flow, according to Moody's Investors Service. The ratings agency expects the default rate to rise to 4.4% at the end of 2023 and to 4.6% by the end of January 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 agency's latest forecasts are lower than its projections last month, primarily because of a drop in high-yield spread assumption as recent levels have been lower than Moody's Investors Service had previously expected. The agency now assumes the U.S. high-yield spread will widen to only 510 basis points in the coming 12 months, down from its forecast of 596 basis points last month.

In the leveraged loan market, three Moody's Investors Service-rated corporate issuers defaulted on loans in January: Party City Holdings Inc., Serta Simmons Bedding LLC and Vue International Bidco plc. The issuer-weighted U.S. loan default rate came in at 2.3% at the end of January, up slightly from 2.2% in December. The global high-yield bond default rate was 1.0% in January when measured on a dollar-volume basis, unchanged from the December level. Across regions, the comparable rate rose to 1.2% from 1.1% in the U.S. but held steady at 0.5% in Europe.

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 fared noticeably better in the second quarter.

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

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

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

In the 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 corporate bond issuance outperformed expectations through the first two months of the year. This was driven by robust investment-grade debt issuance. In the latest period, high-grade issuance amounted to \$51.3 billion, lifting its year-to-date total to a respectable \$346.3 billion. Meanwhile, high-yield issuance surged from \$1.1 billion in the preceding period to \$8.6 billion. At \$47.43 billion through the first week of March, high-yield debt issuance is tracking at its lowest level since 2016. The strength in investment-grade issuance underpins the 3.1% increase in cumulative issuance relative to last year. However cumulative issuance is still 15.6% and 20.7% lower over the same period in 2020 and 2021, respectively.

U.S. ECONOMIC OUTLOOK

Note: Moody's Analytics' March forecast is scheduled to be published on March 14.

Moody's Analytics made minor adjustments to its U.S. baseline forecast in February, as new data altered the outlook only slightly. Fundamentally, the outlook remains the same, and the pace of annual GDP growth is nearly unchanged.

There were no changes to monetary or fiscal policy assumptions in February. New data contained some surprises, especially the labor market data, which showed a stronger-than-expected job market as 2023 started. This results in a more gradual deterioration in job growth in the forecast compared with the prior month. Demand for oil surprised to the upside, but warm weather contributed to weaker-than-expected demand for natural gas, so those forecasts shifted in opposing directions in the short run. Risks around the debt limit were highlighted as it was breached. The near-term outlook for the 10-year Treasury is a bit lower because of the recent decline.

Energy

Moody's Analytics has raised its oil price forecast by \$1 to \$3 from now until the third quarter of 2024. The forecast has been raised because of an improved outlook for the global economy, anticipated halts in global strategic petroleum reserve releases, and ongoing expectations for Russian crude oil supply to decrease as EU sanctions take their toll.

We have also appreciably reduced our natural gas price forecast. We now expect Henry Hub futures to average \$5.51 in 2023, down from \$6.62 a month ago. We downgraded our price forecast because demand has collapsed in the midst of the warmest winter in recent memory. This has substantially reduced demand for space heating and electricity generation.

Liquefied natural gas contract prices are still much higher than current Henry Hub prices. However, arbitrage opportunities are not available because the Freeport LNG hub is still offline, German gas inventory is essentially maxed, and there is a lack of infrastructure to receive more U.S. cargoes. We expect the Freeport terminal to open in the second quarter, facilitating more arbitrage opportunities and putting upward pressure on U.S. gas prices. Moreover, the weather will eventually turn; it is most favorable for low prices at the moment.

Labor market

The release of the January employment report underscored the labor market's resilience. It showed net payroll job gains popped up to more than half a million in that month and the unemployment rate fell to 3.4%—its lowest level since 1969. These new data, plus upward revisions to the

November and December numbers, were incorporated in the February baseline forecast, and the near-term forecast is a bit altered from the prior month.

The strong momentum of the job market means that a marked weakening in the labor market is not expected to materialize until the second half of 2023 and will continue through 2024. Monthly job gains will average 75,000 in the second quarter of this year, followed by gains of only about 25,000 per month in the final two quarters of 2023. Growth will pick up slowly through 2024, when the risk of a recession is highest. Interest-rate-sensitive industries like construction and financial services will lose jobs on net this year. Consumer-driven segments like retail will slow to a near-halt but avoid outright losses.

The unemployment rate forecast is also more optimistic in the first half of 2023 compared with the January baseline forecast but worsens through the back half of the year and through 2024. The unemployment rate will peak at 4% but not until later in 2024. Over the next year, the increase in the unemployment rate will be shy of the 0.5-percentage point increase that historically has been a reliable indicator that the economy is in a recession. The economy will remain at or near full employment as well—the employment-to-population ratio will not fall below 80%.

Fiscal policy

The federal budget deficit will amount to \$1.1 trillion in fiscal 2023, or 4.3% of GDP. While the fiscal 2023 deficit will be slightly larger than we projected in January because of a higher-than-expected budget shortfall in the fourth quarter, it still represents an appreciable decline from the 5.5% deficit-to-GDP ratio in fiscal 2022 due in part to the wind-down of federal pandemic relief.

Since the last update to the federal fiscal forecast, the most important development in Washington DC was the U.S. government hitting its statutory borrowing limit on January 19, setting the stage for a monthslong political fight. The debt limit is the maximum amount of debt the Treasury can issue to the public or other federal agencies. January 19 was not a hard deadline for lawmakers to address the debt limit. The Treasury will be able to continue paying its bills by employing extraordinary measures and drawing down its cash on hand. Extraordinary measures are accounting sleights-of-hand, which reduce the level of intragovernmental debt, like Treasury securities held in government accounts, that would otherwise count against the statutory limit.

If Congress fails to address the debt limit, the Treasury will eventually use up the extraordinary measures at its disposal and run out of cash. At that point, it will be unable to meet its financial obligations in full or on time, and an unprecedented default by the federal government will ensue. Forecasting the length of time the Treasury can forestall a default by tapping into extraordinary measures

and its cash on hand is always an intrepid affair. It requires making assumptions about federal payments and receipts months in advance. Uncertainty around the upcoming tax filing season, student loan policy, the effects of recent fiscal legislation, and the state of the economy make such forecasting even more challenging this year.

According to Treasury Secretary Janet Yellen, the Treasury is unlikely to exhaust the cash and extraordinary measures at its disposal before early June. Our preliminary outlook is that the Treasury could run out of cash and default as early as August. Our baseline assumption is that lawmakers will find a way to come together and raise or suspend the debt limit in time, given the huge economic stakes involved with maintaining the nation's creditworthiness.

GDP

The expansion in economic activity continued in the fourth quarter after pausing in the first half of 2022 as measured by real GDP. The contribution from trade declined, but inventory accumulation increased, and several other components contributed. Output rose 2.9% following a 3.2% gain in the third quarter, according to the preliminary report from the Bureau of Economic Analysis.

The composition of growth was concerning for the outlook. Inventories became a noteworthy contributor to growth, adding 1.5 percentage points as the accumulation of inventories accelerated. Trade also contributed. Fixed investment fell, subtracting 1.2 percentage points from growth with residential investment pulling growth down by 1.3 percentage points and intellectual property investment in software the strongest performer. Consumer spending on services was also a major contributor.

Revisions to the baseline forecast for real GDP growth are modest. The forecast for real GDP now shows a small dip in the first quarter of 2023 but a stronger acceleration in subsequent quarters this year. Annual growth rates in 2022 and 2023 are 2.1% and 1.3%, respectively, unchanged from last month's forecast. Growth in 2024 was revised up slightly to 2.2% and growth in 2025 was unchanged, at 2.7%. Both figures still suggest an economy returning to near-potential growth.

Business investment and housing

Growth in real fixed-business investment slowed significantly in the fourth quarter of 2022, down to 0.7% annualized, according to the BEA advance estimate. The locus of the weakness was the large category of IT equipment, which fell a sharp 24% annualized, leaving it down 2% year over year. This squares with data from a variety of industry sources, which have reported deep declines in sales of PCs as pandemic-era spending related to remote working recedes. High-frequency data also paint a downbeat picture. Adjusted for inflation, new orders for

nondefense, nonaircraft capital goods trended down throughout 2022.

The near-term prospects for growth in business investment remain moderate at best. Credit conditions are tight and will tighten somewhat more, and the projection for overall economic growth in 2023 is still weak. As a result, the forecast for growth in real business investment is more than a percentage point lower than in January. The total will advance by 3.2% on an annual average basis in 2023, with equipment spending rising by just 1.9%. Structures have begun a weak rebound, but spending will remain far below the pre-pandemic pace because of low demand for office space.

Moody's Analytics made only modest adjustments to its forecasts for home sales and construction activity to account for movements in performance data. Recent declines in mortgage rates are expected to support the broader housing market consistent with our outlook for activity to remain low but stable in the first half of 2023 followed by a modest recovery in activity as inflation moderates. House prices are falling but showing signs of resilience as buyers and sellers adjust to the new environment. Prices are expected to decline 5% to 10% from peak to trough nationally and by as much as 20% in some markets. Homebuilders will remain active throughout 2023 due to the large number of housing units that have been started but not completed, supporting construction employment.

Moody's Analytics maintained a negative outlook for commercial real estate price growth over the next year given shifts in consumer demand and the higher interest-rate environment. The completion of additional multifamily properties will place downward pressure on rents, helping bring down headline inflation at the expense of cap rates and prices for apartment buildings. Despite these headwinds, demand for housing is expected to be robust given the large number of young adults hoping to form their own households. Conversely, weakening demand for office and retail properties is expected to place downward pressure on prices for these segments.

Monetary policy

Moody's Analytics baseline forecast for the federal funds rate remains unchanged from the previous outlook. Interest rates will continue to rise in early 2023 as the Federal Reserve remains committed to its fight against inflation. Policymakers slowed the pace of hiking to 25 basis points at the Federal Open Market Committee's February meeting, raising the target range for the fed funds rate to 4.50%-

4.75%. The slowdown was expected as inflation is now consistently moderating. Consumer prices fell 0.08% from November to December, the largest decline since the beginning of the current inflation episode in the spring of 2021. However, at 6.4%, year-over-year consumer price inflation remains well above the Fed's 2% target. Therefore, the FOMC reiterated its view that further interest rate hikes will be appropriate. The Fed, meanwhile, has not committed 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.

We expect the FOMC will hike the fed fund rate by another 25 basis points at its March meeting and then stop. Our terminal fed funds rate projection in 2023 falls just shy of 5%. The Fed will keep rates at this level before cutting them 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.

The baseline outlook reflects our expectation that inflation pressures stemming 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 a narrow one: Policymakers cannot ease 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 is showing signs of sustained cooling, keeping interest rates too high for too long risks choking off the expansion and pushing up unemployment.

Inflation remains the key to the baseline outlook. It rose an estimated 8% in 2022, and the February vintage has the CPI rising 3.9% in 2023, and 2.4% in 2024, a rounding difference down from the prior baseline, as recent inflation has decelerated quicker than expected.

Financial conditions, meanwhile, remain tight, if not quite as tight as a few months ago. The 10-year Treasury yield averaged 3.8% in the final quarter of 2022 but fell to 3.5% in January. The baseline outlook has the 10-year Treasury yield averaging 3.7% in the first three months of this year and peaking in the fourth quarter of 2023 at 4.1%. Compared with the prior baseline, this marks a decline of 10 to 30 basis points for each quarter, reflecting the easing market conditions since the fall of last year. As inflation is falling quicker than expected, markets have been expecting policy rates to come down quicker than previously anticipated. We estimate the 10-year Treasury yield will then decline into 2025.

Euro Zone GDP Stalls

BY ROSS CIOFFI

Final estimates revised euro zone's fourth-quarter GDP. Rather than inching higher by 0.1% quarter over quarter, as initially reported, GDP stalled during the last quarter of 2022. That said, the third-quarter estimate was revised higher by 0.1 percentage point to 0.4%, effectively balancing out the change. According to the detailed breakdown, GDP growth was weighed down considerably by faltering private consumption and fixed investments. The resulting decline in imports added a large 1-percentage point contribution from net trade, and there was also some support from inventory investments and government spending. Wholesale energy costs have eased significantly, adding some improvement to the outlook since the fourth quarter, but risks are still tilted to the downside, as inflation remains well above target.

ECB preview

Next week, on 16 March, the European Central Bank will announce its latest monetary policy decision. A 50-basis point hike in the main refinancing rate to 3.5% is all but written into the outcome, given the ECB members' explicit statements to hike.

The bigger question is what will come at the subsequent meeting on 4 May and whether there will be any hints offered as to what comes next. We expect ECB President Christine Lagarde will take a hawkish tone, signalling the possibility of another 50-basis point hike. We are updating our own baseline assumptions and are betting on a 50-basis point hike at the May meeting.

The euro zone's February inflation print came as a disappointment and a reminder that inflationary pressures are strong and rooted, even though energy costs have eased. Lower energy prices will keep headline inflation rate trending lower. However, we don't think core inflation has peaked yet, and the ECB will not stop hiking rates until there is a clear sign that core inflation is permanently on its way down. The doves on the governing board will have a hard

time arguing to slow the pace of hiking until that happens. Meanwhile, we do not expect any news regarding the ECB's quantitative tightening plans, which are currently set to continue net sales of assets previously purchased under the ECB's Asset Purchase Programme at €15 billion per month between March and June.

German industry recovers...

In January, Germany's industrial production recovered forcefully by 3.5% month over month, after tumbling 2.4% in December. December's figure was revised higher from a previously reported 3.1% decline. The month was saved by strong output for electronic equipment and chemicals. However, production of consumer and capital goods pulled back. Even with January's stronger-than-expected performance, we foresee troubles for Germany's industrial sector. Natural gas and energy costs have eased considerably in recent months but are still substantially higher than pre-pandemic norms; this will continue to suppress demand at home and abroad. We expect GDP to contract again in the first quarter and grow only sluggishly for the rest of the year.

...While retail slumps

Germany's retail sales slumped by 0.3% month over month this January, but January's release comes with a number of significant revisions. December sales figures were revised higher—instead of dropping by 5.3% month over month, they only fell by 1.7%. Although, November's growth rate was revised lower to just 0.7%, down from 1.9%.

Even with the upward revisions, the numbers are grim. The retail release reflects how consumer demand is weakening amidst still-high inflation and low consumer morale. However, the year-ago comparison is accentuated by some base effects, as at this time last year, consumer spending was still partially being channelled into spending on goods away from services because of social-distancing measures.

Bank of Japan to Stand Pat

BY STEFAN ANGRICK

We expect the Bank of Japan to hold major policy levers steady at Friday's monetary policy meeting, but the final decision under outgoing Governor Haruhiko Kuroda leaves the possibility of last-minute surprises. Markets are again testing the 0.5% upper bound of the BoJ's yield curve corridor, notwithstanding efforts to curb speculation. December's sudden tweaks to the BoJ's yield-curve control policy have raised interest rates and made the BoJ more active in markets. This has made both doves and hawks unhappy. Further tweaks are a possibility, but there is little reason to believe these would materially improve the situation. Scrapping YCC altogether seems like the more plausible scenario. However, our best guess is that this will happen at some point after Kazuo Ueda and his deputies take the helm.

Many anticipate a pivot under the BoJ's new leadership, but parliamentary hearings with Ueda as the governor nominee and prospective deputies Shinichi Uchida and Ryozo Himino suggest a more careful and measured approach. Ueda told lawmakers in late February that accommodative monetary policy settings are appropriate given the state of the economy. Inflation, he said, is supply-driven, stemming from higher costs for imported food and energy, and should come down in the months ahead. The kind of steady, demand-driven 2% inflation that would enable monetary tightening is still some way off. On the accord between the BoJ and the government that underpins the central bank's pursuit of 2%

inflation, Ueda said revisions aren't needed. Despite the dovish tone of these statements, Ueda and his deputies acknowledged easing can have negative side effects. All of this suggests that the BoJ's new leadership team—to be confirmed by Japan's upper house Friday before going before the cabinet—would keep the bank in easing mode but simplify its framework.

Government subsidies for energy have scrambled the inflation picture, but delayed pass-through from high producer prices and a renewed slide in the yen suggest inflation will remain hot(ish). Consumer price data for Tokyo released last Friday showed core inflation (CPI excluding fresh food) slowed to 3.3% year on year in February from 4.3% in January thanks to government support for household energy bills (Tokyo CPI data correlates closely with nationwide CPI but is released first). Headline inflation fell to 3.4% year on year from 4.4% before. Despite headline and core inflation rolling over, deeper price metrics show that inflation is still gaining steam. Core-core inflation (CPI excluding fresh food and energy) rose 3.2% year over year in February, up from 3% the month before. Even CPI excluding all types of food and energy rose 1.8% year over year, up from 1.7% in January. The fact that the bulk of that inflation is still imported won't make it any easier for the BoJ's new leadership team to communicate its easing stance to the public.

Demographics Cloud the Outlook

By JUAN PABLO FUENTES

Latin America's economic performance in the two decades before the pandemic relied heavily on the region's employment growth. Broadly speaking, economic growth comes from a combination of labor growth and productivity gains. Between 2000 and 2019, Latin America's GDP averaged 2.5% annually, with employment growth accounting for about 2 percentage points and only 0.5 percentage points resulting from gains in productivity. The region's productivity growth in that period is one of the weakest of any region in the world. However, current demographic dynamics mean that Latin America's labor growth will decelerate sharply in the next decades—with devastating economic consequences—unless the region experiences a surge in productivity.

Employment growth is driven by the expansion in the working-age population (those between age 15 and 64) and changes in the labor force participation rate. Between 2000 and 2019, Latin America's working-age population grew at an annual average rate of 1.5%, while the region's labor force participation rate increased from 62.2% to 67.2%, due mostly to a sharp increase in the women's labor force participation rate. Those demographic dynamics will shift dramatically in the next two decades as the region's population ages. According to the U.N.'s latest estimates, Latin America's working-age population will grow at an annualized rate of only 0.4% between 2023 and 2042 and will start to decline around 2040 amid lower fertility rates.

Moreover, the region's labor force participation rate is expected to inch lower in the next two decades—a process that may have started during the pandemic. According to U.N. estimates, the labor force participation rate will decrease to about 66% by 2042. This means that labor growth will add only about 0.3 percentage point to the region's economic growth in the next 20 years. If productivity growth remains constant at just about 0.5% annually, the region's GDP would grow at an annualized rate of only about 0.8% in the next two decades, which is clearly a concerning outlook for a region with high poverty levels.

Given current demographics, it is clear that Latin America's countries can no longer count on labor growth to sustain development. Indeed, these trends could manifest faster than anticipated. For example, fertility rates could fall quickly, and net migration flows could turn more negative due to climate change and rising economic hardship. Latin America has traditionally undergone negative net migration flows, though the net migration rate has declined in recent years.

Thus, policymakers must turn their attention to implementing policies that can help boost labor productivity. These include labor and tax reforms aimed at increasing formal employment, plus greater investment in education and technology. Productivity growth must grow to at least 2% annually for the region to achieve poverty-reducing economic growth.

Downgrades Dominate in U.S., Credit Improves in Europe

BY OLGA BYCHKOVA

U.S.

U.S. credit downgrades outnumbered upgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of investment- and speculative-grade bonds and industrial, financial and utility companies. Downgrades comprised 10 of the 15 rating changes and 58% of affected debt.

The largest downgrade, accounting for 39% of debt affected in the period, was issued to Community Health Systems Inc., an operator of general acute care hospitals in non-urban and mid-sized markets throughout the U.S., with its corporate family rating lowered to Caa1 from B3 and probability of default rating cut to Caa1-PD from B3-PD. Moody's Investors Service also downgraded the ratings of the company's senior secured notes to B3 from B2, senior unsecured notes to Caa3 from Caa2, and the speculative grade liquidity rating to SGL-3 from SGL-2 and affirmed the Caa2 ratings of the junior-priority secured notes. The outlook is stable. The downgrade reflects a significant increase in the company's financial leverage and the uncertainty associated with the company's ability to generate positive free cash flow given the tough operating environment, according to the rating agency, and CHS' reliance on highly specialised clinical labour makes it vulnerable to worsening supply-demand imbalance of such labour and the resultant spike in labour costs. This risk has become more pronounced after the COVID-19 pandemic, which triggered increased retirement and a shift from permanent positions to temporary staffing, especially for nurse professionals, the rating agency said. Moody's could further downgrade the ratings if liquidity erodes, free cash flow remains negative, or if CHS' earnings weaken such that the debt burden becomes unsustainable. The ratings could also be lowered if the probability of default increases or if the company pursues a transaction that Moody's Investors Service deems as a distressed exchange. An upgrade would require operational initiatives that result in improved volume growth, margin expansion, and company's free cash flow and liquidity, and reduced financial leverage.

Upgrades were headlined by a credit card and prime consumer lender, Discover Financial Services, which saw its long-term senior unsecured ratings raised to Baa2 from Baa3 and subsidiary Discover Bank's long-term unsecured debt and baseline credit assessment lifted to Baa1 from Baa2 and baa1 from baa2, respectively, impacting 37% of

debt affected in the period. In addition, the short-term deposit rating of Discover Bank was upgraded to Prime-1 from Prime-2. The outlook is stable. According to Moody's Investors Service, the rating action reflects DFS' solid market position in the U.S. general-purpose credit card and private student loan markets, which, together with its prudent underwriting and conservative risk management, helps drive the company's very strong profitability. In addition, DFS' capitalization and anticipated resilience to a severe economic downturn, including a prolonged stagflation environment, is solid compared to its U.S. regional peers. Lastly, the bank benefits from good asset quality and balance sheet management, the rating agency added.

EUROPE

Corporate credit rating change activity was much lighter though stronger across Western Europe with upgrades outstripping downgrades 2-to-1.

The lone downgrade, accounting for 100% of the total debt affected in the period, was issued to SES S.A., a leading global satellite services provider. Moody's Investors Service cut SES' long-term issuer and backed senior unsecured ratings to Baa3 from Baa2, its baseline credit assessment to ba1 from baa3, the backed senior unsecured MTN program ratings to (P)Baa3 from (P)Baa2, the backed junior subordinate (hybrid) ratings to Ba2 from Ba1, and the short-term backed commercial paper ratings to Prime-3 from Prime-2. According to Ernesto Bisagno, Moody's Investors Service vice president, senior credit officer, and lead analyst for SES, "The downgrade reflects the prolonged deterioration in SES' credit metrics due to the lower earnings owing to the challenging operating environment for satellite operators, combined with high capex in 2022 and bolt-on mergers and acquisitions. While SES has recently tightened its financial policy, this adjustment has been only marginal, and there is potential that a significant part of the \$3 billion C-band proceeds will not be used for debt repayment, leaving leverage above our previous expectations." The stable outlook reflects the expectation that SES' credit metrics will remain stable in 2023, with potential for deleveraging from 2024, owing to a combination of higher EBITDA and some debt repayments, the rating agency added.

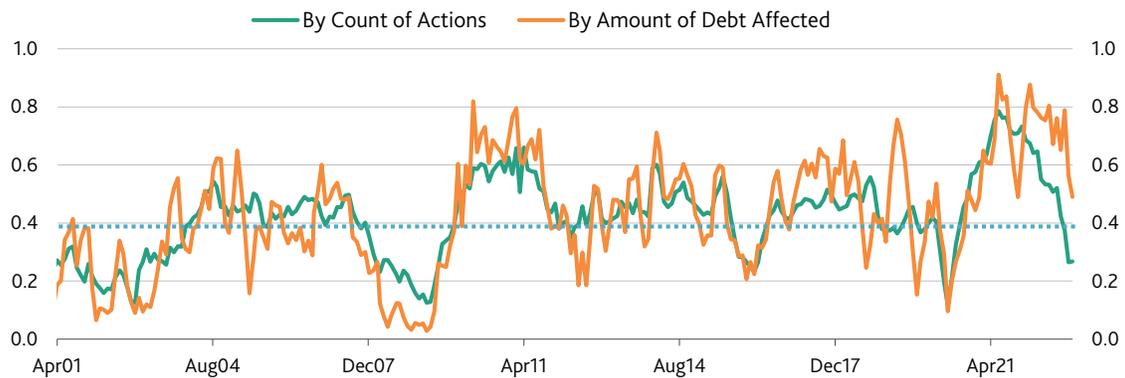
During the latest weekly period, Moody's Investors Service raised Automate Intermediate Holdings II S.à.r.l.'s corporate family rating to Ba3 from B1 and probability of default

rating to Ba3-PD from B1-PD. Concurrently, Moody's upgraded to Ba3 from B1 the instrument ratings of AutoStore's €440 million senior secured term loan B due July 2026 and the \$150 million senior secured revolving credit facility due January 2026. The outlook on all ratings was changed to stable from positive. The rating agency said its action reflects AutoStore's strong business model that enables the very rapid expansion achieved in recent years without substantial capital deployment and which is protected by its proprietary technology. Through expansion into new geographies and by adding additional end markets through new solutions, the company has further improved its revenue diversification, Moody's Investors Service said. An increase in the share of recurring revenue, which currently accounts for just around 5% of total revenue, would further strengthen the company's credit profile in the rating agency's view.

A global sporting goods company, Amer Sports Holding 1 Oy, was also upgraded in the period. The company's corporate family and probability of default ratings were raised to B2 from B3 and B2-PD from B3-PD, respectively. Moody's Investors Service also upgraded to B2 from B3 the ratings on the €1,700 million backed senior secured term loan B due March 2026 and on the €315 million backed senior secured revolving credit facility due October 2025. The outlook on all ratings was changed to stable from positive. According to Giuliana Cirrincione, a lead analyst for Amer Sports, "The upgrade reflects the company's sustained earnings improvement and its positive track record after the pandemic, which led to a marked reduction in financial leverage in 2022 despite the weakening macroeconomic environment, high inflation, and supply chain disruptions."

RATINGS ROUND-UP

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



* Trailing 3-month average

Source: Moody's

FIGURE 2
Rating Key

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

FIGURE 3

Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG
3/1/2023	WILLIAMS COMPANIES, INC. (THE)-MOUNTAINWEST PIPELINES HOLDING COMPANY	Utility	SrUnsec	180	D	A3	Baa1	IG
3/1/2023	COMMUNITY HEALTH SYSTEMS, INC.-CHS/COMMUNITY HEALTH SYSTEMS, INC.	Industrial	SrSec/SrUnsec/LTCFR/PDR	9901.676	D	B2	B3	SG
3/1/2023	SALEM MEDIA GROUP, INC.	Industrial	SrSec	229.4	D	B2	B3	SG
3/1/2023	GENWORTH FINANCIAL, INC.-Enact Holdings, Inc.	Financial	SrUnsec/LTIR/Sub/JrSub/IFSR		U	Ba1	Baa3	SG
3/1/2023	INSTANT BRANDS HOLDINGS INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa3	SG
3/1/2023	RISING TIDE HOLDINGS, INC.	Industrial	SrSec/BCF		D	Ca	C	SG
3/2/2023	TORONTO-DOMINION BANK (THE)-COWEN INC.	Financial	SrSec/BCF		U	B1	A3	SG
3/2/2023	EMERGENT BIOSOLUTIONS INC.	Industrial	SrUnsec/LTCFR/PDR	450	D	Caa1	Caa2	SG
3/2/2023	LASERSHIP HOLDINGS, INC.-LASERSHIP, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
3/3/2023	ARETEC GROUP, INC.	Financial	SrUnsec/SrSec/BCF/LTCFR	400	U	Caa2	Caa1	SG
3/3/2023	SILVERGATE CAPITAL CORPORATION	Financial	LTIR/LTD/PS	200	D	B3	Ca	SG
3/6/2023	SCOTTS MIRACLE-GRO COMPANY (THE)	Industrial	SrUnsec/LTCFR/PDR	1600	D	Ba3	B1	SG
3/6/2023	BELLRING BRANDS, INC.	Industrial	SrUnsec/LTCFR/PDR	840	U	B3	B2	SG
3/7/2023	DISCOVER FINANCIAL SERVICES	Financial	SrUnsec/LTIR/STD/LTD/Sub/PS	9470	U	Baa2	Baa1	IG
3/7/2023	MULTIPLAN CORPORATION-MPH ACQUISITION HOLDINGS LLC	Industrial	SrSec/SrUnsec/BCF/LTCFR/PDR	2350	D	Ba3	B1	SG

Source: Moody's

FIGURE 4

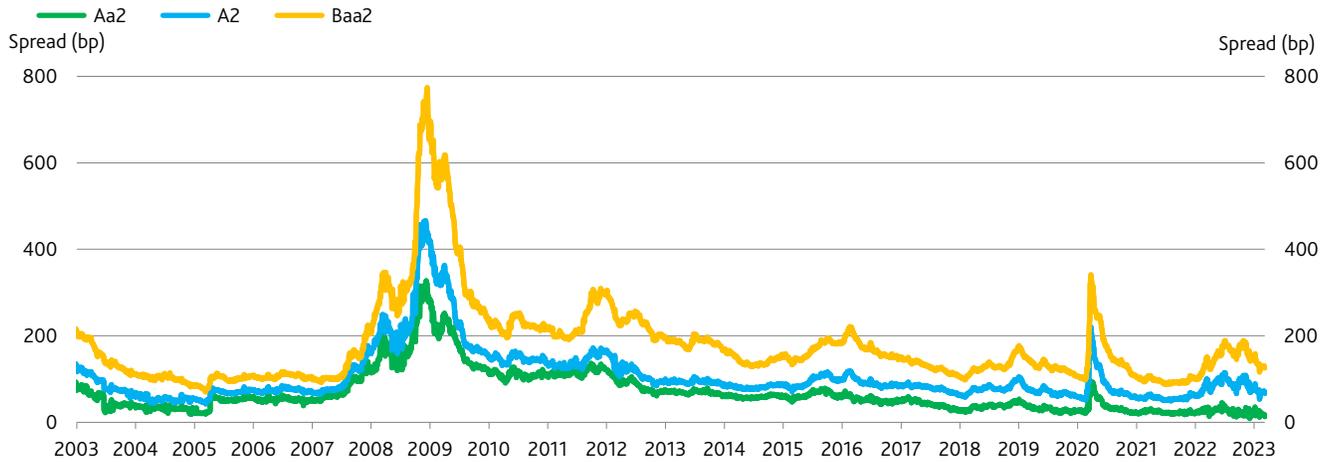
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
3/1/2023	AUTOMATE INTERMEDIATE HOLDINGS II S.?.R.L.	Industrial	SrSec/BCF/LTCFR/PDR		U	B1	Ba3	SG	LUXEMBOURG
3/3/2023	AMER SPORTS HOLDING 1 OY	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG	FINLAND
3/7/2023	SES S.A.	Industrial	SrUnsec/LTIR/JrSub/MTN/CP	5330.991	D	Baa2	Baa3	IG	LUXEMBOURG

Source: Moody's

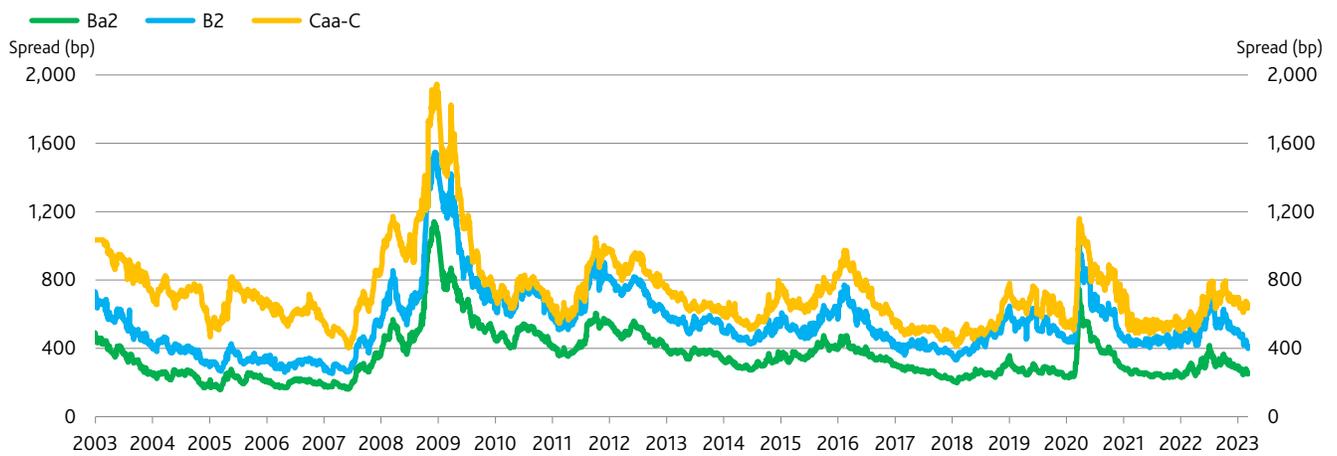
MARKET DATA

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 (March 1, 2023 – March 8, 2023)

CDS Implied Rating Rises		CDS Implied Ratings		
Issuer	Mar. 8	Mar. 1	Senior Ratings	
Coca-Cola Company (The)	Aa2	A1	A1	
Amgen Inc.	A1	A2	Baa1	
Pfizer Inc.	Aa2	Aa3	A1	
Merck & Co., Inc.	Aa3	A1	A1	
Raytheon Technologies Corporation	Aa2	Aa3	Baa1	
Charles Schwab Corporation (The)	Baa1	Baa2	A2	
Visa Inc.	A2	A3	Aa3	
Consolidated Edison Company of New York, Inc.	Baa2	Baa3	Baa1	
Eli Lilly and Company	Aa1	Aa2	A2	
Cargill, Incorporated	Baa1	Baa2	A2	

CDS Implied Rating Declines		CDS Implied Ratings		
Issuer	Mar. 8	Mar. 1	Senior Ratings	
Dish Network Corporation	C	Ba1	B3	
CMS Energy Corporation	A1	Aa1	Baa2	
Ralph Lauren Corporation	A2	Aa3	A3	
United States of America, Government of	Aa2	Aa1	Aaa	
Morgan Stanley	Baa2	Baa1	A1	
American Honda Finance Corporation	A2	A1	A3	
Amazon.com, Inc.	Aa3	Aa2	A1	
Bank of New York Mellon Corporation (The)	A3	A2	A1	
Southern Company (The)	A3	A2	Baa2	
Fiserv, Inc.	Baa1	A3	Baa2	

CDS Spread Increases		CDS Spreads			
Issuer	Senior Ratings	Mar. 8	Mar. 1	Spread Diff	
Dish Network Corporation	B3	1,474	157	1,317	
Liberty Interactive LLC	B3	3,453	3,025	428	
Rite Aid Corporation	Ca	4,899	4,700	198	
Embarq Corporation	Caa2	2,008	1,882	126	
Lumen Technologies, Inc.	Caa1	1,617	1,516	102	
Dish DBS Corporation	B3	1,543	1,442	101	
Unisys Corporation	B3	996	952	44	
Qwest Corporation	B1	661	620	41	
iHeartCommunications, Inc.	Caa1	772	733	39	
Credit Suisse (USA), Inc.	A3	416	379	38	

CDS Spread Decreases		CDS Spreads			
Issuer	Senior Ratings	Mar. 8	Mar. 1	Spread Diff	
American Greetings Corporation	Caa1	392	559	-167	
Freedom Mortgage Corporation	B2	740	837	-98	
CSC Holdings, LLC	B1	1,532	1,617	-85	
Carpenter Technology Corporation	B2	236	314	-78	
Pitney Bowes Inc.	B3	897	951	-53	
Deluxe Corporation	B3	632	683	-50	
Macy's Retail Holdings, LLC	Ba2	325	372	-47	
Macy's, Inc.	Ba2	334	380	-46	
United Airlines, Inc.	Ba3	489	529	-41	
PennyMac Financial Services, Inc.	Ba3	423	457	-34	

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (March 1, 2023 – March 8, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	Mar. 8	Mar. 1	Senior Ratings
Issuer			
Banco Bilbao Vizcaya Argentaria, S.A.	A1	A2	A3
DZ BANK AG	Aa3	A1	Aa2
BAWAG P.S.K. AG	Baa1	Baa2	A2
Danone	Aa3	A1	Baa1
National Grid Electricity Transmission plc	A1	A2	Baa1
Orsted A/S	A3	Baa1	Baa1
Credit Mutuel Arkea	Baa1	Baa2	Aa3
Telia Company AB	Aa3	A1	Baa1
Bertelsmann SE & Co. KGaA	Aa1	Aa2	Baa2
Electrabel SA	Aa2	Aa3	Baa1

CDS Implied Rating Declines	CDS Implied Ratings		
	Mar. 8	Mar. 1	Senior Ratings
Issuer			
Landesbank Hessen-Thuringen Girozentrale	Baa1	A2	Aa3
Smiths Group plc	A3	A1	Baa2
Societe Generale	A2	A1	A1
Credit Agricole S.A.	Aa3	Aa2	Aa3
Lloyds Banking Group plc	Baa1	A3	A3
DNB Bank ASA	A1	Aa3	Aa2
Credit Suisse Group AG	B2	B1	Baa2
SEB AB	A1	Aa3	Aa3
E.ON SE	A3	A2	Baa2
Siemens Aktiengesellschaft	Aa2	Aa1	A1

CDS Spread Increases	CDS Spreads			
	Senior Ratings	Mar. 8	Mar. 1	Spread Diff
Issuer				
Casino Guichard-Perrachon SA	Caa1	2,958	2,661	298
Vedanta Resources Limited	Caa1	1,952	1,840	113
Novafives S.A.S.	Caa2	1,038	994	45
CECONOMY AG	B2	912	878	34
Credit Suisse Group AG	Baa2	361	328	33
Credit Suisse AG	A3	282	256	26
TK Elevator Holdco GmbH	Caa1	429	414	15
Virgin Money UK PLC	Baa1	166	152	14
Landesbank Hessen-Thuringen Girozentrale	Aa3	72	59	12
Smiths Group plc	Baa2	62	52	10

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Mar. 8	Mar. 1	Spread Diff
Issuer				
Trinseo Materials Operating S.C.A.	B2	772	838	-66
INEOS Quattro Finance 2 Plc	B2	540	579	-39
Lorca Telecom Bondco, S.A.U.	B3	400	430	-30
Deutsche Lufthansa Aktiengesellschaft	Ba2	172	201	-29
Iceland Bondco plc	Caa2	1,004	1,034	-29
Jaguar Land Rover Automotive Plc	B1	668	694	-26
Boparan Finance plc	Caa3	1,282	1,307	-25
Carnival plc	B3	850	872	-21
Ardagh Packaging Finance plc	Caa1	652	670	-19
Telecom Italia S.p.A.	B1	292	309	-17

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (March 1, 2023 – March 8, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	Mar. 8	Mar. 1	Senior Ratings
Issuer			
Adani Green Energy Limited	Caa2	C	B2
Transurban Finance Company Pty Ltd	A3	Baa2	Baa2
Korea Gas Corporation	A1	A3	Aa2
Korea Development Bank	Aa2	Aa3	Aa2
Hong Kong SAR, China, Government of	Aa1	Aa2	Aa3
Woori Bank	Aa2	Aa3	A1
Korea Electric Power Corporation	Aa2	Aa3	Aa2
Sydney Airport Finance Company Pty Ltd	Baa1	Baa2	Baa1
Mitsui & Co., Ltd.	Aaa	Aa1	A3
Marubeni Corporation	Aa1	Aa2	Baa2

CDS Implied Rating Declines	CDS Implied Ratings		
	Mar. 8	Mar. 1	Senior Ratings
Issuer			
Mitsubishi UFJ Financial Group, Inc.	A2	A1	A1
Mizuho Financial Group, Inc.	Baa2	Baa1	A1
MUFG Bank, Ltd.	A2	A1	A1
Malayan Banking Berhad	Baa2	Baa1	A3
Nissan Motor Co., Ltd.	Ba1	Baa3	Baa3
Telstra Corporation Limited	A1	Aa3	A2
Norinchukin Bank (The)	A3	A2	A1
Mitsubishi HC Capital Inc.	A2	A1	A3
Japan, Government of	Aaa	Aaa	A1
China, Government of	A3	A3	A1

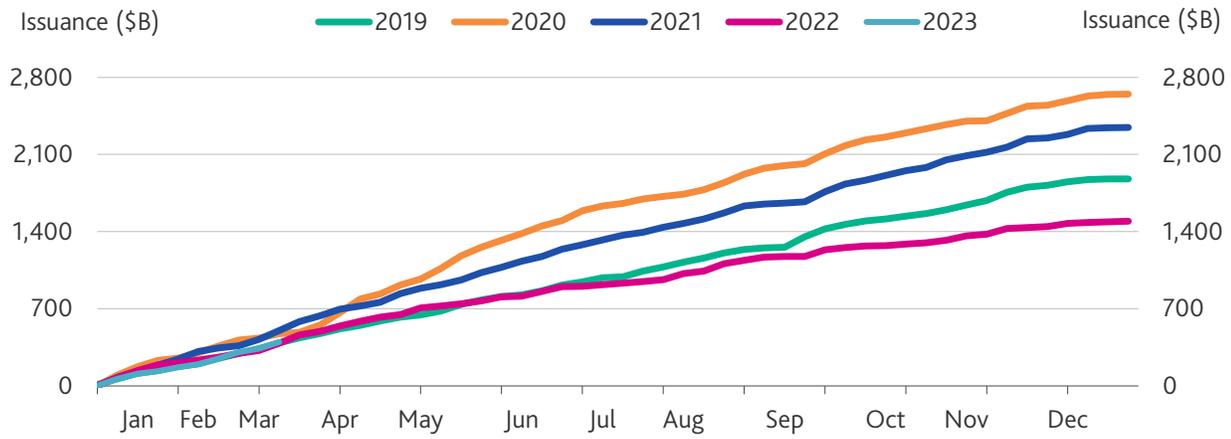
CDS Spread Increases	CDS Spreads			
	Senior Ratings	Mar. 8	Mar. 1	Spread Diff
Issuer				
Pakistan, Government of	Caa3	3,861	3,420	441
Nissan Motor Co., Ltd.	Baa3	154	138	17
Vietnam, Government of	Ba2	115	107	8
Philippines, Government of	Baa2	88	84	5
APA Infrastructure Limited	Baa2	90	85	5
Indonesia, Government of	Baa2	90	86	4
NBN Co Limited	A1	76	73	4
Coca-Cola Amatil Limited	Baa1	68	64	4
CITIC Group Corporation	A3	111	108	3
China, Government of	A1	67	65	2

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Mar. 8	Mar. 1	Spread Diff
Issuer				
Adani Green Energy Limited	B2	922	1,735	-813
Halyk Savings Bank of Kazakhstan	Ba2	433	471	-38
Kazakhstan, Government of	Baa2	146	172	-26
GMR Hyderabad International Airport Limited	Ba3	235	261	-26
Tata Motors Limited	B1	259	282	-23
SoftBank Group Corp.	Ba3	280	298	-17
SK Innovation Co. Ltd.	Baa3	199	216	-17
Transurban Finance Company Pty Ltd	Baa2	68	82	-14
Amcor Pty Ltd	Baa2	93	105	-12
Korea Gas Corporation	Aa2	52	63	-11

Source: Moody's, CMA

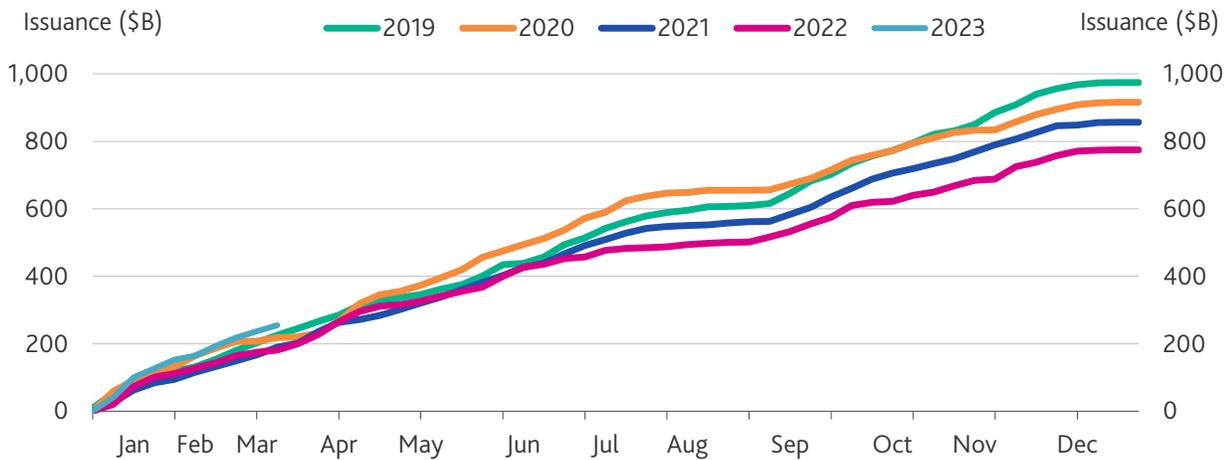
ISSUANCE

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	51.280	8.550	61.953
Year-to-Date	346.296	47.425	398.847

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	15.275	2.173	17.448
Year-to-Date	223.516	20.345	254.222

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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