

WEEKLY MARKET
OUTLOOK

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Explaining the Standstill in Auto Credit

The check-engine light is on for the auto credit market. After positive developments in the spring, the total number of outstanding accounts has been flat since June. Total outstanding balances ticked up slightly since the summer; however, the pace of quarterly growth was the slowest since early as loan demand remained challenged while interest rates ticked higher. Furthermore, already-high delinquency rates came under additional pressure through the fall, remaining above pre-pandemic levels.

Changes in loan market activities by both banks and finance companies were largely muted. The total number of accounts held by banks and credit unions edged down from the peak in April, while the outstanding balance of these accounts was relatively flat. For finance companies, the story is slightly different, but changes were equally as small. Auto balances held by these institutions inched upward, but the number of outstanding accounts was mostly flat. The overall number of accounts serviced by finance companies has fallen almost 6% since peaking in June 2021. This compares with a slight increase in the number of accounts held by banks during the same period.

Banks and finance companies are trading lightly in part because of the runup in auto delinquency rates. Total delinquencies as a percent of balances have continued to increase over the past three months. October marked the seventh consecutive monthly increase for the total delinquency rate. Total delinquencies reached 3.6% of balances, the highest October reading since 2009 in the teeth of the Great Financial Crisis.

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The rise in delinquency rates has happened across credit score bands, but gains have been most acute for prime borrowers. This trend accelerated over the past three months. Borrowers with risk scores between 660 and 739 are all now 50% higher than in the same month of 2019. Delinquency growth compared with 2019 has slowed for subprime borrowers since May. This is likely a sign that tighter lending standards over the past year have started to have a positive effect on the likelihood of borrower payments.

Finance lender delinquencies showed signs of improvement in October, especially compared with banks and credit unions. The finance company delinquency rate has moved down slightly over the past two months. At the same time, delinquencies for banks and credit unions have increased 2.4%. Still, credit quality of borrowers is significantly higher at banks and credit unions, keeping delinquency rates below those of finance companies.

One area that remains a concern are longer-duration delinquencies. Delinquencies that are 120 days or more past due have reached a higher percentage than at any point back through 2006. Ninety-day delinquencies have had only one worse month, in 2009. This may be the case of lenders working with borrowers more as they miss payments, since we have yet to see the recent pop in delinquency become negatively closed accounts to a considerable degree. Closed negatives, defaults plus bankruptcies, remain below 2019 levels.

Relatively muted defaults may be why senior loan officers showed a slight improvement in sentiment in the most recent Senior Loan Officer Opinion Survey on Bank Lending Practices. The percentage of banks reporting tighter lending standards in the SLOOS declined in the third quarter from the second, but has remained positive for the past five quarters. The net percentage of banks reporting stronger demand for auto loans has been negative for five consecutive quarters; however, the survey showed some improvement over the previous quarter.

Market conditions corroborate this view of moderating risk aversion among auto credit providers. The spread between a 60-month new-car auto loan and the underlying five-year Treasury declined by about 20 basis points from the second to the third quarters, after the blowout in spreads related to bank solvency concerns that followed the bank failures earlier in the year.

Limited loan appetite and affordability concerns have kept new-vehicle sales tepid. Year to date through October, new-light-vehicle sales have averaged 15.5 million SAAR, a 5.6% increase from the prior year. That said, seasonally adjusted inventories have trended up every month this year, suggesting the market is not fully absorbing the increase in

vehicle production. Moreover, sales are well below their average from the five years preceding the pandemic.

Given stagnant demand for auto loans, it is no surprise that new- and used-vehicle prices have slackened. In October, the Moody's Analytics Used-Vehicle Price Index indicated a 7.3% decrease from the previous year with more declines expected to materialize in the coming quarters. Weakness is also expected for new-vehicle prices as improved vehicle production increases supply and inventories, causing sellers to decrease prices and bringing buyers back into the new-vehicle market.

The outlook for auto lending follows the Moody's Analytics baseline assumptions. That is, growth will slow over the near term as the labor market loosens. This will allow inflation to cool, and the Federal Reserve to keep its foot off the brakes and avoid further substantive interest rate hikes. The cooling labor market will remain a stress for auto lending in the form of increased delinquencies and charge-offs. Nevertheless, the economy will come through without going into a recession, keeping delinquencies tethered sufficiently close to the long-run rates to not cause major issues in the credit market.

Risks to this outlook are equally weighted. On the downside, the economy could worsen more than expected and slip into recession, significantly increasing delinquencies and defaults. Additionally, used-vehicle prices could fall faster than expected, decreasing asset values and putting more borrowers under water. Still, the auto credit market and the economy have tailwinds. U.S. GDP growth in the third quarter was stronger than expected. Also, loosening in the labor market has given the Fed some breathing room, and the current inflation levels are not far from the Fed's target. Additionally, auto lenders have been tightening standards for more than a year, meaning recent vintages of loans are higher quality with a lower chance of missed payments. In all, the auto credit market remains in a precarious spot, but if the U.S. economy remains resilient, auto lenders should come across the recent rough patch with only limited damage.

The U.S. government averts a shutdown...again

The U.S. Congress has passed a bipartisan continuing resolution, averting a government shutdown for the second time this fiscal year. The laddered stopgap measure has been sent to the president's desk and is expected to be signed before the November 17 deadline. We had expected that heightened partisanship and the thin Republican majority in the House of Representatives would result in a short two-week shutdown. But newly minted Speaker Mike Johnson cut against some of the wishes of those on his conservative flank and passed a clean CR, as it does not include spending cuts or additional border funding. As a result, nearly half of House Republicans voted against the bill. This was a fatal move for former Speaker Kevin McCarthy, who was ousted from his position for doing the same thing. However, it seems that

incentives still align with showing Speaker Johnson some grace, as another prolonged battle over the speaker's gavel would further the press the idea of congressional dysfunction.

Although, the laddered approach imbedded in the CR should be of some comfort to fiscal conservatives. The bill contains two staggered funding deadlines. The first is January 19, when funding for the departments of Transportation, Housing and Urban Development, Energy, Veteran Affairs, and Agriculture will run out. The rest of the government will be funded through February 2. This is considered a victory by some conservatives, as it limits the chance of jamming an omnibus

spending package through on the threat of breaching a single deadline and gives Congress some additional leeway in its negotiations.

It is important to note that the CR extends into the new year. Under a special provision included in the Fiscal Responsibility Act, if there is an active CR in place on April 30, a permanent and automatic across the board 1% discretionary spending cut is triggered. We do not think that either Republicans or Democrats want to see that happen, given the planned 3% increase to defense spending. Therefore, both parties will need to hash out the details before the CRs expire, lest they risk breaching the budget-cut deadline.

U.S. Oil Drillers See a Price Windfall

By CHRIS LAFAKIS

The U.S. alone has pumped enough new oil to satisfy half of the total rise in global oil demand since Russia invaded Ukraine in February 2022. We just didn't know it in real time because a key leading indicator was throwing us off the scent. In this commentary, we deconstruct the rise in U.S. oil production and demonstrate how recent trends are unsustainable.

High-frequency indicators

The two most high-frequency indicators that we have to gauge U.S. oil production are the Energy Information Agency's Weekly Petroleum Status Report and a measure of active rotary rigs reported by Baker Hughes. The WPSR estimates U.S. oil production using a model-based method for which rotary rigs serve as an input. According to the WPSR, U.S. oil production rose from 11.6 million barrels per day in February 2022 to 12.2 million bpd by late July 2023, a head-scratchingly low increase given that oil prices spiked after Russia invaded Ukraine, and prices still remain well above their pre-invasion levels. Higher oil prices provide producers with an incentive to drill new wells since the price at which they can sell their oil rises, but their break-even cost of around \$70/bbl remains constant.

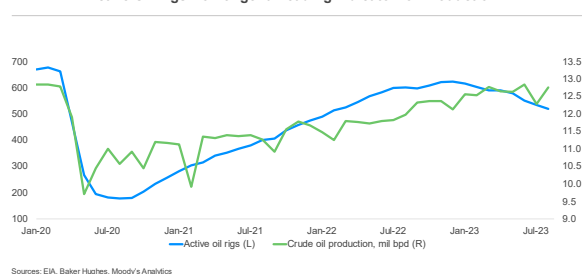
Initial indications of sluggish production growth were in line with flat-to-down active rig counts. This jibed with public statements and actions by industry executives, who emphasized uncertain operating environments, shareholder returns, and capital discipline. Instead of reinvesting in capital expenditures, firms paid down their debts, awarded shareholders with dividends, and added to their cash piles.

But it turns out that U.S. production is actually closer to a far-larger 13.1 million bpd, and the reason U.S. drillers' financial performance improved was that they were tapping their inventory of already-drilled wells in lieu of drilling new ones.

Production and productivity

The EIA's "definitive" measure of oil production comes from its [Petroleum Supply Monthly](#). The PSM's estimates of U.S. oil production are survey-based, not model-based like the WPSR. When the PSM showed much stronger U.S. oil production than the WPSR, our first inclination was to check productivity. Firms squeezing more oil out of their newest operating rigs would be able to provide a plausible explanation behind the disconnect between rising production and falling rotary rigs.

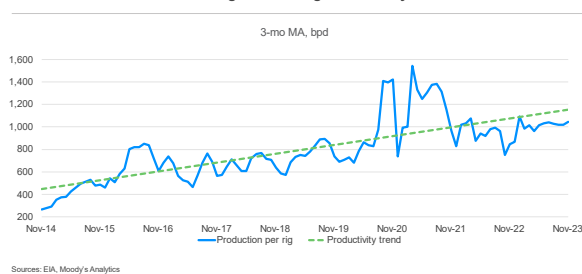
Active Oil Rigs No Longer a Leading Indicator for Production



Sources: EIA, Baker Hughes, Moody's Analytics

That has not been the case. There has been no new surge in U.S. oil extraction productivity in 2023. In fact, actual productivity remains below the upward-sloping trend that it has been on since the advent of the shale revolution.

No Surge in New Rig Productivity



Sources: EIA, Moody's Analytics

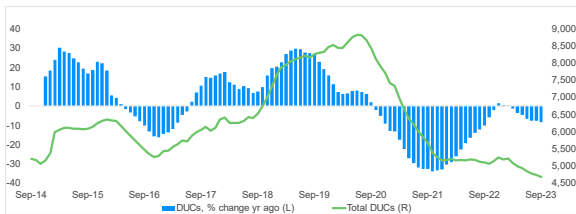
Drilled but uncompleted wells

The actual reason for the disconnect between rigs and production is that firms are depleting their inventory of potential new wells. Firms lease rigs, which they use to bore down to the shale rock level and drill horizontally once in a 360-degree circle. This is just the first step in the oil production process, however. Two-thirds of the cost of establishing a new oil well comes next, when the well must be cased, as not to leak, and "fracked"—that is, injected with vast quantities of water and chemicals to open up the small pores in the rock formation that will allow the hydrocarbons to escape to the surface.

Wells that are drilled but uncompleted are akin to housing starts. They are not yet a viable residence, but the process of building a new home is underway. Once we entered a higher-price oil environment after Russia's invasion, firms chose to complete their already-started wells without leasing more rigs to drill new holes. In an era of capital discipline and increasing production costs, DUCs are a cost-effective way to

produce more oil without much drilling. But the current trajectory is unsustainable. DUCs are currently sitting just above 4,500, the lowest count since 2014, and are still falling. Moreover, four out of five oil and gas executives expect active oil rigs to remain near their current levels during the next six months.

The Sharp Declines in DUC Inventory Are Unsustainable



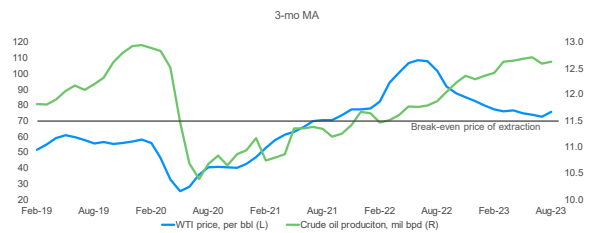
Sources: EIA, Moody's Analytics

What does this mean?

There are three important takeaways from developments in the oil market during the past couple of months. First, active rotary rigs have become a less reliable indicator of oil production. Second, the steady declines in DUC inventory in

the past two years is unsustainable. DUC depletion could very well go on for a few more months. But eventually, firms will exhaust their finite amount of inventory and have to dig new wells to boost output. Third, the most reliable indicator to watch when determining future U.S. production is the oil price. Russia's invasion of Ukraine pushed oil prices comfortably above their break-even price of extraction. We now know that the response of U.S. oil producers has been remarkable. To determine future levels of oil output, it's best to keep your eye on the oil price.

Higher Prices, Higher Production



Sources: EIA, Moody's Analytics

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar will tap the brakes next week, given the Thanksgiving holiday. Kicking off the week will be the Conference Board's Leading Economic Index. The index has declined for 18 consecutive months, a negative streak not seen since the lead-up to the Global Financial Crisis. As of September, the LEI was down roughly 8% on a year-ago basis, which is consistent with previous mild recessions. We do not expect the index to have improved in October, given weakness in manufacturing and certain credit-related indicators such as the yield curve and the leading credit index.

Tuesday gives us the first look at the housing market's performance through October. Data for existing-home sales show that they are trending toward a series low due to the constrained supply of already-existing housing units. Homeowners do not want to trade up on the low mortgage rates they locked in before rates started taking off in early 2022. The interest rate on 30-year fixed rate mortgages has jumped more than 400 basis points since then, causing current homeowners to stay put and potential homebuyers to remain on the sidelines. Therefore, we expect the month of October to display little change from the current trajectory in existing-home sales.

Also due to be released next week are the minutes from the latest Federal Open Market Committee meeting. The FOMC left the target range for the fed funds rate unchanged between 5.25% and 5.5% in November. It is increasingly likely that the post-pandemic tightening cycle has reached its peak. There remains some leftover hawkish rhetoric from some of the regional Fed bank presidents. But with inflation trending to target and job and wage growth cooling according to plan, there seems to be little reason for another rate hike.

Other data to be released next week include the Census Bureau's advanced estimates for durable goods orders for October, jobless claims for the week ended November 16,

and the final estimate of the University of Michigan Consumer Sentiment index for November.

Asia-Pacific

We expect Thailand's third-quarter GDP release will show growth slowed to 0.8% year on year from 1.8% in the second quarter. This will be the country's weakest reading since the economy contracted in the third quarter of 2021. Private consumption growth will slow from the second quarter and government consumption will again contract.

Japanese inflation data will likely show a pickup in price pressures for October. This will reflect three factors: First, the fresh uptick in global commodity prices means energy will make a smaller negative contribution to headline inflation. Second, prices have risen for travel and hospitality-related services, largely on account of the rebound in foreign visitor arrivals. Third, food price inflation is stubbornly high. Our forecast is for core inflation, which excludes fresh food, to rise to 3% year on year from 2.8% in September.

Latin America

The upcoming two weeks in Latin America will bring the first reads on the region's performance in the final quarter, with October prints on industrial production and employment for Brazil and Mexico expected to show the two economies' gap in performance over the rest of the region widening. Nonetheless, the latest economic data are bound to show some of the wear from elevated interest rates and mounting uncertainty over domestic policy and global geopolitical tensions. Beyond the region's two largest economies, signs of strain are widespread. We look for both consumer spending and manufacturing production in Chile to have fallen again in October, showing lingering symptoms of economic strain. In Peru, we are expecting a pallid third quarter to show up in the statistics institute's GDP reading, while September economic activity in Argentina likely slowed further.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk	Risk Assessment
12-18 Nov	APEC	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.
17-Nov	U.S.	Potential government shutdown	Low	Low	Congress has passed a continuing resolution that will fund the government at current spending levels through November 17. If lawmakers cannot come to an agreement on the FY2024 budget bills, the government will again face the possibility of a shutdown.
19-Nov	Argentina	Presidential election runoff	High	Medium	The highly contested election might yield a drastic shift in economic policy and the country's political orientation. The ruling leftist coalition surprised by winning the first round on October 22, but faces a strong challenge from libertarian outsider candidate Javier Milei in the runoff vote.
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.
26-Nov	OPEC+	OPEC and non-OPEC Ministerial Meeting and Joint Ministerial Monitoring Committee Meeting	High	High	The OPEC+ meetings will be closely watched on changes to oil production output and quotas as crude oil benchmarks have been getting closer to \$100 due to cuts from Saudi Arabia and Russia.
30-Nov-12-Dec	U.N.	COP 28, to be held in Dubai, UAE	Low	Low	
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 such as 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	Term-limited president Joko Widodo has put Indonesia's economic development agenda on a steady course, and his successor will be expected to follow through.
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.
May	India	Election (Lok Sabha, lower house)	Medium	Low	Prime Minister Narendra Modi is vying for a third term building India as an economic engine of the world, but the domestic focus is now towards inflation and economic inequality.
1-Jun	Mexico	General election	High	High	As elections commence in Mexico, the risk of social and political unrest will rise due to concerns over election subversion and fraud. Financial markets would be shaken while consumption and investment decisions tank, raising the risk of recession.
6-9 June	EU	Parliamentary elections	Medium	Low	The European Parliament has increased in importance since the founding of the EU. The parliament has the power to amend or adopt legislation proposed by the European Commission.

Corporate Defaults Show Signs of Stabilization

By **OLGA BYCHKOVA**

CREDIT SPREADS

Corporate credit spreads have narrowed further through the first half of November. 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 and persistent strength in consumer spending. The Moody's Investors Service long-term average corporate bond spread to the 10-year U.S. Treasury has decreased 2 basis points to 132 bps, slipping below its 12-month low of 133 bps. Similarly, Moody's long-term average industrial bond spread declined 3 bps to 111 bps over the past week, remaining below its one-year low of 114 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 bps 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 considerably narrowed to 381 bps from 398 bps the previous week, while the ICE BofA U.S. high-yield option-adjusted bond spread closed Wednesday at 389 bps, down a whopping 19 bps from its prior-week value. 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—a real-time indicator of the implied volatility of S&P 500 stocks that measures the market's sentiment about future asset price variance—has dropped 0.25 point over the week to 14.2 Wednesday, significantly below its long-term average near 20. The stock market is recalibrating itself to accommodate a prolonged era of heightened interest rates and sustained inflation, which, in turn, is propelling volatility. Tensions on the geopolitical landscape could have an even more significant impact, stoking further risk aversion. 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 decline in the VIX this year has brought it back generally in line with high-yield spreads.

GLOBAL DEFAULTS

Moody's Investors Service reported that 11 corporate debt issuers defaulted in October, the same as the previous month's upwardly revised count. After peaking at 21 in May, the monthly default count slowed to 14 in June and has since ranged between 11 and 12. This year's defaults reached 132 through October. If we exclude Russian defaults, the 2023 year-to-date sum would have surpassed the tally of 92 during the entire year of 2022.

In the U.S., default activities notably rebounded last month from September's subdued level. Of October's 11 global defaults, all but two were from the U.S. Rite Aid Corporation led October's defaults with about \$3.8 billion of debt. The company operates over 2,300 drug stores in 17 states and a full-service pharmacy benefit management company, Elixir. Rite Aid filed for Chapter 11 bankruptcy after a period in which the company struggled to stabilize operations, as shown by its weak operating earnings, negative free cash flow, high financial leverage, and weak interest coverage. The bankruptcy filing marked the third default event for Rite Aid. In 2019 and 2022, the company bought back some debt at a discount in distressed exchanges.

The two October defaults outside the U.S. were both from Asia—China SCE Group Holdings Limited, a property developer that missed payment on the instalment of its syndicated loan, and Lippo Mall Indonesia Retail Trust, which conducted a distressed exchange on its bank loans by pushing out the maturities to 2026 from 2023.

Of the 132 defaults in the year to date, 90 were from North America (88 in the U.S. and two in Canada). The rest were from Europe (22), Asia-Pacific (11) and Latin America (9). Across sectors, business services remained the largest contributor, with 12 defaults. Construction & building and healthcare & pharmaceuticals followed with 11 each. Distressed exchanges remained the most common default type, accounting for 57% of defaults so far this year.

The trailing 12-month global speculative-grade default rate held steady at 4.5% in October, remaining above its long-term average of 4.1%, amid higher-for-longer interest rates, tightened financing conditions and elevated inflation.

Moody's Investors Service forecasts the rate to trend higher over the remainder of 2023, reaching 4.7% in December. In 2024, the credit agency expects the default rate to peak at 4.8% in the first quarter before easing to 4% in the second quarter after the prior-year second-quarter default pile moves out of the trailing 12-month window. Thereafter, the rate will stabilize at 3.9% to 4% through October 2024. Moody's Investors Service's latest baseline default rate forecasts incorporate the assumptions that the U.S. high-yield spread will widen to 504 bps over the next four quarters from about 437 bps at the end of October and that the U.S. unemployment rate will rise to 4.4% from 3.9% in the comparable period.

The 2024 default outlook is primarily driven by global economic growth, monetary policy in major economies, and geopolitical developments in Eastern Europe and the Middle East. According to Moody's Investors Service, global growth will slow in 2024 as high interest rates percolate through credit channels to the real economy. Meanwhile, inflation will continue to cool amid slowing demand as central banks maintain a tight policy stance.

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.

Third-quarter 2023 corporate bond issuance weakened, with worldwide offerings of investment-grade corporate bonds falling 5.6% year over year. U.S. dollar-denominated investment-grade corporate bonds totaled \$290.4 billion, down 4.7% on a year-ago basis and 15.4% from the prior quarter. U.S. dollar-denominated high-yield corporate bond issuance was \$41.7 billion in the third quarter, down from \$65.8 billion in the second. However, high-yield issuance was up 42.6% on a year-ago basis.

U.S. dollar-denominated investment-grade debt issuance totaled \$44.9 billion in the most recent week, bringing the year-to-date figure to \$1,181.6 billion. This reflects a 5.2% decline compared with the same period in 2022.

There was \$11.6 billion in high-yield debt issued in the same period, raising the total to \$183.1 billion this year. High-yield issuance has outstripped early-year expectations, increasing 32.7% relative to last year's pace. Total U.S. dollar-denominated corporate debt issuance now tracks 1.5% below where it stood in 2022 and is 35.1% lower compared with 2021.

U.S. ECONOMIC OUTLOOK

The U.S. economy continues to show significant resilience, with unexpectedly robust growth in the third quarter. Consequently, we made modest adjustments to our November iteration of the U.S. baseline forecast to include slightly higher near-term growth and a somewhat slower reduction in interest rates by the Federal Reserve. Nonetheless, the pattern of slowing growth in response to fiscal tightening next year followed by a return to trend growth by 2026 remains intact.

In sum, key assumptions changed little in November. Monetary policy assumptions were tweaked to include a

slower loosening of monetary policy, although rate cuts still begin in June of next year. Long-term rates were revised higher in response to recent movements in financial markets, but this simply helps to secure the slowdown in growth already forecast for next year. We continue to assume a two-week federal government shutdown in November, but the impact on the broader economy is minimal. Our oil price outlook is little changed although we did alter our outlook for U.S. natural gas prices because of a change in our forecasting approach. Recent data modestly strengthened the outlook for business investment. The forecasted recovery in existing home sales was pushed out to late 2024 to reflect the expectation that mortgage interest rates will remain higher for longer, but this does support the outlook for new home sales.

Changes to GDP

U.S. GDP exceeded expectations and rose a strong 4.9% in the third quarter, according to the Bureau of Economic Analysis' advance estimate. This was the fifth consecutive quarter of growth near or above the economy's potential and the strongest growth since the final three months of 2021. Inventories contributed powerfully, though not as much as consumer spending. Trade was a minor drag and fixed investment barely grew, but those were the only weak spots outside a drop in real disposable income.

Consumer spending remained an important source of growth in the third quarter. It added 2.7 percentage points to growth. Inventories added 1.3 percentage points after being neutral for growth the prior quarter. Nonresidential fixed investment was neutral in the quarter, but residential investment made its first contribution to growth since the start of 2021. Government contributed 0.8 percentage point with the contribution about evenly split between federal and state and local spending. Trade was a small drag on growth, with the drag from growing imports not quite offset by growth in exports.

The unexpected surge in inventory accumulation in the third quarter will be reversed in the fourth quarter, but otherwise, third-quarter data showed an economy with even more momentum than previously thought. Hence, while third-quarter growth will not be sustained, the near-term outlook is modestly more optimistic. Real GDP growth will be higher than previously forecast through next year before the slower reduction in interest rates undermines the outlook beginning in 2025. Including the new third-quarter history, real GDP is now projected to grow 2.4% this year and 1.7% next year, above previous forecasts of 2.1% and 1.3%, respectively. Subsequently, annual average growth was revised down by 0.1 percentage point the following two years to 1.7% in 2025 and 2.3% in 2026, when growth returns to trend in 2026.

Monetary policy

Monetary policy assumptions have changed slightly since the last update. We continue to expect that the Fed funds rate has reached its terminal range of 5.25%-5.5% and that the Federal Open Market Committee will start cutting rates by June 2024. However, we now anticipate that the Fed will subsequently relax monetary policy more slowly, cutting rates by 25 basis points per quarter until reaching 3% by late 2026, and 2.5% by 2030. This reflects our view that the neutral rate, that is the policy rate at which monetary policy neither stimulates nor dampens economic activity, has risen to pre-global financial crisis levels. We base this assumption on price shifts in securities markets, and the U.S. economy's stronger-than-expected performance despite the Fed's aggressive tightening.

The Fed continues to balance inflation and labor market tightness against financial conditions. Recent inflation figures point in the right direction, with personal consumption expenditure core inflation falling from 3.8% year-ago in September to 3.7% in October. Core consumer price inflation fell from 4.4% to 4.1% over the same period. While energy prices caused an uptick in headline inflation, falling oil prices through October suggest that these pressures will fade. Meanwhile, U.S. Treasuries continued a sell-off through mid-October, which caused the cost of credit to rise broadly. The 10-year Treasury yield breached 5% and settled around 4.6% in early November, a nearly 50 basis points increase from early September. Finally, labor markets are also coming more into balance. October payrolls came in lower than expected at 150,000, while September payroll hiring was revised down to 297,000. In a similar vein, the employment cost index for wages and salaries grew 4.5% year-over-year in the third quarter, down from 4.6% in the second.

This combination of higher long-term rates, slower hiring and wage growth has inflation return to target by late 2024 in our baseline, without the economy entering recession. The November vintage has year-ago consumer price inflation at 3.3% by the end of 2023, a rounding difference up from the previous outlook. As in the previous outlook we anticipate that inflation will return to the Fed's 2% target by the fourth quarter of next year.

Meanwhile, our baseline for long-term interest rates has changed materially from the previous update, reflecting recent bond market developments, and altered assumptions about the neutral rate. We anticipate that the Treasury 10-year yield will average 4.7% in the fourth quarter, about 40 basis points up from the October baseline. We expect the rate to remain above or at 4% until the end of the decade, which adds 10 to 15 basis points per quarter until 2026 compared to the previous baseline.

Foreign exchange markets, finally, are seeing a resurgence of the U.S. dollar's strength since June. Higher U.S. interest rates and geopolitical uncertainty are driving demand for the reserve currency. On a real broad trade-weighted basis, the U.S. dollar was up 4.5% in October from July. This figure is still below its historic peak in October 2022, but the U.S. Dollar remains about 9% above its pre-pandemic level.

Fiscal policy

As of November, the baseline forecast maintains the assumption of a two-week government shutdown. As of November 7, the House Republicans had passed seven out of the necessary 12 appropriations bills and two more were on the docket for votes this week. We expect the House Republicans to complete all the bills shortly before the November 17 deadline for the expiration of the current continuing resolution. However, this timeline likely does not allow sufficient time to work out the differences between the House and Senate budgets, which are far apart. Compared with the \$1.6 trillion of discretionary spending enacted in FY2023, House Republicans are likely asking for cuts of about \$130 billion, for a total of \$1.47 trillion in FY2024, while Senate Democrats' budget allots \$1.59 trillion, a \$10 billion cut.

As November 17 nears, House Republicans are likely to offer another continuing resolution that extends the government's funding into early 2024, but consistent with previous practice, the deal is likely to include conditions disfavored by Democrats. For example, the initial supplemental aid package to Israel included a reduction in funding for the IRS that had been part of the Inflation Reduction Act. We expect House Republicans to target another, more cherished element of the IRA, and Democrats will balk, precipitating a brief shutdown.

In the October baseline forecast, Moody's Analytics has calibrated the shutdown shock according to the observed severities from previous shutdowns, adjusted for the assumed 2-week duration. The result is a 0.26-percentage point hit to annualized real GDP growth in the fourth quarter of 2023, much of which is due to productivity losses by furloughed federal workers. However, these losses will be made up in the first quarter of 2024 as work schedules bounce back to normality, causing GDP growth to rebound. Therefore, we boosted our estimate of annualized real GDP growth in the first quarter of 2024 by a similar margin.

If the government continues to be funded under a continuing resolution on January 1, 2024, the Fiscal Responsibility Act, which resolved the recent debt-limit crisis, triggers a temporary, automatic 1% across-the-board cut to discretionary spending. Neither Republicans nor Democrats desire this outcome, since both want to increase

funding to the Defense Department, but the top-line cut is in line with the Senate Democrats overall number. If a continuing resolution remains in effect on April 30, the 1% cut becomes permanent. However, it should be noted that the extent to which these budget levels are binding against future legislation is unclear.

Given the automatic 1% cuts are close to the Senate Democrats budget, we assess that they would be more likely to keep supporting clean continuing resolutions instead of a government shutdown. However, the majority of House Republicans have indicated that they will not keep supporting continuing resolutions, which tilts the odds toward a shutdown, if not in November, then at the next deadline.

Ultimately, we expected a compromise to be reached in conference between the two houses of Congress. The final deal is expected to hew closer to the Senate Democrats plan, given the House Republicans' large spending cuts are not broadly supported by the Republican Senate nor White House. The final, top-line number for FY2024 discretionary spending likely comes in around \$1.57 trillion.

Looking further ahead, the pending expiration, in 2025, of income tax cuts in the Tax Cut and Jobs Act is likely to become an increasingly hot button issue as the election season of 2024 gets under way. While the result will hinge heavily on the winners of the 2024 federal elections, the current baseline assumption is that the vast majority of the tax cuts are extended beyond 2025.

Energy

Moody's Analytics has not changed its oil price forecast in the near term. The war in the wake of the Hamas attack in Israel has not widened. Major Middle-East oil producers have stayed on the sidelines, not using production cuts as a political cudgel as they did after the Yom Kippur war. There is no evidence of immediate cuts in Iranian production because of more forceful application of U.S. sanctions, but we maintain a risk premium for both factors materializing is making oil prices higher than they otherwise would be.

The one small change is a slight upward revision to the equilibrium cost of extraction. We expect the cost of capital to be higher for oil and gas producers given the transition that many countries are working towards to net zero carbon emissions. As such, fewer projects will be financed, and they will be financed at a higher cost. As a result, we assume that a West Texas Intermediate price of \$70 per barrel is the effective price at which new wells will be established by U.S. shale oil drillers, who remain the providers of the marginal barrel of oil to the global oil market. As such, there is a slight

upward revision to our WTI and Brent forecasts during the 2026-2030 period.

Moody's Analytics has adopted a new framework governing its forecast of U.S. natural gas prices. The new framework calls for gas prices to converge to a long-term equilibrium price while allowing for cyclical factors such as weather and arbitrage across global natural gas markets to influence prices in the short to medium term. In the long term, the equilibrium price of natural gas extraction is expected to grow in tandem with the inflation rate, plus a premium that reflects a higher cost of capital as the global economy transitions away from fossil fuels.

Whereas results from the Dallas Fed's energy survey help set a breakeven cost of oil extraction, no such estimate exists for natural gas extraction. To this end, we use a 10-year moving average of natural gas prices to proxy the breakeven cost of extraction. This abstracts from business cycle factors to determine the price at which new sources of production consistently come online. This comes to approximately \$3.25 per million btu in 2023, down from a price of \$6 per million btu at the advent of the U.S. shale revolution.

However, the equilibrium cost of extraction is expected to increase in the wake of the Russian invasion of Ukraine. That invasion created a paradigm shift in the global energy market, as advanced western economies stopped importing crude oil, petroleum products and natural gas from Russia in response. Prices soared in Europe, eventually reaching \$60 per million btu in the fall of 2022. While prices have since retreated to \$10.76, that is still over three times the price of gas in the U.S., creating significant arbitrage opportunities for companies with export capacity. The cost of transporting natural gas is approximately \$3.50 per million btu plus 15% of the raw cost. Applied to current U.S. gas prices, this comes out to \$7.52, well below current U.S. gas prices.

U.S. businesses are responding with alacrity to the arbitrage opportunities created by the Russia-Ukraine war. By 2028, the Energy Information Administration estimates that U.S. liquefied natural gas export capacity will rise from its current 11.4 billion cubic feet per day to nearly 23 bcf/day by 2028, with additional projects in Canada and Mexico.

For context, the U.S. produced 36.47 trillion cubic feet of natural gas in 2022. As such, the expected 12.9 bcf per day-addition in export capacity by 2028 would constitute 13% of total current U.S. gas production, allowing the U.S. to export up to 24% of all the natural gas it produces.

Such a rise in natural gas exports would raise domestic natural gas prices. This is because U.S. producers will be forced to invest in and operate less profitable wells, given the large rise in U.S. export volumes. This will raise the

breakeven cost of extraction, resulting in higher domestic gas prices.

We estimate the arbitrage effect's impact on U.S. gas prices to be \$1 per million btu beginning in 2024, when post-Russia capacity expansions begin to come online. This premium will take roughly a decade to wind down. We estimate the equilibrium gas price in the post-Russia sanction era to be \$5 per million btu by 2034. This assumes that the U.S. will export approximately 25% to 30% of all the natural gas it produces, up from the current 11.4%.

The long-term forecast calls for gas prices to grow from this \$5 equilibrium level by the rate of inflation plus a premium. The premium reflects the higher cost of capital that producers will face as the global economy transitions away from fossil fuels. This involves loans at less favorable terms, withdrawn credit altogether, and a decline in the expected returns of investment, which prompts firms to choose to return capital to shareholders instead of establishing new sources of production.

Labor market

After an upside surprise in September, the October labor market data must have been heartening to the Federal Reserve, which has been hoping for a notable slowdown in the pace of job growth and wage growth. The October employment report showed an increase of 150,000 jobs on net over the month, a marked slowdown from the prior month's increase of nearly 300,000 (as revised) and the three-month moving average pace of over 200,000 per month. The downshift in job growth is somewhat overstated given that several labor strikes were ongoing during the survey reference week of the payroll survey, including the now-ended United Auto Workers strike against the Big Three car makers. The strike effect was likely about 50,000 jobs (combined with the just-ended SAG-AFTRA strike and a few ongoing small others), suggesting underlying job growth is likely closer to 200,000—a still very healthy increase.

Both hours worked and earnings throttled back as well according to the payroll survey—average hourly earnings grew 0.2% over the month, bringing year-over-year earnings growth down to 4.1%. On the household survey side, the unemployment rate ticked up a tenth of a percentage point to 3.9% and that survey showed a large decline in employment over the month split amongst the private wage and salary sector, agriculture, and self-employment. The plethora of other labor market data however, suggested neither a sharp slowing nor an acceleration in the labor market and so the Fed will likely be satisfied with keeping interest rates where they are for the foreseeable future.

The forecast for a continued slowing in job and wage growth has not changed with the update to the forecast in November. The last couple months of 2023 should each bring job gains of near 150,000 and the average monthly job gains through 2024 will be around 100,000—an upgrade from last month's forecast of 80,000. The unemployment rate is expected to rise 0.2 percentage point over the course of the next year as job growth slows alongside participation in the labor force, sparing the economy from a surge in unemployment. By the end of 2024, wage growth as measured by the ECI for private wage and salary workers will be 3.3% on a year-to-year basis, about the same as we were forecasting last month. Barring a major upheaval in the global economy that causes consumers to drastically pull back on spending, the outlook for the job market is for a graceful slowdown back to the pace of growth that existed prior to the pandemic.

Business investment and housing

The Bureau of Economic Analysis' advance estimate of third-quarter GDP data shows that real business investment declined modestly overall, by 0.1% on an annualized basis. This was broadly in line with Moody's Analytics October forecast of a decline of 0.6% for the quarter. However, performance varied substantially by category. Equipment spending was the main source of weakness, down about 4% annualized, more than the 2% decline projected in the October forecast. By comparison, structures, which had been forecast to weaken, rose nearly 2%. Additionally, intellectual property, more than half of which is software, rose more than expected, by nearly 3%.

The contraction in equipment spending was widespread, with all four major categories declining. IT fell the most, about 5% annualized, continuing a trend over the past two years that has resulted in a cumulative decline of about 9%. The "other" category, which includes mining equipment, fell by about 4% annualized. Mining equipment has fallen throughout 2023 as exploration activity ebbed owing to the \$50 per barrel decline in oil prices between April 2022 and mid-2023. However, although transportation equipment fell, the decline was minimal, as light truck sales held onto most of their big second-quarter gains.

The modest gain in structures spending masked wide disparity in the outcomes for various components. Commercial managed a small gain, but the largest segment, office building, is still down nearly 30% since 2019. Mining

structures fell significantly, consistent with the decline in spending on mining equipment. In sharp contrast, new manufacturing facilities jumped again and are up 65% year over year, reflecting the booming growth in the building of semiconductor and EV facilities. Factors supporting these trends include the CHIPS Act and gradually expanding demand for EVs, which now amount to 8% of new unit sales of vehicles.

More recent higher-frequency data are not positive. On a three-month moving-average basis, shipments of nondefense, nonaircraft capital goods adjusted for inflation have fallen continuously since March 2022, with a cumulative decline of 2.5% during that time. Moreover, new orders have fallen even more. Further, surveys of planned capital expenditures by Federal Reserve Banks were a bit more pessimistic in October.

The bottom line is that real fixed business investment will rise by 4.2% in 2024 and 1.9% in 2025, slightly more than 4.1% and 1.5%, respectively, in October. The keys will be slightly stronger growth in structures and intellectual property, though equipment spending will be somewhat weaker than previously forecast.

The forecasted recovery in existing home sales was pushed out to late 2024 to reflect the expectation that mortgage interest rates will remain higher for longer. The incentive for existing homeowners to move will be reduced given the significant increase in monthly mortgage payments they would experience if they were to purchase a similarly priced home with a new mortgage. Potential homebuyers—especially first-time homebuyers—will face affordability constraints that will sideline them from the market, keeping home sales at depressed levels until interest rates normalize.

The short-term outlook for new home sales was increased slightly to account for the expected dearth of existing homes available for sale. Homebuilder concessions, including the temporary buydown of mortgage interest rates, will support demand as will the wealth of higher income households who are able to make all-cash offers to purchase homes.

The outlook for house prices was largely unchanged from October apart from the Moody's Analytics House Price Index, which registered an uptick in growth in September, leading to a stronger near-term forecast. The outlook for CRE prices was largely unchanged from last month.

Unemployment Stays Inert in the U.K.

By OLIA KURANOVA

The [U.K.](#)'s adjusted experimental unemployment rate remained unchanged at 4.2% in the third quarter, in line with expectations. Last month, the Office for National Statistics implemented an experimental adjusted version of labour market data, having changed data gathering methods.

While the headline unemployment rate remains unchanged, there are signs of slack in the labour market with a fall in job vacancies across 16 out of 18 industry sectors, highlighting the caution in hiring among businesses across the economy.

Vacancies are still historically high, but coupled with a decrease of 0.1 percentage point in the employment rate we are seeing some weakness emerge in the resilient market. Additional stresses on the market continue: There were 229,000 working days lost to labour disputes in September.

On the upside, wage growth remains strong, with real pay rising at the fastest rate in two years partly driven by the fall in inflation. Regular pay excluding bonuses grew in nominal terms by 7.7% year over year in the three months to September, down from 7.9% previously but still outpacing inflation and leading real total wages to expand 1.3%.

Still, while headline inflation eased tangibly during the stanza, allowing for real wages to start a recovery, households have faced six quarters in a row of declines in real disposable incomes. Meanwhile, borrowing costs also grew as the Bank of England raised its policy rate to 5.25% in August and has left it unchanged since.

This means that the outlook ahead is not too inspiring. The same problems of high prices, high interest rates, and low sentiment will persist. We expect the economy to move at a snail's pace for the remainder of the year, which chimes in with the possibility of further increases in the unemployment rate and the existing deterioration in the employment data.

Netherlands tumbling down

Real GDP in the [Netherlands](#) posted a third consecutive contraction in the third quarter. The economy was 0.2% smaller than in the preceding three months, just shy of our expectations of a 0.1% quarterly drop. While previously held back by lower household consumption, real GDP in the third quarter was knocked by low fixed investment. Private consumption stagnated, and fixed investment fell sharply,

while the trade balance was slightly higher as imports fell at a faster pace than exports.

Headwinds are working against Dutch households and the economy. Real wages continue to catch up to the price increases experienced post-pandemic, though disposable incomes are now taking a hit from the rapid increase in interest rates. Household savings are stronger than usual, though consumer confidence remained in the pits, detracting from demand. With financing costs still high, downside risks remain prevalent for domestic demand, which mostly drives real GDP as its largest single component.

Our baseline still foresees a soft landing, whereby a meaningful recession is avoided. We expect the Dutch economy to continue posting lackluster growth amid tight financing conditions and weak demand from its largest trading partner, Germany.

Inflation remains obstructive across the region

From Spain to Scandinavia, sticky inflation is still a serious hurdle.

[Spain](#)'s consumer price index rose 3.5% year over year in October, not budging from an identical reading in September, and more than twice as high now than the 1.9% reading reached in June 2023. October's increase was mostly driven by smaller declines in electricity and fuel prices relative to a year ago. On the upside, core inflation, which in Spain excludes energy and only some food components, inched down by 0.6 percentage point in October to 5.2% annually. The economy is going through a stickier-than-expected disinflationary process and the inflation rate will hover above target in the near term.

In [Sweden](#), CPI inflation was unchanged in October after falling 1 percentage point to 6.5% year over year in September. While inflation slowed across a number of core goods and services, base effects caused a sharp slowdown in the pace at which energy prices were declining compared with a year earlier. The rate of deflation of electricity prices slowed sharply in October, largely due to base effects. Transport services inflation increased, as well. Looking ahead, we expect that the Riksbank will be pushed to tighten monetary policy further. As of our November baseline forecast, we assume a 25-basis point rate hike at

the upcoming 23 November meeting, bringing the Riksbank's two-week repo rate to 4.25%.

In [Finland](#), inflation moderated in October, decelerating to 4.9% year over year from 5.5% in September on the back of lower prices for food, restaurants and hotels, and electricity.

However, month over month, consumer prices lifted 0.3% mostly due to rising average housing loan costs. We expect overall inflation to decline throughout the coming quarters, with price growth falling below the European Central Bank's 2% target by the first half of next year—well before the rest of the euro zone.

Japan's Third-Quarter GDP Ignores the Narrative

By STEFAN ANGRICK

[Japan's](#) GDP is back below pre-pandemic levels. Output dropped 0.5% in the third quarter from the second, reversing some of the gains made in the first half of the year. We had expected a modest improvement in GDP, while the consensus had pointed to a moderate decline. After stronger-than-expected growth in the first and second stanza triggered a flurry of upbeat assessments of the economy, the disappointing third-quarter reading serves as a sobering reminder that the country is not yet out of the woods.

We generally caution against reading too much into the initial estimate of GDP because sizeable revisions are common. Japanese output sees some of the largest revisions within the OECD on account of preliminary estimates failing to appropriately capture key expenditure components such as fixed investment. It is not uncommon for growth readings to move by 0.2 percentage point or more when the second estimate is released. Disruptions caused by the COVID-19 pandemic have only amplified this problem. We note that monthly data on industrial and services activity spanning

August to September suggested that output would see a modicum of growth on the quarter, but that contrasts with the sharp drop in this preliminary GDP print.

Still, revisions are unlikely to fundamentally change the fact that Japan's economy is struggling. Better net exports, underpinned by a rebound in car shipments and tourism, helped lift growth in the second stanza and mask weakness in domestic demand. Now that the export recovery has run its course, that weakness is returning to the fore. Elevated inflation is eating into household spending power, keeping demand weak and businesses reluctant to invest. At the same time, a weak yen raises the risk that inflation will prove stickier than originally expected. All of this complicates the policy path for the Bank of Japan as it looks to dial back easing. We expect the BoJ to drop negative interest rates early in 2024, largely to avoid further yen depreciation. But an overly eager departure from supportive monetary conditions risks damaging an already-weak economy, which ultimately would do little to help the yen.

Central Bank Authority Under Siege in Colombia

By JUAN PABLO FUENTES

Colombia President Gustavo Petro has repeatedly asked the central bank board to lower interest rates in recent months amid weak economic growth. The business and banking sectors have recently joined the president in clamoring for lower interest rates. In a surprising joint letter released in early September, the government and private-sector organizations demanded the easing of monetary conditions, even as inflation remains in the double digits and well above target. They argued that inflation has decelerated after peaking in early 2023. Meanwhile, the current restrictive policy has hurt credit growth, and hence the overall economy.

Those demands represent a worrisome development. The Central Bank of Colombia's independence remains a cornerstone of the country's success at achieving macroeconomic stability in recent decades. Public demands aimed at dictating the central bank's decisions threaten that independence. In our view, the central bank board has rightfully delayed the beginning of the monetary relaxation cycle given current inflation levels. Central banks in neighboring countries such as Chile, Brazil and Peru started cutting policy rates in the third quarter, but inflation in those countries has come down measurably. In Chile, the annual inflation rate reached 5% in October, just above the upper limit of the target range. Similar situations occurred in Brazil and Peru. By contrast, the annual inflation rate in Colombia reached 10.5% in October, still well above the upper limit of the target range of 2% to 4%.

More important, medium-term inflation expectations also remain above target. According to the central bank's October survey, analysts see the annual inflation rate reaching 5.3% by the end of 2024, still well above the long-term central target of 3%. That is the highest reading for end-2024 inflation since the central bank survey included it in the survey.

In a recent personal note by two central bank directors published on the institution's web page, the academics implicitly explain some of the reasons for the monetary authority's stance. They correctly emphasized the importance of bringing inflation down as quickly as possible to realize the economy's full long-term potential. The central bank could certainly cut the policy rate prematurely, which would give the economy a short-term boost. Yet under that scenario, inflation might stay above target for longer, thus hurting long-term growth and the central bank's credibility.

Given the current environment, it seems likely that the central bank's board will make the first policy rate cut in December. Inflation will likely fall below 10% in November and further deceleration will occur in 2024. We also see inflation expectations starting to turn. However, the monetary authority must remain vigilant to assure convergence with the central target by late 2024 or early 2025. Rate cuts should be gradual to keep the policy rate in restrictive territory throughout 2024. Colombia's neutral rate stands close to the 7% mark.

The government and the private sector have made the central bank's job more difficult by trying to influence its decision-making. It is up to the central bank's board to fend off those pressures and protect the institution's invaluable independence.

Credit Changes Break Even

By **OLGA BYCHKOVA**

U.S.

In the latest weekly period, U.S. rating change activity saw as many credit upgrades as downgrades, issued to the diverse set of speculative- and investment-grade bonds and industrial and financial firms. Upgrades comprised three of the six rating changes and 100% of affected debt.

Upgrades were headlined by Enterprise Products Operating, LLC, one of the largest publicly traded midstream energy master limited partnerships globally. Moody's Investors Service raised the company's backed senior unsecured notes to A3 from Baa1, backed junior subordinated notes to Baa1 from Baa2, backed senior unsecured shelf rating to (P)A3 from (P)Baa1, backed subordinated shelf rating to (P)Baa1 from (P)Baa2, affirmed Enterprise Products' Prime-2 short-term rating, and changed its outlook to stable from positive, impacting 82% of debt affected in the period. According to Moody's Investors Vice President Sajjad Alam, "The upgrade reflects our view that Enterprise Products will continue to thrive as a leading midstream company while maintaining excellent financial flexibility through volatile oil and gas price cycles. Based on management's strong track record of prudent financial policies, we believe the company will be able to comfortably manage its competing leverage, investment and distribution goals, and further expand the scale and breadth of its operations over time."

The credit agency would further upgrade Enterprise Products' ratings if the company could significantly strengthen its business risk profile to additionally increase cash flow predictability by reducing volumetric risks, establish more visibility to future cash flow from serving lower carbon intensive energy sources or carbon sequestration activities, and comply with more conservative leverage and distribution coverage commitments. At the same time, the ratings could be downgraded if Enterprise Products were to expand into activities that significantly increase its business risk and cash flow volatility, or if management adopts more aggressive financial policies involving growth spending, acquisitions, or shareholder distributions leading to higher leverage and weaker free cash flow.

In October, almost 66% of ratings actions issued by Moody's Investors Service were credit downgrades, which comprised 56% of the total affected debt. Similarly, through the first ten months of the year U.S. rating changes were predominantly negative with downgrades exceeding upgrades 434:260.

Europe

Corporate credit rating change activity was similar but a bit weaker across Western Europe with as many upgrades as downgrades. Upgrades comprised two of the four rating changes and 89% of debt affected in the period. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade industrial companies.

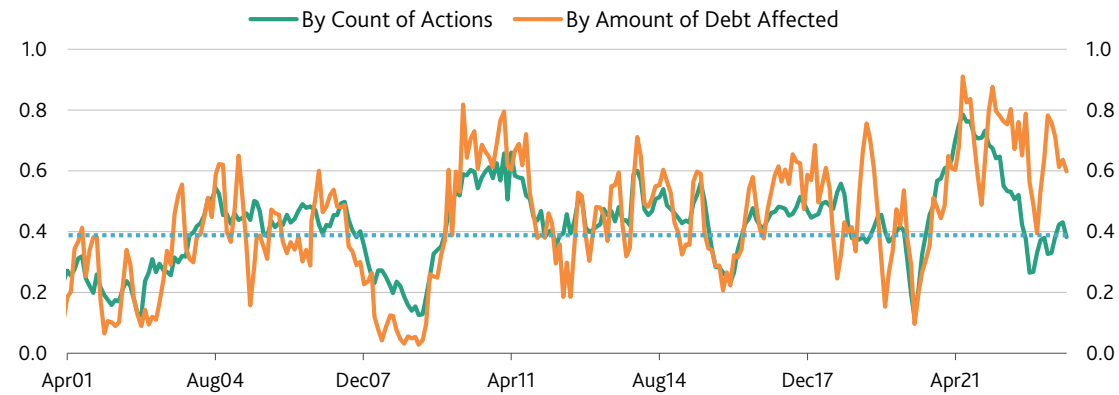
The largest upgrade, accounting for about 78% of debt affected in the period, was issued to a UK manufacturer of premium passenger cars, Jaguar Land Rover Automotive Plc, with its corporate family rating and backed senior unsecured global notes lifted to Ba3 from B1 and probability of default rating raised to Ba3-PD from B1-PD. The outlook on all ratings remains positive. According to Moody's Investors Service, the upgrade of JLR's ratings to Ba3 with positive outlook reflects the company's strong operating performance over the past 12 months, which has led to a significant improvement in credit metrics. The rating action was additionally underpinned by JLR's increasingly conservative financial policy, with its clear focus on debt reduction to achieve its target of net debt below zero by the end of financial year 2025.

The largest downgrade last week was made to German manufacturing company Knorr-Bremse AG, which saw its long-term issuer and the senior unsecured ratings lowered to A3 from A2, impacting 11% of debt affected in the period. The outlook changed to stable from negative. According to Matthias Heck, Moody's Investors Service Vice President, Senior Credit Officer, and Lead Analyst for Knorr-Bremse, "Continued weakness in Knorr-Bremse's end-markets, especially China, and adverse inflationary effects have reduced the company's profitability and leverage to levels that are no longer commensurate with our demanding requirements for the previous A2 rating. The stable outlook on the A3 rating reflects the resilience of Knorr-Bremse's business model and strong market position, which should allow for margins of comfortably above 10%, whilst maintaining moderate leverage levels."

Like the U.S., in October, 58% of ratings actions issued by Moody's Investors Service in Western Europe were credit downgrades, though these comprised only about 40.5% of total affected debt. From January to October this year Western Europe rating changes were mostly negative with downgrades exceeding upgrades 162:154.

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
11/9/2023	PSSI HOLDINGS, LLC.-PACKERS HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
11/10/2023	Nationwide Enterprise-NATIONWIDE FINANCIAL SERVICES, INC.	Financial	SrUnsec/IFSR		D	A2	A3	IG
11/13/2023	EPCO HOLDINGS, INC.-ENTERPRISE PRODUCTS OPERATING, LLC	Industrial	SrUnsec/Sub/JrSub	28580.99	U	Baa1	A3	IG
11/13/2023	84 LUMBER COMPANY	Industrial	SrSec/BCF/LTCFR/PDR		U	Ba3	Ba2	SG
11/14/2023	MOLSON COORS BEVERAGE COMPANY	Industrial	SrUnsec/CP	6114.967	U	Baa3	Baa2	IG
11/14/2023	TRIBE BUYER LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Ca	SG

Source: Moody's

FIGURE 4

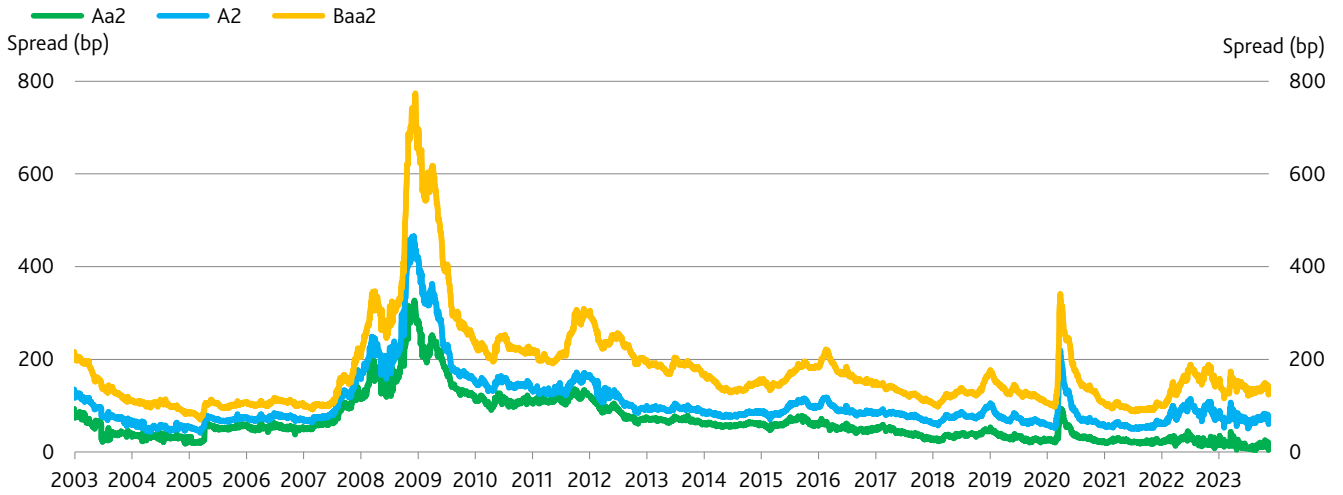
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
11/9/2023	TATA MOTORS LIMITED-JAGUAR LAND ROVER AUTOMOTIVE PLC	Industrial	SrUnsec/LTCFR/PDR	5540.894	U	B1	Ba3	SG	UNITED KINGDOM
11/9/2023	KNORR-BREMSE AG	Industrial	SrUnsec/LTIR	800.2902	D	A2	A3	IG	GERMANY
11/13/2023	B&M EUROPEAN VALUE RETAIL S.A.	Industrial	SrSec/LTCFR/PDR	792.7699	U	Ba2	Ba1	SG	LUXEMBOURG
11/14/2023	FASTPARTNER AB	Industrial	LTCFR		D	Ba3	B1	SG	SWEDEN

Source: Moody's

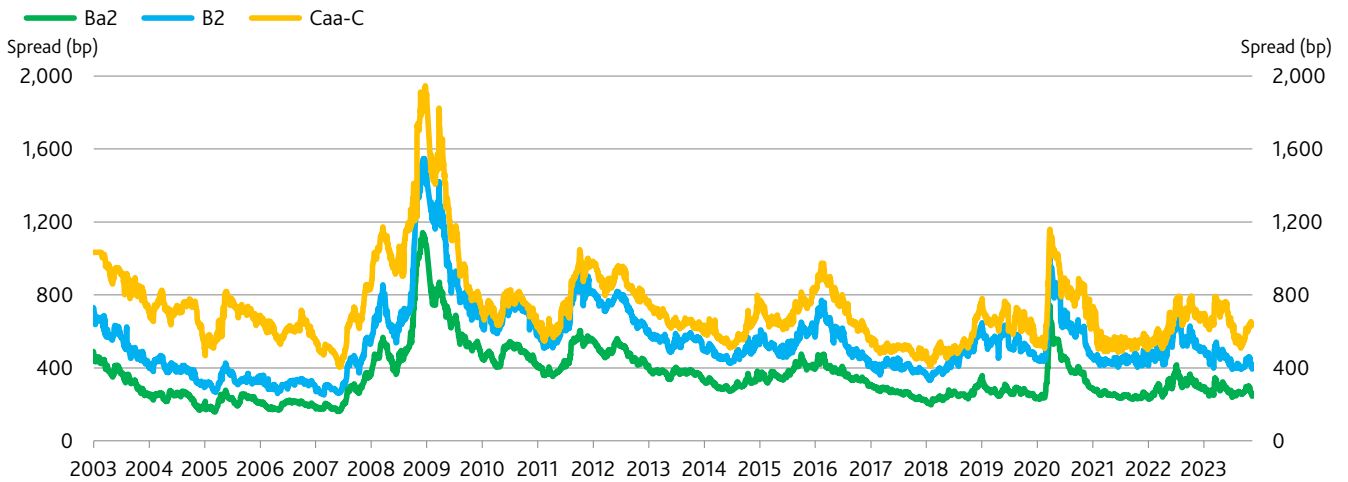
MARKET DATA

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 (November 8, 2023 – November 15, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		Senior Ratings
	Nov. 15	Nov. 8	
Roche Holdings Inc.	Aa1	Aa3	Aa2
Target Corporation	Aa2	A1	A2
Brunswick Corporation	Baa3	Ba2	Baa2
Oracle Corporation	A2	A3	Baa2
Merck & Co., Inc.	Aa1	Aa2	A1
Bristol-Myers Squibb Company	Aa1	Aa2	A2
Union Pacific Corporation	Aaa	Aa1	A3
Cargill, Incorporated	A1	A2	A2
Mondelez International, Inc.	Aa2	Aa3	Baa1
Prologis, L.P.	A3	Baa1	A3

CDS Implied Rating Declines	CDS Implied Ratings		Senior Ratings
	Nov. 15	Nov. 8	
Abbott Laboratories	A2	Aa3	Aa3
S&P Global Inc.	A2	Aa3	A3
Emerson Electric Company	A3	A1	A2
EOG Resources, Inc.	A3	A1	A3
United States of America, Government of	Aa3	Aa2	Aaa
JPMorgan Chase Bank, N.A.	A2	A1	Aa2
American Honda Finance Corporation	Baa1	A3	A3
Amgen Inc.	A1	Aa3	Baa1
Intel Corporation	Baa1	A3	A2
Philip Morris International Inc.	A3	A2	A2

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Nov. 15	Nov. 8	Spread Diff
Macy's Retail Holdings, LLC	Ba2	481	400	81
Lumen Technologies, Inc.	Caa3	3,874	3,829	45
V.F. Corporation	Baa2	173	150	23
Terex Corporation	B1	248	225	23
Western Digital Corporation	Ba2	253	232	22
Qwest Corporation	B3	1,702	1,682	19
Time Warner Cable Enterprises LLC	B1	178	160	18
NNN REIT, Inc.	Baa1	148	135	14
Alexandria Real Estate Equities, Inc.	Baa1	106	95	10
Hasbro, Inc.	Baa2	184	174	10

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Nov. 15	Nov. 8	Spread Diff
Liberty Interactive LLC	Caa2	2,552	2,876	-324
Unisys Corporation	B3	669	816	-147
American Airlines Group Inc.	B3	819	932	-113
Brunswick Corporation	Baa2	101	210	-109
Dish DBS Corporation	Caa2	2,627	2,731	-104
Anywhere Real Estate Group LLC	B3	1,252	1,348	-96
Pitney Bowes Inc.	B3	854	941	-86
Dish Network Corporation	Caa2	2,136	2,219	-83
Carnival Corporation	B3	514	594	-80
Brandywine Operating Partnership, L.P.	Ba1	445	509	-64

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (November 8, 2023 – November 15, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	Nov. 15	Nov. 8	Senior Ratings
Issuer			
Italy, Government of	Baa2	Baa3	Baa3
INTESA SANPAOLO S.P.A.	Baa2	Baa3	Baa1
UBS Group AG	Baa1	Baa2	A3
Dexia Credit Local	Baa1	Baa2	Baa3
ENGIE SA	Aa2	Aa3	Baa1
Siemens Aktiengesellschaft	Aa2	Aa3	Aa3
Tesco Plc	A3	Baa1	Baa3
London Stock Exchange Group plc	A1	A2	A3
Vattenfall AB	Aa1	Aa2	A3
Leonardo S.p.A.	Baa2	Baa3	Baa3

CDS Implied Rating Declines	CDS Implied Ratings		
	Nov. 15	Nov. 8	Senior Ratings
Issuer			
Nordea Bank Abp	A2	Aa3	Aa3
France, Government of	Aa1	Aaa	Aa2
BNP Paribas	A3	A2	Aa3
Ireland, Government of	Aa1	Aaa	Aa3
Credit Agricole S.A.	A2	A1	Aa3
CaixaBank, S.A.	Baa1	A3	Baa1
DZ BANK AG	A3	A2	Aa2
Portugal, Government of	A1	Aa3	Baa2
Credit Agricole Corporate and Investment Bank	A2	A1	Aa3
Nederlandse Waterschapsbank N.V.	Aa1	Aaa	Aaa

CDS Spread Increases	CDS Spreads			
	Senior Ratings	Nov. 15	Nov. 8	Spread Diff
Issuer				
Vedanta Resources Limited	Caa3	3,423	3,248	175
Ardagh Packaging Finance plc	Caa1	1,178	1,004	174
Nidda Healthcare Holding GMBH	Caa3	164	142	23
Hapag-Lloyd AG	Ba3	304	282	22
thyssenkrupp AG	Ba3	186	179	8
Yara International ASA	Baa2	125	120	5
Proximus SA de droit public	A2	72	69	4
LyondellBasell Industries N.V.	Baa2	128	124	4
National Westminster Bank Plc	A1	58	55	3
PPF Telecom Group B.V.	Ba1	103	100	3

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	Nov. 15	Nov. 8	Spread Diff
Issuer				
Boparan Finance plc	Caa3	1,150	1,276	-126
Iceland Bondco plc	Caa2	514	592	-78
Carnival plc	B3	487	563	-76
Wm Morrison Supermarkets Limited	B2	669	728	-59
Jaguar Land Rover Automotive Plc	Ba3	379	430	-51
United Group B.V.	Caa1	618	657	-40
Telecom Italia S.p.A.	B1	251	286	-34
Garfunkelux Holdco 3 S.A.	Caa2	1,496	1,526	-30
Hammerson Plc	Baa3	183	213	-29
Dufry One B.V.	Ba3	259	287	-28

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (November 8, 2023 – November 15, 2023)

Issuer	CDS Implied Ratings		Senior Ratings
	Nov. 15	Nov. 8	
Aurizon Network Pty Ltd	A3	Baa2	Baa1
Telstra Corporation Limited	Aa2	Aa3	A2
LG Electronics Inc.	A3	Baa1	Baa2
Daiichi Sankyo Company, Limited	Aa1	Aa2	A2
Coca-Cola Amatil Limited	Aa3	A1	Baa1
Petroliam Nasional Berhad	A1	A2	A2
Telekom Malaysia Berhad	Aa3	A1	A3
Japan, Government of	Aa1	Aa1	A1
China, Government of	A3	A3	A1
Westpac Banking Corporation	A1	A1	Aa3

Issuer	CDS Implied Ratings		Senior Ratings
	Nov. 15	Nov. 8	
Mizuho Financial Group, Inc.	A3	Aa3	A1
Mizuho Bank, Ltd.	A2	Aa2	A1
India, Government of	A3	A2	Baa3
National Australia Bank Limited	A1	Aa3	Aa3
Korea Development Bank	Aa3	Aa2	Aa2
Sumitomo Mitsui Trust Bank, Limited	A2	A1	A1
Development Bank of Japan Inc.	A3	A2	A1
Takeda Pharmaceutical Company Limited	Aa3	Aa2	Baa1
Export-Import Bank of India	A2	A1	Baa3
Kansai Electric Power Company, Incorporated	Aa2	Aa1	A3

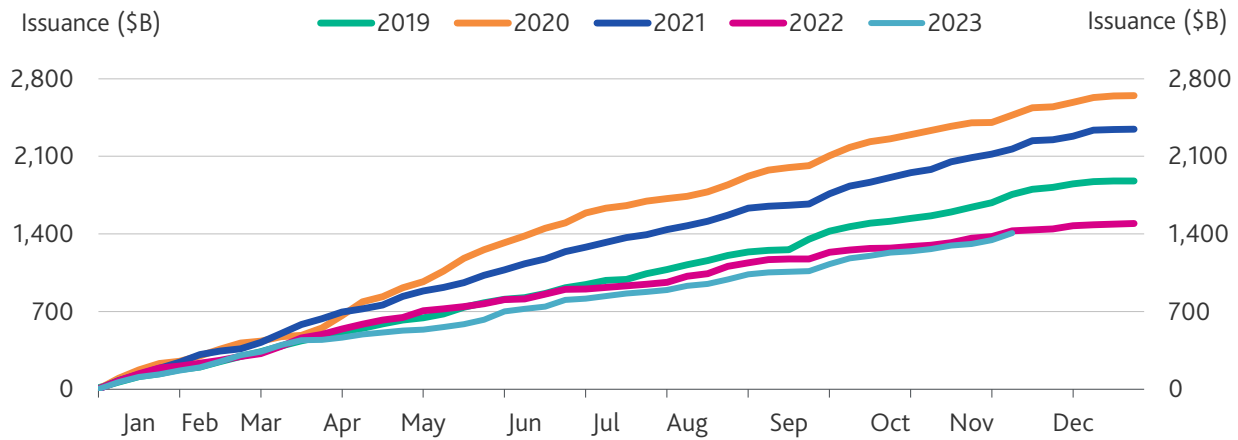
Issuer	Senior Ratings	CDS Spreads		
		Nov. 15	Nov. 8	Spread Diff
Mizuho Financial Group, Inc.	A1	56	45	11
Mizuho Bank, Ltd.	A1	49	40	9
Flex Ltd.	Baa3	132	124	8
Boral Limited	Baa2	130	123	7
GMR Hyderabad International Airport Limited	Ba3	247	241	7
Toyota Industries Corporation	A2	113	108	5
Sydney Airport Finance Company Pty Ltd	Baa1	97	92	4
Amcor Pty Ltd	Baa2	109	105	4
Kirin Holdings Company, Limited	Baa1	24	22	3
Sumitomo Mitsui Banking Corporation	A1	40	38	2

Issuer	Senior Ratings	CDS Spreads		
		Nov. 15	Nov. 8	Spread Diff
Vanke Real Estate (Hong Kong) Company Limited	Baa2	1,485	1,873	-387
SoftBank Group Corp.	Ba3	230	265	-35
LG Electronics Inc.	Baa2	58	80	-22
Aurizon Network Pty Ltd	Baa1	65	85	-20
Adani Green Energy Limited	B2	713	729	-16
Petroliam Nasional Berhad	A2	47	61	-14
Tata Motors Limited	Ba3	156	166	-10
Pakistan, Government of	Caa3	3,034	3,043	-9
Development Bank of Kazakhstan	Baa2	188	195	-8
Daiichi Sankyo Company, Limited	A2	32	40	-8

Source: Moody's, CMA

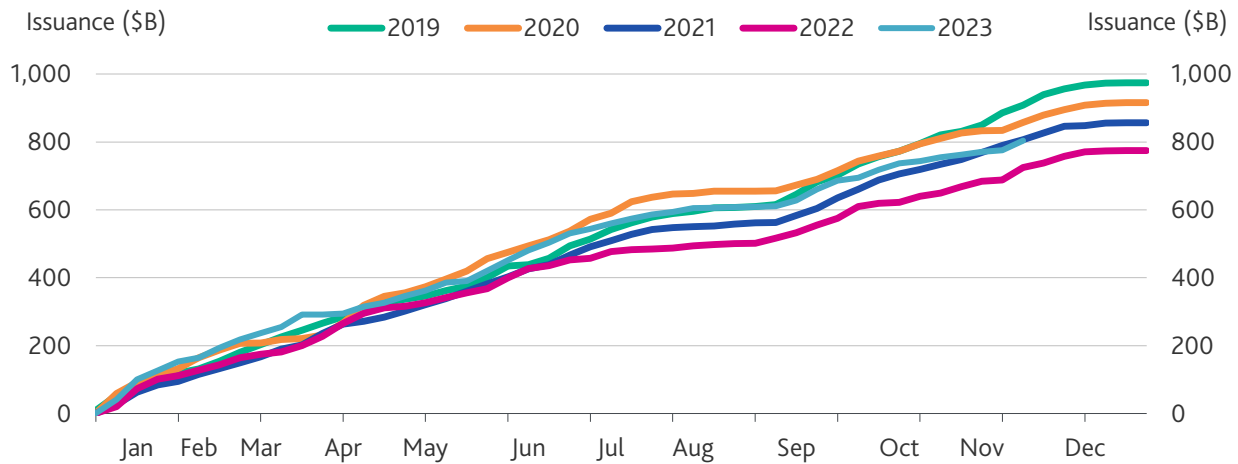
ISSUANCE

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	44.907	11.625	61.827
Year-to-Date	1,181.640	183.111	1,407.078

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	20.876	2.318	28.242
Year-to-Date	705.582	61.623	803.977

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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