MOODY'S ANALYTICS

WEEKLY MARKET OUTLOOK

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Lead Author

Dante DeAntonio Director

Asia-Pacific

Harry Murphy Cruise Dave Chia Jeemin Bang Eugene Tan

Europe

Ross Cioffi Olga Bychkova

U.S.

Marisa Di Natale

Latin America

Jesse Rogers

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The U.S. economy is performing well, and near-term prospects are good, as the economy remains resilient. U.S. economic growth slowed in the fourth quarter, though only modestly. Real GDP declined from a clearly unsustainable 4.9% in the third quarter to a still unlikely to be sustained 3.2% in the fourth quarter, according to the Bureau of Economic Analysis' second estimate. Consumer spending was the largest contributor as substantial thirdquarter support from inventories became a drag. Trade grew as a support, government spending contributed, and fixed investment grew only modestly. The saving rate dropped to 3.9% from 4.3% in the third quarter but remained above its 2022 lows.

There are still only limited first-quarter data, but it appears growth has slowed

only modestly. The job market continues to produce lots of jobs, with payrolls increasing by an average of near 250,000 jobs per month in the past year. Unemployment remains firmly below 4%, as it has for the past two years, and all demographic groups are enjoying the low joblessness. Annual inflation is hovering near 3%, which is still above the Federal Reserve's target, but the rate has moderated consistently since peaking in mid-2022, and the Fed's target is coming into view.

Prospects are good that the economy will perform well this year. Consumers are doing their part and spending just enough to support broader economic growth. With inflation moderating, real after-inflation incomes and thus consumers' purchasing power are improving. Still-substantial excess savings built up during the pandemic by middle- and especially high-income households also continue to support spending. Near-record stock prices and housing values and still-low and stable debt service burdens are also helping.

This does not mean growth will not slow further. The recent pace of growth is unsustainable as high interest rates take an increasing toll, inventory accumulation remains modest, and the saving rate stops dropping. Additional weights beyond high interest rates are numerous, including the fallout from the banking crisis, the impact of the debt ceiling agreement, some reduction in spending by lower-income consumers who must start repaying student loans and find pandemic-era loosening of welfare eligibility requirements ending, and the war and transportation issues in the Middle East and Ukraine.

Mixed messages from U.S. consumers

The Conference Board's consumer confidence index took a step back in February, breaking three consecutive increases. The index dipped more than 4 points to 106.7, its lowest since November, even as the University of Michigan consumer sentiment index improved. Consumers' assessments of both present and future conditions weakened, with the expectations index dipping back into recession territory. Nevertheless, the Conference Board's measure remains roughly 10 points above the long-run average, indicating that consumers are feeling fairly positive about the current state and future path of the economy, even if there are some cracks.

Although consumers' assessment of the labor market weakened slightly in February, resiliency on the job front has solidified the health of consumers, even as interest rates have risen. According to its latest reading, the labor market differential, the difference between those saying jobs are plentiful versus hard to get, fell from 31.7 in January to 27.8. The labor market differential tracks closely with the vacancy-to-unemployment level, which is a measure of labor market slack or tightness that shows whether there is a sufficient supply of available labor to fill open positions. The correlation coefficient between the two metrics is 0.89. The wide availability of jobs and continued upside surprises in

monthly payroll additions are supporting consumers' confidence. That is, if they are, for whatever reason, laid off from their current position, there are other opportunities out there. Moreover, a tight labor market is the primary driver of robust real wage growth, which has padded the wallets of still-spend-happy consumers. As a result, most consumers have a favorable view and outlook of their income.

Still, there are other factors at play keeping confidence from running higher. One recent study from the National Bureau of Economic Research suggests that consumers are especially concerned over the cost of money, which is factored into the cost of living by consumers and is affected by rising interest rates, as opposed to simply inflation of prices for goods and services. Another such factor keeping confidence lower than one might expect given the overall strength of the U.S. economy is price nostalgia. The notion, coined by economists at the University of Chicago, suggests that consumers often compare prices they pay for goods and services today with the prices they paid for those same goods and services a year or more ago. Consequently, as inflation persists, even if at a slower pace, the recent spate of rapid price growth will continue to sour the stomachs of consumers as they dwell on what once was until higher prices are solidified as the norm.

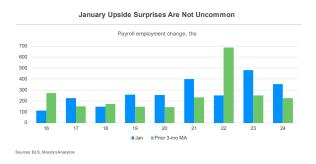
Finally, write-in responses in February's consumer confidence report suggest that consumers are growing increasingly concerned with the state of U.S. politics. Polarization between the two leading parties has bred a dysfunctional Congress that struggles to pass new legislation, including budget appropriations. The continued threat of a government shutdown, the undealt-with crisis at the southern border, and the increasing occurrence of fraught geopolitical events will keep anxieties high and weigh on sentiment.

TOP OF MIND

Surprising U.S. Labor Market Kickoff in 2024

By MARISA DI NATALE

The year began with another large upside surprise in the U.S. labor market. The net job gain in nonfarm payrolls of 353,000 in January was more than double the Moody's Analytics and consensus forecasts. Moreover, revisions to the prior two months added an additional 126,000 jobs and brought December's gain from 216,000 to 333,000. The three-month moving average of job growth is just below 300,000 per month, and now with revisions, the "weak" October and November sub-200,000 gains look more like outliers than the norm. That said, January has historically been a month of upside surprises. In January 2023, a similarly large gain blew past expectations.



Taking the comparison back prior to the pandemic shows that it is more the rule than the exception for January's job gain to come in hot compared with prior months. This may indicate that a shift in typical seasonal hiring patterns is underway and that the seasonal adjustment methods used by the Bureau of Labor Statistics have yet to fully incorporate these changes. Another possibility is the low response rate to the payroll survey. January's survey collection rate at 56% was the lowest for any January since 2002. It may also explain December's large revision; the first collection rate for that month was below 50% for the first time since 1990.

This January, job gains were well-distributed across the private and public sectors, though the public sector addition was smaller than it has been in recent months. In the private sector, there were large gains in professional/business services, retail trade, and private education and social services. Gains in leisure/hospitality were smaller than in recent months, including outright job losses at hotels and restaurants.

Average hourly earnings also came in on the hot side last month, advancing 0.6% and bringing over-the-year wage growth from 4.3% to 4.5%. At the same time, average

weekly hours worked continued to slide and now sit at their lowest level (excluding the pandemic months) since the recovery from the Great Recession in 2010.



Though job growth is remarkably strong, many of these jobs feature shorter workweeks so that the aggregate number of hours worked in the economy is up only 0.3% over the year in January in contrast to a nearly 2% increase in the number of jobs over that period. The largest declines in hours across industries over the past several years have come in manufacturing and retail trade. The average workweek for retail workers sits at its shortest since at least 2006 when the data series begins.

On the household survey side, the gain in employment was also relatively large (after removing the effects of the annual population controls introduced over the month). The gain of 239,000 is only the second positive number in the past four months. The unemployment rate at 3.7% and labor force participation rate at 62.5% were both unchanged over the month.

New year, new populations

In the January report, the BLS also published the results of its annual benchmarking of the payroll survey data, as well as the incorporation of new population estimates from the Census Bureau into the household survey.

Overall, neither of these annual exercises change the story of the labor market over the past year. The payroll survey's benchmark revisions resulted in a 0.1% downward revision to the level of March 2023 employment (-266,000). The annual benchmark revision aims to recalibrate the payroll survey to actual universe counts of employment based on state unemployment insurance tax records. BLS revises data from the previous benchmark through the current month as a result.

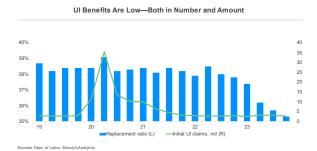
In the household survey, the BLS incorporates updated Census Bureau population estimates each January and does not revise prior months' data to reflect the change, essentially creating a break in the household series each January. The updated population estimates reduced the civilian noninstitutional population by more than 600,000 in December, with proportionate reductions in other level series such as employment and unemployment. There was, however, no impact on rates—neither the unemployment rate nor the labor force participation rate was affected. Interestingly, the reduction in the population estimated by the Census Bureau is at odds with recent data put forth by the Congressional Budget Office that show an assumed very large increase in population in the years 2021-2023 owing to much higher levels of international immigration. Subsequent updates to the Census Bureau (and BLS) population estimates are likely to incorporate the new data on immigration.

UI may not tell the whole story

Bolstering the view that the labor market is in no danger of slowing sharply have been the weekly data on the number of people filing for <u>unemployment insurance</u> benefits. The levels of new UI filing have been extremely low for most of the past two years. Only briefly in early 2023 did UI claims rise to levels that warranted some additional attention, but they quickly fell during the summer months. Continuously low levels of UI filings have coincided (again) recently with media reports of large layoffs in several industries, notably tech, finance and retail. And yet, UI claims have not budged.

Though the source data are not nearly as robust, the Challenger layoff report shows a recent sharp increase in announced layoffs, similar to the level seen in early 2023, after which initial claims for UI did rise. The Challenger report aggregates (and tries to verify) media reports of announced layoff events. In January, the number of layoffs reported by Challenger rose to more than 82,000, up from a threemonth moving average of 39,000 in December.

One reason for the discrepancy may be that, over time, unemployment insurance claims have become less generous, and eligibility has become more restrictive in several states. The replacement ratio, the percent of a worker's lost salary that is made up for by unemployment insurance benefits, has fallen over time and now sits at about 35% by one measure.

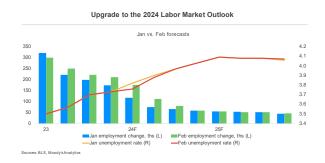


For many workers, especially if they expect to find a new job quickly in a tight labor market like the present one, it may simply not be worth it to them to file for UI.

A more wholistic measure of replacement also includes tax treatment and other forms of unemployment assistance and benefits (like those provided by employers) and finds that these factors often boost replacement rates much higher, again, lowering the incentive to file for state UI assistance. Moreover, if the industries laying people off are on the high end of the pay scale, the replacement rate falls even further. UI claims are still an important metric to watch, but they may be less effectual at revealing labor market changes in real time than they once were.

Outlook

The boomy January report (and revisions to previous months) resulted in an upgrade to our employment forecasts.



We now expect 1.28 million jobs to be added from December 2023 to December 2024 compared with the January forecast for 950,000 jobs over that period. The expectation is still that job growth will slow gradually this year, averaging about 50,000 by the start of 2025. The unemployment rate will rise more gradually in the first half of the year with the rate topping out at 4.1% by the start of next year—the same forecast as last month.

Risks

Risks to the outlook are becoming more balanced and one can now imagine one or two upside risks in addition to the plethora of downside risks. On the downside, a Federal Reserve misstep, a black swan event in the financial system, and higher oil prices stemming from a geopolitical crisis are

at the top of the list for derailing the expansion. On the upside, the recent run of strong productivity growth could prove to be more resilient. Higher productivity would help the Fed out by offsetting higher inflation and letting up on wage pressures. Faster population growth could also provide some upside if it leads to more labor supply than anticipated.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar will deliver key insights about the labor market next week. First up will be January data from the Job Openings and Labor Turnover survey. We look for ongoing signs that labor demand is softening and expect that job openings have fallen south of 8.7 million in January. This would mark the lowest total since March 2021 but remain well above the pre-pandemic average of about 7 million openings.

The star of the week will be the release of February's employment report next Friday. The new data will take on added importance given stronger than expected job gains in December and January. All eyes remain on the Federal Reserve, and they will look for job growth to return to its trend of moderation before moving forward with a rate cut later this year. On a three-month moving average basis, job growth was around 200,000 and headed lower towards the end of 2023 but have now jumped back to nearly 300,000. We expect the prior trend to return and job growth to have come in at 180,000 in February, as layoffs remain low but hiring eases further.

Other key data released next week include factory orders, the ISM nonmanufacturing index, productivity, and international trade.

Asia-Pacific

Held back by weak household spending and falling dwelling investment, the Aussie economy likely limped to the end of 2023. We estimate the economy grew just 0.1% quarter on quarter in the last three months of the year. That would be about half of the September quarter's 0.2% expansion and the weakest print since lockdowns ground the economy to a halt in September 2021. Still, the economy should have pockets of resilience; business investment, exports and public demand should all support GDP growth in the December quarter.

We expect South Korean industrial production to jump 8% year on year in January after December's 6.2% leap. Manufacturing output is gaining traction as rising foreign demand drives up exports.

In Taiwan, headline inflation likely rose to 1.9% year on year in February from 1.8% in January. The numbers may have been affected by the timing of Lunar New Year; the celebration fell in January in 2023 and February in 2024, so food and entertainment prices could be higher this time around.

Europe

The European Central Bank is likely to put off any changes to its monetary policy at its meeting next week. It will keep its main refinancing rate at 4.5%. Reporters will once again try to get a forward-looking statement from bank president Christine Lagarde, but we do not expect anything concrete to come out of the meeting. Rather, there will be more assurances that the ECB is data-dependent. There will be some datapoints to point to, however, such as marginally lower inflation rates between January and December and negotiated wage growth in the fourth quarter of 2023 compared to the third.

Meanwhile, euro zone GDP will likely be confirmed to have stagnated in the fourth quarter of 2023, following a 0.1% decline in the third quarter. We expect details to show weak domestic demand resulting in weak consumption and fixed investments. Net trade and inventories will balance the downside.

At the start of 2024, we do not see much stronger data coming, either. Euro zone retail sales likely only partially recovered by 0.3% m/m in January after a 1.1% decline in December. Consumer demand for goods remains cast aside in favor of services. Overall, however, households continue to struggle with depressed real disposable incomes. Confidence is also grim, even if there have been some minor increases in survey data in recent months.

On the business side, industrial production likely fell in Germany and staggered along in France and Spain. We foresee a 1% m/m decline in German industrial production. Red Sea supply disruptions will likely show up in falling capital goods output. Meanwhile, construction was also likely in the red. France and Spain will be unable to gather much momentum with 0.1% m/m and 0.2% growth, respectively. With the German engine sputtering, factories will be having trouble in the rest of the euro zone as well. Dismal PMI and confidence data speak to that.

Latin America

The next week in Latin America is a busy one on the economic calendar, with February CPI prints in Mexico, Chile and Colombia likely to show further progress on the inflation-fighting front. Mexico's national statistics institute will be the first to report. We look for the national CPI to have risen just 4.5% year on year in February. This time last year, inflation in Mexico was almost twice this figure. In Colombia, we expect inflation to have fallen below 8% in February, marking just the third straight month in single digits. Cuts to the country's costly fuel subsidy have prevented headline inflation from falling faster, with higher energy costs bleeding into some core measures. In Chile, we look for a small uptick in inflation in the February print, but

this will likely be the result of last year's high comparison base. Weak demand will likely combine with fading supply shocks to bring inflation lower in the months ahead, potentially preparing the way for a more accelerated easing program. Rounding out the week are trade prints in Chile

and Brazil. We expect the two countries to have recorded another large surplus amid surging agricultural exports in Brazil and restrained imports in Chile. Finally, the January industrial production figures in Argentina likely worsened amid the country's deepening recession.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk	Risk Assessment
1-Mar	U.S.	Federal government shutdown deadline, part 1	Low	Low	Temporary funding for DoT, HUD, Energy, the VA and Agriculture is set to expire March 1. House Republicans seek to pass individual appropriations bills to avoid a high-cost omnibus. A shutdown of a limited number of departments could occur, but the economic impact will be minimal.
8-Mar	U.S.	Federal government shutdown deadline, part 2	Low	Low	Temporary funding for Commerce/Justice/Science, Defense, Financial Services/General Government, Homeland Security, Interior/Environment, Labor/HHS/Education, Legislative Branch, and State/Foreign Operations is set to expire one week after the first tranche runs out.
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 Suk Yeol's policy agenda will continue to face opposition in the National Assembly.
30-Apr	U.S.	Deadline to pass 12 appropriations bills before 1% spending cuts become permanent	Medium	Low	The Fiscal Responsibility Act (2023) disincentivizes the use of continuing resolutions to fund the government by enforcing a 1% automatic cut to all discretionary spending if a CR is in place on April 30, 2024. Such a cut to spending would drag GDP growth, bringing additional urgency to Congress to pass a full-year budget.
5-May	Panama	General elections	Medium	Low	General elections in Panama fall amid rising unrest and uncertainty over the future of the mining sector.
19-May	Dominican Republic	Presidential and legislative elections	Low	Low	President Luis Abinader is a favorite to be re-elected. In a possible second term, he will seek a fiscal reform delayed from the first term.
Мау	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 toward inflation and economic inequality.
1-Jun	Mexico	General election	High	Medium	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.
30-Jun	Dominican Republic	Potential presidential runoff	Low	Low	President Luis Abinader is a favorite to be re-elected. In a possible second term, he will seek a fiscal reform delayed from the first term.
27-Oct	Uruguay	General elections	Low	Low	Uruguay's president, Luis Lacalle Pou, is ineligible for re- election. Thus, the electoral contest could be between the ruling coalition candidate, Álvaro Delgado, and Laura Ruffo from Partido Nacional.
5-Nov	U.S.	Presidential and Congressional elections	Medium	Low	American voters will head to the polls to cast their ballots for incumbent president Joe Biden or the GOP front-runner, former president Donald Trump. The balance of power in the House and Senate are also at stake, which could lead to a shake-up in fiscal policy.
24-Nov	Uruguay	Potential presidential runoff	Low	Low	Uruguay's president, Luis Lacalle Pou, is ineligible for re- election. Thus, the electoral contest could be between the ruling coalition candidate, Álvaro Delgado, and Laura Ruffo from Partido Nacional.
Unknown	Venezuela	Presidential election	Medium	Medium	Opposition coalition candidate Maria Corina Machado leads in the polls against the incumbent president, Nicolas Maduro. However, the Supreme Court banned Machado from running. The likelihood of free and fair elections appears slim and the U.S. could reinstate sanctions on the oil industry.

THE LONG VIEW: U.S.

Credit Spreads Generally Tighten Through February

By OLGA BYCHKOVA

CREDIT SPREADS

Corporate credit spreads have considerably narrowed throughout February, averaging 20 basis points less at the end of the month compared with the first day of the month. Tight credit spreads show market participants remain confident in the creditworthiness of borrowers and see the overall economy as favorable. As a result, despite tight monetary conditions, the economy begins the final descent toward a soft landing, with inflation declining steadily and growth holding up. This has been underpinned by persistent strength in consumer spending on the demand side and increased labor force participation, mended supply chains and cheaper energy and commodity prices on the supply side. The Moody's Investors Service long-term average corporate bond spread to the 10-year U.S. Treasury has decreased 4 bps to 111 bps, slipping below its 12-month low of 114 bps. Similarly, Moody's long-term average industrial bond spread declined 3 bps to 96 bps over the past week. That is now below its one-year low of 98.5 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 during the last weekly period. 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 optionadjusted spread contracted to 314 bps from 316 bps the previous week, while the ICE BofA U.S. high-yield optionadjusted bond spread closed Wednesday at 331 bps, down 3 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—dropped 1.5 points over the week to 13.8, sliding further below its long-term average of about 20 and median of 18, meaning investors can buy relatively cheap insurance and position in potentially profitable trades. Since the VIX tends to move inversely to stocks, market participants watch it closely as an indicator

of investor sentiment and positioning. 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 last year by 42.5% to the average of 17 has brought it back generally in line with high-yield spreads.

The VIX has recently increased to the highest values since early November, following the largest S&P 500 slide in 14 months posted in mid-February after a hotter-thanexpected CPI print quashed hopes that the Federal Reserve will cut interest rates any time soon. This rekindled traders' appetite for protection after hedging demand was mostly muted during the S&P 500's relentless rally since late October. As a result, VIX call selling outnumbered VIX call buying as traders looked to monetize their VIX call contracts amid a somewhat unexpected jump in the fear gauge. Volatility has nevertheless been suppressed with a lot of put selling in the S&P 500 recently. The so-called put-to-call skew on the Top 50 stocks in the S&P 500 has approached the levels last seen in the first quarter of 2021. With people putting out more defensive positions, a short-term bid in volatility is expected to continue.

GLOBAL DEFAULTS

Moody's Investors Service reported that 11 corporate debt issuers defaulted in January, down from 20 in December, declining to a near-average pace. Monthly default count, nonetheless, remains in the double digits, driven by ongoing strains from higher-for-longer interest rates.

January's defaulters came from a variety of industries, led by durable consumer goods; finance; and chemicals, plastics, and rubber, each accounting for two defaults. Across regions, North America had five defaults (four in the U.S. and one in Canada), while Europe had four. The remainder were from Asia-Pacific (one) and Latin America (one). By default type, distressed exchanges remained the most common and accounted for five of January's defaults. Payment defaults followed with four, and the other two were bankruptcies.

Gol Linhas Aereas Inteligentes SA was January's biggest defaulter. Latin America's largest low-cost carrier filed for Chapter 11 with about \$2.8 billion in financial debt excluding leasing obligations. Gol is the fourth Latin

American airline that has filed for Chapter 11 bankruptcy since 2020. Gol tried to address its heavy debt burden last year via a distressed exchange, but it did not sufficiently resolve the company's near-term liabilities and its financial leverage remained very high after the restructuring.

The global speculative-grade corporate default rate reached 5% for the trailing 12 months ended in January, the highest level since April 2021. The January rate was up from December's 4.8% because more defaulters entered the trailing 12-month window than exited.

In the coming 12 months, defaults will gradually head toward normalization, falling from the higher levels that resulted from the pandemic, the war in Ukraine and interest rate hikes. The credit agency predicts that January's 5% default rate will mark the current cycle's peak and that the global speculative-grade default rate will decline modestly to 3.6% by the end of this year before edging lower to 3.5% in January 2025. If realized, the default rate in 2024 will remain close to its historical average of 4.2%. Moody's Investors Service assumes that the U.S. high-yield spread will widen to 494 basis points in the coming four quarters from the low base of 344 bps at the end of January. The default rate forecast also incorporates the assumption that the U.S. unemployment rate will rise to 4.5% from the current rate of 3.7%.

The forecast is underpinned by several factors. The Federal Reserve is anticipated to begin policy rate normalization in the second quarter and lower the federal funds rate by 100 bps this year. Lower policy rates will boost borrowers' ability to cover interest expenses, especially in the loan market. In addition, high-yield spreads, a strong predictor for default rates, remain tight and are currently well below historical averages. Furthermore, private and direct lending has provided an alternative source for some small and low-rated borrowers to refinance their debt when they cannot access the syndicated loan market.

The global default rate will not fall significantly in 2024 against a backdrop of moderating global economic growth. Interest rate cuts will be gradual, and effects will take time to fully materialize. In addition, some companies that conducted distressed exchanges in prior years that did not thoroughly repair their balance sheets may re-default.

In terms of geopolitical headwinds, the Russian war in Ukraine will likely continue for the foreseeable future, but its impact on the energy and commodity markets and the global economy should continue to diminish. Ongoing geopolitical tensions in the Red Sea have forced many cargo vessels to reroute, increasing transit times and leading freight rates to rise. But unlike 2022, when supply stresses spurred high global inflation that was exacerbated by

Russia's invasion of Ukraine, these developments are expected to have a relatively limited effect on inflation and the global economy.

CORPORATE BOND ISSUANCE

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 accounted for more than half of activity globally, decreased 15% on an annual basis. U.S. high-yield issuance also experienced a sluggish start at just \$52 billion, marking its slowest kickoff to the year since 2009, and posting an 18.4% decline compared to the first quarter of 2022.

In the second quarter of 2023, issuance strengthened as worldwide offerings of corporate bonds revealed a year-over-year increase of 20.7% 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 picked up further, with worldwide offerings of investment-grade corporate bonds rising 7.5% year over year. U.S. dollar-denominated investment-grade corporate bonds totaled \$315.6 billion, up 3.5% on a year-ago basis but down 8% from the prior quarter. U.S. dollar-denominated high-yield corporate bond issuance was \$54 billion in the third quarter, down from \$65.8 billion in the second. However, high-yield issuance was up a whopping 70% on a year-ago basis.

Fourth-quarter 2023 corporate debt issuance came in suppressed. Worldwide offerings of investment-grade corporate bonds totaled \$240.5 billion, down 35% year over year, while high-yield corporate bond issuance clocked in at \$38.1 billion, increasing 15% on a year-ago basis. U.S. dollar-denominated high-yield issuance ended the year at \$207.3 billion, reflecting a colossal 45.5% revival from 2022. Meanwhile, U.S. dollar-denominated investment-grade bond issuance totaled \$1.26 trillion in 2023, corresponding to a 3.1% decline from 2022. Over the past 12 months, total U.S. dollar-denominated issuance has tracked at a near-decade low, surpassing only 2022 value by a marginal 2.6%.

For the most recent week, U.S. dollar-denominated investment-grade debt issuance totaled \$61.4 billion, raising the headline figure to \$347.9 billion since the start of the year. This reflects a 17.9% increase compared with the same period in 2023. There was \$3.15 billion in high-yield debt issued in the same period, bringing the year-to-date reading to \$59.1 billion, a 51.9% resurgence relative to last year's pace. Total U.S. dollar-denominated corporate debt issuance so far tracks 29% above where it stood in 2023 and has jumped 35.2% higher compared with 2022.

U.S. ECONOMIC OUTLOOK

The U.S. economy is performing well, with above-trend growth in real GDP continuing in the fourth quarter. Consequently, we made modest adjustments to the U.S. baseline forecast in February, including real GDP slightly stronger in the near term and more job growth in the first half of the year. This is consistent with the economic momentum and recent declines in long-term interest rates and oil prices. Nonetheless, the pattern of slowing growth in response to fiscal tightening next year, followed by a gradual return to trend growth by 2026, remains intact. The unemployment rate will gradually rise to about 4%, unchanged from last month's forecast.

In sum, key assumptions changed little in February. In terms of monetary policy, rate cuts in 2024 still begin in May. However, long-term rates were also little changed. A slowdown in growth remains the expectation for next year, though the recently demonstrated economic momentum means it will be more gradual. We assume passage of a federal budget and no federal government shutdown. Our oil price outlook is little changed, although we did reduce the near-term forecast for natural gas as supply remains elevated and warm weather is limiting demand. The outlook for house prices was largely unchanged this month with the restricted supply of homes available for sale expected to support prices throughout 2024. The projection for commercial real estate is also only modestly changed by new data and rising delinquency rates on CMBS backed by office buildings.

Changes to GDP

U.S. economic growth slowed in the fourth quarter, but not as much as expected. Real GDP declined from a clearly unsustainable 4.9% in the third quarter to a still above-trend 3.3% in the fourth, according to the Bureau of Economic Analysis' preliminary estimate. This was the sixth consecutive quarter of growth near or above the economy's potential. Consumer spending was the largest contributor as the support from inventories tumbled. Trade and government spending also rose, but fixed investment grew only modestly.

Consumer spending added 1.9 percentage points to growth, nearly as much as the prior quarter. Nonresidential fixed investment continued to rise modestly, and residential investment made its second positive contribution to growth since the start of 2021. Government added 0.6 percentage point, led by state and local spending. Growth in exports outweighed the drag from growing imports.

Inventory accumulation will slow further in the current quarter, and the contributions from consumer spending, imports and government spending will shrink in the first half of 2024. However, the near-term outlook is a bit more optimistic than last month's as the economy is demonstrating more momentum than anticipated. Real GDP in 2024 will be higher than previously forecast, but the persistence of high interest rates ensures some slowing relative to 2023. Real GDP is projected to rise 2.3% in 2024 on an annual average basis, an upward revision of 0.4 percentage point. Subsequently, growth in the following two years will be 1.6% in 2025 and 2% in 2026, approaching the long-term trend.

Labor market

The labor market delivered another upside surprise to start the year. Payroll employment rose by 353,000 in January, nearly doubling consensus expectations. Growth was strongest in healthcare, professional/business services, and retail, but payrolls were up across almost all major industries. The impact of revisions to prior months was significant and to the upside as the gains in November and December were revised higher by a combined 126,000. Overall, the average gain over the last three months was 289,000, compared with just 165,000 prerevision.

Stronger-than-expected job growth in January, combined with an uptick in hiring and a still-historically low level of layoffs, has caused us to raise our forecast for the first half of 2024. Job gains are now expected to average about 150,000 through the first half of the year compared with about 100,000 in the January forecast. Employment growth will still slow below 60,000 by year's end. The unemployment rate forecast was little changed. January's reading came in at 3.7% for the third consecutive month. The unemployment rate is still expected to gradually rise to 4% by the end of the year before peaking just above that in mid-2025.

Business investment and housing

In contrast with the strong fourth-quarter GDP reported by the BEA, real business investment rose only moderately, up 1.9% annualized. Although this was slightly more than the third quarter's 1.5% figure, it was well below the Moody's Analytics final fourth-quarter projection of 4.9%. All major segments, equipment, structures, and intellectual property were below expectation.

Equipment was nearly flat, up only 1% annualized. Holding down the total, the two largest segments of transportation, aircraft and light trucks, both fell significantly. Since aircraft shipments are lumpy, the data tend to be volatile, and the pace of spending is still close to its high point in 2018 as airlines rush to restock. However, the January 5 Alaska Airlines accident involving a Boeing 737 MAX 9 represents a downside risk to demand. The drop in light trucks reflects more persistent struggles in that segment, and the level of

activity is no higher than in 2016. Although supply-side shortages have eased, high borrowing costs have cut into demand. On the positive side, IT equipment rose for the first time in more than a year, potentially heralding the beginning of a turnaround.

Structures rose only about 3% annualized, far below the double-digit pace for most of 2023. Factory building stayed strong as chipmakers construct new fabs. But commercial weakened again after a modest rebound over much of the year. Office building remains down more than 25% from its pre-pandemic peak.

High-frequency data are still downbeat about a turnaround in equipment investment. Both shipments and new orders for nondefense, nonaircraft capital goods adjusted for inflation continue to trend down. On balance, total real business investment will be relatively slow over the next couple of years, held back by elevated costs of borrowing. On an annual average basis, the increase will be 3% in 2024 and 1.4% in 2025, compared with 2.6% and 1.2%, respectively, in the December outlook.

The outlook for house prices was largely unchanged this month with the restricted supply of homes available for sale expected to support prices throughout 2024. A modest decline in the forecasted path of interest rates on 30-year fixed-rate mortgages will bolster demand but will be insufficient to significantly change the outlook for mortgage payment affordability given rising prices and moderating income growth.

Life events such as divorces, deaths, and the birth of children along with moderating interest rates will prompt more homeowners to list their homes in 2024 than in 2023, but the rise in existing-home sales is expected to be limited. Moody's Analytics revised upward its short-term forecast for single-family permits and starts under the assumption that homebuilders will look to address the nation's housing deficit with the construction of additional homes.

The outlook for CRE prices was changed very modestly from last month. Historical CRE pricing data from the third quarter came in slightly stronger than anticipated leading to a small reduction in forecasted peak-to-trough price declines for multifamily and hotel properties. Moody's Analytics downgraded the outlook for office properties given rising delinquency rates on CMBS backed by office buildings. Low transaction volume in the CRE property market continues to inject volatility in observed prices across geographic regions and market segments. As lease extensions end and more properties change hands in coming quarters, greater price discovery will inform the outlook.

Fiscal policy

The February 2024 baseline forecast incorporates marginal changes to the outlook for federal spending, particularly discretionary outlays. Namely, we assume that outlays align with the preliminary agreement between congressional leaders on top-line spending. The final bill is expected to grant about \$1.66 trillion in outlays for fiscal 2024, which sidesteps the FRA's \$1.59 trillion through a series of accounting gimmicks. However, supplemental packages passed throughout the fiscal year—such as for international aid and disaster relief—will drive the total dollar amount higher. We assume an additional \$100 billion in supplemental spending and bringing the total discretionary spend to \$1.76 trillion. That total would mark a marginal increase over the prior fiscal year. The fiscal-year total is nearly identical to our prior forecast though the timing has changed. The current continuing resolutions, which appear to likely remain in effect through most of the first quarter, have spending tracking too high, requiring some pullback in the second half of the fiscal year (that is, in the second and third quarters) to satisfy the top-line target.

We also added the assumption that the Tax Relief for Families and Workers Act, which boosts the child tax credit and restores several tax credits, is enacted. The fiscal implications are marginal since the bill is funded with clawbacks from the COVID-19-era worker retention tax credits, so it effectively just reassigns tax credits from businesses to households. We do not assume that Ukraine, Israel and immigration supplemental bill will pass.

Monetary policy

Monetary policy assumptions remain unchanged from our last outlook. We anticipate that the fed funds rate has reached its terminal range of 5.25%-5.5% for the current tightening cycle. In January, policymakers further signaled that they will only consider rate cuts once inflation is moving more sustainably towards the Fed's 2% inflation target. We anticipate this to be the case by mid-2024 and expect the Fed to cut in May, June, July and December, by 25 basis points each. The Federal Open Market Committee will subsequently relax monetary policy slowly, cutting rates by 25 basis points per quarter until reaching 3% by the second half of 2026 and 2.5% by 2030.

We anticipate this easing thanks to a trajectory of easing inflation. Average monthly core CPI inflation decreased from an annualized 4.6% in the first half of 2023 to 3.2% in the second half. Despite December's consumer price inflation slightly exceeding expectations, the Fed's favored personal consumption expenditure measure came in better than expected, with core inflation dropping below 3% year over year. In the final quarter of 2023, annualized PCE core rose at 2%, aligning with target inflation. Meanwhile, U.S. labor

markets continue to outperform with strong back-to-back payroll reports for December and January when the economy added more than 300,000 jobs each. Even so, the jobless rate has held steady at 3.7%, following a labor force surge last fall, keeping wage pressures in check. The employment cost index for wages and salaries ended 2023 below expectations at 4%. Recession odds, thus, have fallen, underscored by strong 3.3% annualized real GDP growth in the fourth quarter of 2023, and this strength reduces the Fed's urgency to rush to immediate rate cuts.

Financial markets, meanwhile, remain bullish thanks to easing inflation and strong economic fundamentals. The Standard & Poor's 500 hit its all-time high in early February, and the 10-year Treasury yield, which had touched on 5% in mid-October 2023, settled slightly above 4%.

The February baseline has year-ago consumer price inflation at 2.9% in the first quarter of 2024, same as in the previous outlook. We anticipate that inflation will return to the Fed's 2% target by the fourth quarter of 2024. In a similar vein, we anticipate that the Treasury 10-year yield will average 4.2% in the first quarter of 2024, as in the previous baseline. Over the year, the yield will approach its equilibrium level of 4% and remain near this level until the end of the decade.

The recent reversal in Treasury yields is mirrored in foreign exchange markets, where the dollar has weakened. On a real

broad trade-weighted basis, the currency lost 2.9% from October through December. However, reflecting high U.S. interest rates, the dollar continues to ride strong and is still 5.5% above pre-pandemic levels.

Energy

Moody's Analytics has not made any notable changes to its oil price outlook. We still expect a modest rise in oil prices as supply growth slows down through the fall.

However, we have revised the natural gas price forecast lower over the past month. The forecast narrative is unchanged, emphasizing stronger exports and weaker production should lead to higher gas prices over the course of the year. However, warm weather in the early winter in important markets is reducing demand and the slowdown in gas production is taking longer to materialize. Strong natural gas production has been supported by robust U.S. shale oil drilling. Natural gas is a production output of the shale drilling process.

Second, the arbitrage trade to Europe has taken longer to boost prices. The Biden administration's recent pause on LNG export terminal approvals is unlikely to last long enough to have a material impact since it does not impact terminals that have already been approved. The effects of new terminals will take a while to materialize

THE LONG VIEW: EUROPE

A Cloud Over Germany's Solar Industry

By ROSS CIOFFI

<u>Swiss</u>-owned Meyer Burger confirmed it will close its solar modules production site in Freiberg, <u>Germany</u>, moving Germany's last solar cell manufacturer to the <u>U.S.</u> The proximate reason is because the group cannot compete with <u>Chinese</u> imports without greater support from the German state. The U.S., by contrast, is offering generous subsidies through the Inflation Reduction Act of 2022; the company expects to receive more than \$1 billion in tax relief in the coming years.

Given state support and a long-established industry in China, competition from the world's industrial center is steep. Out of the 56 gigawatts of solar panels installed in the EU in 2023, only 6 GW worth was produced in Europe. In 2022, solar panels cost about 26 U.S. cents per watt, while those in Germany were 40% more expensive at 38 cents per watt. It was not just a higher cost of labour but of energy itself. The raw materials necessary to produce panels are also largely centralized in China. For example, China produces 80% of the globe's polysilicon supply. Europe produces 11%, most of which goes into higher-value-added advanced semiconductors.

The European Commission has set a nonbinding target for 40% of solar panel purchases to be sourced in Europe. The European Union's Solar Energy Strategy from 2022, moreover, set out a target to add more than 300 GW of solar panels to a total of 600 GW by 2030. But wishes from Brussels can carry only so far. For a domestic solar panel production industry to flourish, production costs need to be competitive, which is increasingly difficult in an environment of high energy costs in Europe, disrupted global trade, and rising foreign subsidies. Absent more competitive production, domestic support or trade barriers would likely need to increase to reach the EU production targets. Is the trade-off warranted? The EU will have to decide if it is worth, for example, diverting polysilicon from the highervalue-added and strategically important field of semiconductor manufacturing.

The example of Meyer Burger evokes those issues facing manufacturers in Europe's industrial center. Problems are even worse for industries that do not already enjoy political support from Berlin or Brussels. The German economy is wheezing, with undeniable risks of recession present. And if Germany's manufacturing sector takes a hit, the rest of Europe's will as well.

Thailand's Prime Minister Calls for a Rate Cut

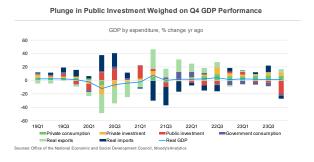
By EUGENE TAN

The <u>Bank</u> of Thailand is under pressure to cut interest rates. December-quarter <u>GDP</u> confirmed the economy is still struggling; GDP growth of 1.7% year on year was underwhelming and made for a third straight quarter where the economy underperformed market expectations. Srettha Thavisin, who became prime minister in August after the Pheu Thai Party sealed a controversial alliance with conservative and pro-military parties, this week upped the pressure on the central bank. Taking to social media, he asserted the economy was in crisis and in urgent need of a rate cut. Since then, BoT Governor Sethaput Suthiwartnarueput has rejected Thavisin's assessment of the economy and defied calls to hold an emergency meeting to loosen monetary policy. Thavisin made similar calls to cut rates in January.

Case for a rate cut

The argument for a rate cut is that it will give the economy a boost while low inflation allows for it. <u>Thailand</u> doesn't have the same inflation problem as some other Asia-Pacific economies. Its CPI fell 1.1% year on year in January, marking the fourth negative reading in a row and the softest inflation print in more than two years. Declining prices for energy and meat have led the way.

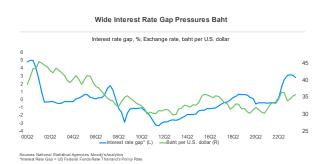
On the surface, economic indicators support Srettha's case. GDP growth in 2023 was a disappointing 1.9%, severely undershooting BoT's own forecast of 3.6% in early 2023. This pales in comparison to growth in similar economies in the region; Vietnam and Indonesia grew 5% and 5.1%, respectively, in 2023. The BoT has downwardly revised its expectations for 2024, forecasting growth of 2.5% to 3%; in September it had a more optimistic forecast of 4.4%.



However, the economic situation is more nuanced than it seems. Political infighting after the May general election delayed the approval of the budget for the fiscal year ending in September 2024. As a result, public investment in the fourth quarter plunged 20.1% year on year. While investment clearly weighed on the economy in that quarter, private consumption growth kept a good pace and export growth accelerated. Indeed, tourists flocked back to Thailand. Arrivals in December were 83% of what they were in the same month of 2019. Admittedly, the spend per tourist has not recovered to the same degree, but the Thai economy is not as frail as the headline GDP number suggests.

Financial market volatility a concern

The argument against a rate cut is the risk it poses to financial markets. Since the monetary tightening cycle began in the U.S., the gap between interest rates in the U.S. and Thailand has widened greatly. This has caused the baht to lose value against the greenback. At its weakest point, in October 2022, the currency was down about 14%. This was when the interest rate margin was around 225 basis points. The current margin is around 300 basis points—the largest in more than two decades—and the baht is down about 7% from the start of the U.S. tightening cycle. That improvement from being down as much as 14% is likely a function of expectations of a U.S. rate cut. Fear that a Thai rate cut would only send more money offshore and put extra pressure on the baht remains. A cut would likely give exports a quick shot in the arm, but further deviation from the U.S. Fed's path risks volatility in Thai financial markets. Indeed, the BoT cited the depreciating baht as one factor behind its 25-basis point rate hike in September to 2.5%. To normalise the interest rate differential against the U.S. fed funds rate, the BoT would have to keep its policy rate steady while the U.S. eases this year.



The BoT has had a record of autonomy, particularly since amendments in 2008 were made to strengthen its independence under the law. The administration of former Prime Minister Yingluck Shinawatra pressured the BoT to cut rates in early 2013, but it took prolonged economic weakness, exacerbated by huge political protests, before the central bank cut the policy rate in November that year. Srettha has maintained that the BoT remains functionally independent, and the decision to start easing lies in the hands of the MPC.

Still, February brought a departure from the usual consensus among MPC members on policy settings; five members approved the decision to hold the policy rate, but two called for a rate cut. Due to the financial risk associated with deviating from the U.S. Fed path, we expect another rate pause by the BoT at its next scheduled meeting, which will be on 10 April. However, the odds of a rate cut have certainly increased given the recent poor headline GDP figure. If upcoming indicators such as private consumption and industrial production are poor, the BoT might be prompted to find a knife.

THE LONG VIEW: LATIN AMERICA

Peru Shows Positive Progress

By JESSE ROGERS

The Peruvian economy is showing green shoots. For the second month in a row, leading indicators such as cement construction and public investment—a proxy for overall fixed investment—grew, while imports of capital goods snapped a nearly year-long decline. On the consumption side, food sales in the Lima metropolitan area and electricity demand nationally both increased, while the Central Bank of Peru's leading indicator of loan growth turned up. All of these are good signs for an economy that struggled for the past 13 months and spent the final three quarters of 2023 in

The economy's troubles over the past year can be broken down into things that could have been avoided and things that couldn't. Peru's political crisis, which hampered business confidence and dampened the labor market, belongs in the first category. President Dina Boluarte did little to heal urban-rural fissures following the impeachment of former President Pedro Castillo in December 2022. Fear of social unrest have weighed over the business environment ever since, pushing investment lower in three of the past five quarters and stirring capital flight. Instead of holding early presidential elections to bring Castillo's supporters back into the fold, Boluarte sided with Peru's powerful congress, its members tarred by corruption charges and none too eager to face national elections before 2026.

Of the things that could not have been avoided, the most consequential is the high interest rate environment that was a necessary response to the past few years' food and energy supply shocks. Though the Central Reserve Bank of Peru began to lower its policy rate in September and has cut rates by a cumulative 150 basis points, the real interest rate is still about as high as it has been since the start of the bank's inflation-targeting regime two decades ago. High real interest rates have weighed on both consumption and investment, preventing a self-reinforcing cycle of job and income gains from taking hold.

The second unlucky event was the return of El Niño this year, which delivered heavy rains to coastal regions and drought to key agricultural-producing regions inland. Warm waters off the coast also thinned the anchovy population, leading to a lean year for the fishing industry. Though only a small part of GDP, Peru's anchovy catch ranks among the world's largest. With El Niño fading and inflation falling fast, the economy will return to growth this year. However, barring more enduring solutions to the country's political crisis and large informal economy, the recovery will be without any flourish. Low growth will make it harder to bridge political fissures and achieve the kinds of reforms the economy would need to replicate its success during the first two decades of this century.

RATINGS ROUNDUP

Corporate Credit Quality Deteriorates

By OLGA BYCHKOVA

U.S.

U.S. credit downgrades overwhelmingly outnumbered upgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade bonds and industrial, financial and utility companies. Downgrades comprised 11 of the 17 rating changes but only 12% of affected debt.

Downgrades were headlined by Sotheby's, one of the two largest auction houses in the world, impacting less than 7% of debt affected in the period, with its corporate family rating and the ratings on the existing backed senior secured notes, senior secured notes and senior secured bank credit facilities lowered to B3 from B2 and its probability of default rating cut to B3-PD from B2-PD. The outlook was maintained at stable. According to the rating agency, the downgrades reflect Sotheby's EBITDA declines in both 2022 and 2023, following lower buyer demand in a weakened art auction market as a result of higher interest rates, geopolitical issues in the Middle East and Eastern Europe, and a slowdown in China on top of general consumer weakness. While aggregate sales volumes have been resilient over the past couple of years reflecting strength on the supply side for auctions, margins have declined because of cost pressures with the company having to spend more on guarantees, risk sharing and marketing to facilitate sales. The downgrade were also motivated by governance considerations, particularly the company's decision to continue dividend payments out of its credit group in 2023 despite its operating performance deterioration and its very high leverage, the credit agency added. Meanwhile, the stable outlook reflects the agency's expectation of improved profitability and adequate liquidity over the next 12 to 18 months.

The largest upgrade, accounting for nearly 41% of debt affected in the period, was issued to a leading global online travel agency Expedia Group Inc., with its senior unsecured rating raised to Baa2 from Baa3. The outlook changed to stable from positive. The upgrade was prompted by the company's recovery from the lows of the pandemic, with revenue, EBITDA and free cash flow exceeding 2019 levels, driven by B2C and lodging, Expedia's largest businesses. Moody's Investors Service expects the company to sustain organic average annualized revenue growth in the mid-tohigh-single-digit percentage range, while profitability continues to improve with EBITDA margins expanding beyond 20%. The stronger earnings profile reflects the execution of Expedia's multiyear strategy to simplify its business, including the harmonization of its brands and marketing, unification of previously fragmented loyalty

programs into one, consolidation of its siloed technology stacks into a single, centralized cloud-based platform, and a more streamlined cost structure, the rating agency said.

Europe

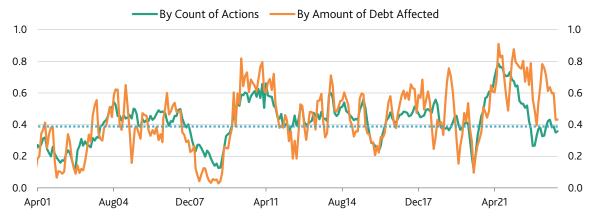
Across Western Europe, corporate credit rating change activity was lighter and weaker than in the U.S. with downgrades outstripping upgrades 4:1 and comprising 100% of affected debt, issued to the diverse set of speculative-grade industrial companies.

The largest downgrade last week, accounting for 63% of affected debt, was made to Telenet Group Holding NV, a provider of broadband and mobile communications services in Belgium and Luxembourg, which saw its corporate family and probability of default ratings lowered to B1 from Ba3 and B1-PD from Ba3-PD, respectively. Concurrently, Moody's Investors Service downgraded to B1 from Ba3 the instrument ratings on the backed senior secured bank credit facilities issued by Telenet International Finance S.a r.l. and Telenet Financing USD LLC as well as on the senior secured notes issued by Telenet Finance Luxembourg Notes S.a r.l. The outlook on all entities changed to stable from negative.

The downgrade was prompted by Telenet's announcement that it had up-streamed a special dividend of €1,190 million to its parent Liberty Global Holding Belgium B.V. (a subsidiary of Liberty Global plc) in the fourth quarter of 2023. The shareholder distribution was funded through the issuance of a €890 million sustainability linked term loan and €300 million of cash on balance sheet. The rating agency estimates that the debt issuance and use of cash for the dividend have increased Telenet's debt-to-EBITDA and net debt-to-EBITDA to the levels above the thresholds for the previous Ba3 rating. The stable outlook on Telenet's rating reflects the credit agency's expectation that the company's EBITDA will decline in the mid-single-digit percentages over 2024 before a broad stabilization in 2025. This is likely to lead to leverage and cash flow from operations to debt ratio remaining well within the thresholds set for the current B1 rating.

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	
2/21/2024	TOPAZ SOLAR FARMS LLC	Industrial	SrSec	1100	U	Ba2	Ba1	SG
2/21/2024	CONSTELLATION RENEWABLES, LLC	Industrial	SrSec/BCF		U	Ba3	Ba2	SG
2/21/2024	MIC GLEN LLC	Industrial	SrSec/BCF		D	B2	В3	SG
2/22/2024	APEX TOOL GROUP, LLC.	Industrial	SrSec/BCF		D	Caa3	Ca	SG
2/22/2024	AXALTA COATING SYSTEMS LTDAXALTA COATING SYSTEMS, LLC	Industrial	SrUnsec/LTCFR/PDR	1700	U	B1	Ba3	SG
2/23/2024	DOMINION ENERGY, INCQUESTAR GAS COMPANY	Utility	SrUnsec/MTN	100	D	A3	Baa1	IG
2/23/2024	TRIBE BUYER LLC	Industrial	PDR		D	Ca	D	SG
2/23/2024	HORNBLOWER SUB, LLC	Industrial	PDR		D	Caa3	D	SG
2/26/2024	KITE REALTY GROUP TRUST-KITE REALTY GROUP, LP	Financial	SrUnsec/LTIR	1575	U	Baa3	Baa2	IG
2/26/2024	AMERICAN ROCK SALT HOLDINGS, LLC-AMERICAN ROCK SALT COMPANY LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
2/26/2024	SOUND INPATIENT PHYSICIANS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG
2/26/2024	EAGLE PARENT CORP.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG
2/27/2024	REGENCY CENTERS CORPORATION-REGENCY CENTERS, L.P.	Financial	SrUnsec	3475	U	Baa1	А3	IG
2/27/2024	EXPEDIA GROUP, INC.	Industrial	SrUnsec	6794.4	U	Baa3	Baa2	IG
2/27/2024	VANTAGE SPECIALTY CHEMICALS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG
2/27/2024	ENVIVA HOLDINGS, LP-ENVIVA INC.	Industrial	SrUnsec/LTCFR/PDR	750	D	Caa2	С	SG
2/27/2024	BIDFAIR HOLDINGS INCSOTHEBY'S	Industrial	SrSec/SrSec/BCF/LTCFR/PDR	1122.687	D	B2	В3	SG
Source: Mood		industrial	2L26C\2L26C\RCF\F1CFK\bDK	1122.687	ט	BZ	В3	

FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/S G	Country
2/21/2024	TRINSEO PLC-TRINSEO MATERIALS OPERATING S.C.A.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	950	D	В3	Caa1	SG	LUXEMBOURG
2/21/2024	CELESTE BIDCO B.V.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG	NETHERLANDS
2/23/2024	RENK HOLDING GMBH-RENK GMBH	Industrial	LTCFR/PDR		U	B1	Ba3	SG	GERMANY
2/23/2024	ENVALIOR FINANCE GMBH	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG	GERMANY
2/27/2024	LIBERTY GLOBAL PLC-TELENET FINANCE LUXEMBOURG NOTES S.A R.L.	Industrial	SrSec/SrSec/BCF/LTCFR/PDR	1649.287	D	Ba3	B1	SG	BELGIUM

Source: Moody's

MARKET DATA

Figure 1: 5-Year Median Spreads-Global Data (High Grade)

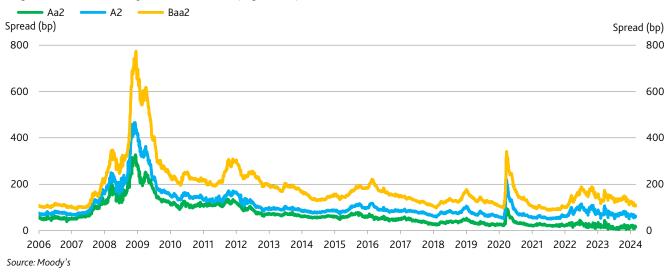
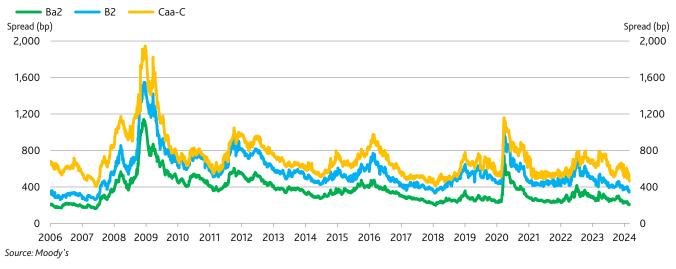


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS Movers

Figure 3. CDS Movers - US (February 22, 2024 – February 29, 2024)

CDS Implied Rating Rises	CDS Impli		
Issuer	Feb. 29	Feb. 22	Senior Ratings
PACCAR Financial Corp.	Aa2	A2	A1
WEC Energy Group, Inc.	Aa3	A2	Baa1
Bank of America Corporation	Baa1	Baa2	A1
John Deere Capital Corporation	A2	A3	A1
Amgen Inc.	Aa3	A1	Baa1
Philip Morris International Inc.	A1	A2	A2
Lowe's Companies, Inc.	Aa2	Aa3	Baa1
Bank of New York Mellon Corporation (The)	A2	A3	A1
United Parcel Service, Inc.	Aa1	Aa2	A2
Visa Inc.	Aa1	Aa2	Aa3

CDS Implied Rating Declines	CDS Impli	_	
Issuer	Feb. 29	Feb. 22	Senior Ratings
Texas Instruments, Incorporated	A2	Aa3	Aa3
Oracle Corporation	A3	A2	Baa2
Amazon.com, Inc.	Aa3	Aa2	A1
Merck & Co., Inc.	Aa2	Aa1	A1
Truist Financial Corporation	Baa1	A3	A3
Burlington Northern Santa Fe, LLC	Aa2	Aa1	A3
CCO Holdings, LLC	B2	B1	B1
Fidelity National Information Services, Inc.	Baa2	Baa1	Baa2
Berkshire Hathaway Energy Company	A1	Aa3	A3
PacifiCorp	Aa2	Aa1	Baa1

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff
iHeartCommunications, Inc.	Caa3	2,396	2,180	216
Paramount Global	Baa3	287	241	46
Unisys Corporation	В3	548	507	41
Dana Incorporated	B1	184	167	17
Smithfield Foods, Inc.	Ba1	145	132	14
SBA Communications Corporation	Ba3	159	146	13
Walgreens Boots Alliance, Inc.	Ba2	99	88	11
Walgreen Co.	Ba1	98	87	11
Anywhere Real Estate Group LLC	В3	892	883	10
Meritage Homes Corporation	Ba1	135	125	10

CDS Spread Decreases	_		CDS Spreads	
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff
CSC Holdings, LLC	B2	1,358	1,890	-533
Staples, Inc.	Caa2	1,051	1,416	-366
Liberty Interactive LLC	Caa2	1,502	1,781	-279
Lumen Technologies, Inc.	Ca	2,682	2,904	-223
Dish DBS Corporation	Caa3	2,720	2,931	-212
Dish Network Corporation	Caa3	2,212	2,384	-173
Embarq Corporation	Caa3	1,664	1,802	-138
Qwest Corporation	Caa3	1,181	1,279	-98
Carnival Corporation	В3	267	342	-75
Glatfelter Corporation	Caa1	353	403	-51

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (February 22, 2024 – February 29, 2024)

CDS Implied Rating Rises	CDS Impli	_	
Issuer	Feb. 29	Feb. 22	Senior Ratings
Credit Mutuel Arkea	A3	Baa2	Aa3
ABB Ltd	Aa2	A1	A3
Rabobank	Aa1	Aa2	Aa2
Banque Federative du Credit Mutuel	A2	A3	Aa3
Credit Agricole Corporate and Investment Bank	A1	A2	Aa3
BASF (SE)	A1	A2	A3
Siemens Aktiengesellschaft	Aa1	Aa2	Aa3
Anheuser-Busch InBev SA/NV	Aa3	A1	A3
Telecom Italia S.p.A.	Ba2	Ba3	B1
National Grid Electricity Transmission plc	A2	A3	Baa1

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	Feb. 29	Feb. 22	Senior Ratings
Bayerische Landesbank AoR	A3	A1	Aa3
Avon Products, Inc.	Baa3	Baa1	Ba3
Spain, Government of	A2	A1	Baa1
DZ BANK AG	Baa1	A3	Aa2
DNB Bank ASA	A3	A2	Aa2
Portugal, Government of	A1	Aa3	A3
Svenska Handelsbanken AB	A3	A2	Aa2
Landesbank Hessen-Thueringen Girozentrale	Baa3	Baa2	Aa3
Bayerische Motoren Werke Aktiengesellschaft	A3	A2	A2
Landesbank Baden-Wuerttemberg	Baa1	A3	Aa3

CDS Spread Increases	_		CDS Spreads	
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff
Vedanta Resources Limited	Ca	1,361	1,091	270
Close Brothers Finance plc	Aa3	169	108	61
Close Brothers Group plc	A2	167	107	60
Hamburg Commercial Bank AG	A3	205	156	49
Iceland Bondco plc	Caa2	533	502	31
Avon Products, Inc.	Ba3	85	57	28
Bellis Acquisition Company PLC	Caa2	499	473	26
Landesbank Hessen-Thueringen Girozentrale	Aa3	94	75	19
TUI AG	B1	351	338	13
Bayerische Landesbank AoR	Aa3	49	39	11

CDS Spread Decreases		CDS Spreads				
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff		
Ardagh Packaging Finance plc	Caa1	1,204	1,581	-376		
Carnival plc	В3	253	324	-71		
Trinseo Materials Operating S.C.A.	Caa1	1,974	2,001	-28		
thyssenkrupp AG	Ba3	152	180	-28		
Picard Bondco S.A.	Caa1	336	364	-28		
Nidda Healthcare Holding GMBH	Caa3	109	133	-24		
Credit Mutuel Arkea	Aa3	44	67	-23		
TK Elevator Holdco GmbH	Caa1	381	403	-22		
Orsted A/S	Baa1	62	82	-20		
Stonegate Pub Company Financing 2019 plc	Caa2	485	503	-18		

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (February 22, 2024 – February 29, 2024)

CDS Implied Rating Rises	CDS Implied Ratings		_
Issuer	Feb. 29	Feb. 22	Senior Ratings
Mizuho Bank, Ltd.	Aa2	A2	A1
Mizuho Financial Group, Inc.	A1	A3	A1
National Australia Bank Limited	Aa1	Aa2	Aa3
Mitsubishi UFJ Financial Group, Inc.	Aa2	Aa3	A1
MUFG Bank, Ltd.	Aa2	Aa3	A1
Korea Gas Corporation	Baa1	Baa2	Aa2
Sumitomo Corporation	Aa1	Aa2	Baa1
NIPPON STEEL CORPORATION	A2	A3	Baa2
CNAC (HK) Finbridge Company Limited	Ba1	Ba2	Baa2
Mitsubishi HC Capital Inc.	Aa1	Aa2	A3

5 Implied Rating Declines CDS Implied Ratings			
Issuer	Feb. 29	Feb. 22	Senior Ratings
Coca-Cola Amatil Limited	A3	Aa3	Baa1
Electric Power Development Co., Ltd.	A2	Aa3	A3
Korea Development Bank	A2	A1	Aa2
United Overseas Bank Limited	A2	A1	Aa1
Singapore, Government of	Aa2	Aa1	Aaa
Malaysia, Government of	A2	A1	A3
Transurban Finance Company Pty Ltd	Baa3	Baa2	Baa2
Bank of China Limited	Baa3	Baa2	A1
Indian Railway Finance Corporation Limited	Baa2	Baa1	Baa3
SK Hynix Inc.	Baa3	Baa2	Baa2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff
Vanke Real Estate (Hong Kong) Company Limited	Ba1	1,361	1,273	88
Coca-Cola Amatil Limited	Baa1	44	36	9
RHB Bank Berhad	A3	84	79	5
SK Hynix Inc.	Baa2	75	71	4
Adani Green Energy Limited	B2	272	268	4
Electric Power Development Co., Ltd.	A3	40	37	3
China, Government of	A1	64	62	2
Sydney Airport Finance Company Pty Ltd	Baa1	68	66	2
LG Chem, Ltd.	A3	63	61	2
GMR Hyderabad International Airport Limited	Ba3	183	182	2

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Feb. 29	Feb. 22	Spread Diff
Pakistan, Government of	Caa3	1,767	1,800	-33
Mizuho Financial Group, Inc.	A1	37	51	-14
Halyk Bank of Kazakhstan JSC	Ba2	350	363	-13
Tata Motors Limited	Ba3	158	170	-12
Mizuho Bank, Ltd.	A1	32	42	-10
CNAC (HK) Finbridge Company Limited	Baa2	131	139	-8
Development Bank of Kazakhstan	Baa2	123	130	-8
Kia Corporation	A3	93	101	-8
SoftBank Group Corp.	Ba3	171	179	-7
Amcor Pty Ltd	Baa2	64	71	-7

Source: Moody's, CMA

ISSUANCE

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

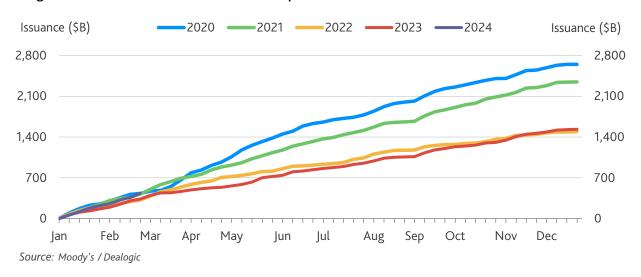


Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated

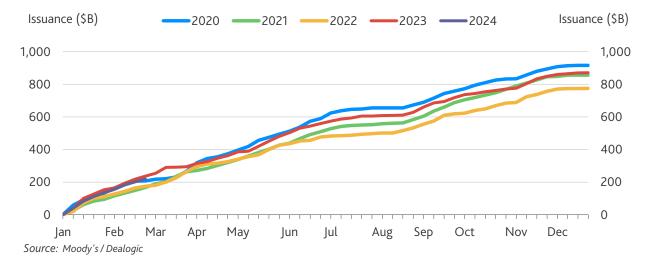


Figure 8. Issuance: Corporate & Financial Institutions

	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	61.403	3.150	68.955
Year-to-Date	347.936	59.069	434.518

		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	14.243	0.648	17.663
Year-to-Date	76.164	13.263	122.981

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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Editor James Hurd

helpeconomy@moodys.com

Contact Us Americas +1.212.553.1658 clientservices@moodys.com

Europe +44.20.7772.5454 clientservices.emea@moodys.com

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

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