

**WEEKLY MARKET  
OUTLOOK**

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# A Positive End for 2022

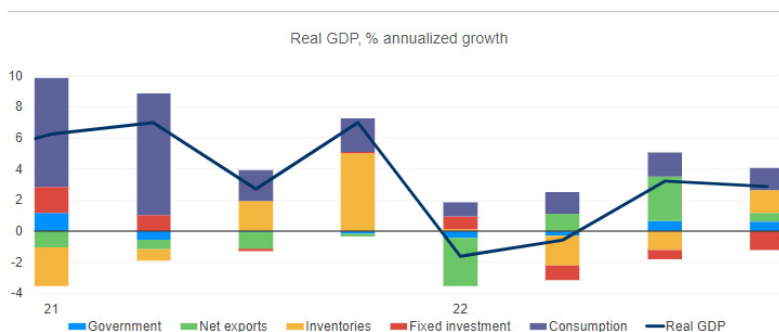
At 2.9%, U.S. GDP growth in the fourth quarter split the difference between our expectations and the consensus, according to the preliminary estimate from the Bureau of Economic Analysis. After economic activity contracted in the first half of 2022, the year ended on a more positive note. However, full-year growth for 2022 came in at just 1%, below potential and well below the 5.7% growth in 2021.

Consumer spending remained a primary contributor to growth, adding 1.4 percentage points, but weak real income growth will continue to weigh on consumers. After an outsize contribution from trade in the third quarter, it added only modestly to growth to end the year. Inventories turned a corner in the fourth quarter, posting the largest contribution to growth at 1.5 percentage points after acting as a headwind in preceding quarters. This leaves the mix of growth weaker than the top-line suggests. Final sales of domestic products, which exclude the impact from inventories, rose 1.4%, a material slowdown from the 4.5% gain in the third quarter.

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**Inventory Build Props Up Fourth-Quarter GDP**



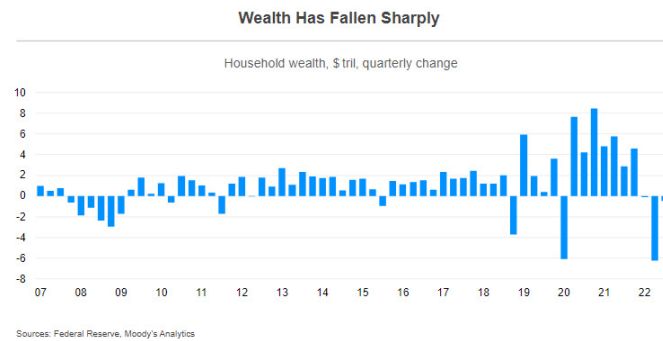
Sources: BEA, Moody's Analytics

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

While our current baseline forecast has the economy avoiding a recession this year, we expect growth to remain sluggish and come in around 1% again in 2023 in the face of high and still-rising interest rates and heightened uncertainty. Consumer spending is unlikely to pick up this year, and while there is some hope for better trade prospects if the dollar continues to weaken, it is unlikely to be enough to offset weakness elsewhere

### U.S. household wealth on the way down

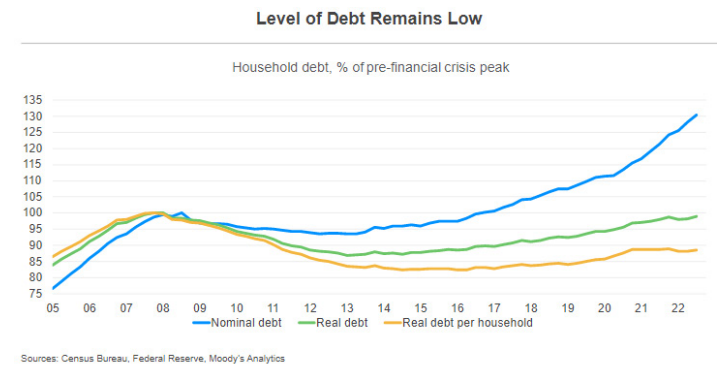
Household wealth in the U.S. fell sharply in the first three quarters of 2022 and undoubtedly fell further in the year's final three months. The drop in the second quarter was the largest quarterly decline on record in dollar terms, eclipsing the first three months of 2020 when the onset of the COVID-19 pandemic caused asset values to plunge. In just three quarters, wealth has declined by nearly two-thirds of the amount it declined in a year and a half during the financial crisis more than a decade ago.



Further, more declines are likely. Through the third quarter of last year, the value of real estate assets and housing wealth was still rising. This undoubtedly reversed in the fourth quarter as house prices were declining. However, even at the start of 2023, house prices remained overvalued and at risk from still-rising interest rates. Our baseline forecast expects that house prices will decline 5% to 10% over 2023 and 2024. By 2025, U.S. house prices will return to their late-2021 level, eliminating an estimated \$4 trillion in housing wealth.

From a balance sheet perspective, households remain in a strong position. While wealth has fallen substantially, it grew at an unprecedented rate in late 2020 and early 2021. Household wealth is comfortably above the level that would have been achieved if it had continued to grow at the pace seen in the five years leading up to the pandemic. Even if adjusted for the surge in inflation in 2022, real wealth is about on par with where the pre-pandemic trend would have put it, a remarkable achievement given that the economy suffered a deep recession in 2020.

The situation is manageable on the liability side of the balance sheet. Rising house prices pushed up the usage of mortgage debt beginning in the second half of 2020. More recent, rising inflation and reduced government support have contributed to rapid growth in consumer debt. However, the level of debt remains manageable. Despite the strong growth of late, real debt per household remains more than 11% below its elevated pre-financial crisis peak. Further, the bulk of the debt, more than 80%, is fixed rate and insulated from the recent increase in interest rates. Hence, as noted, debt burdens remain remarkably low. Again, given increases in debt and interest rates, burdens will increase, but not painfully so, at least for some time.



Wealth is falling, and balance sheets are deteriorating. This will be a drag on spending growth in 2023 and likely beyond. However, at least at present, balance sheets remain strong. Even a modest deterioration poses little threat to consumers' ability to spend if they have healthy income growth. However, if balance sheets deteriorate more than expected, negative wealth effects will grow, and credit quality will deteriorate further, threatening consumers' access to credit. If severe enough, it could push the still-fragile economy into recession.

### Leading indicators and recession risks

Expectations are strong that high and quickly rising interest rates will push the economy into recession at some point in 2023. Recent surveys of professional economists put the probability of a recession in the next 12 months at close to two-thirds. Given how deep this recession pessimism runs there is reason to worry that it could be self-fulfilling. Recessions are ultimately a loss of faith by consumers that they will hold on to their jobs causing them to curtail their spending, and a loss of faith by businesses that they will be able to sell what they produce, causing them to lay off workers. A self-reinforcing vicious cycle—a recession—takes hold. However, our baseline outlook still assumes a path forward this year with slow growth, but no recession.

A coming downturn would be consistent with many tried-and-true leading indicators of recession. Most notable is the deep inversion of the Treasury yield curve. When the two-

year Treasury yield rises above the 10-year Treasury yield, a recession invariably happens more than a year later. The two-year rose firmly above the 10-year in July. The long lag between inversion and recession likely reflects how long it takes for a tightening in monetary policy to fully impact the economy. However, the most recent inversion should be taken with a grain of salt since the Fed's forward guidance implies a yield curve inversion even without recession.

The Conference Board's leading economic index also presages a similarly dark economic outlook. The index is a compilation of 10 indicators that have historically led recessions. They include the shape of the yield curve, measures of interest rate-sensitive manufacturing and housing activity, and labor market indicators. When the index falls sharply on a year-over-year basis and most of the indicators are down, as is now the case, recession follows six

to 12 months later. While the index fell for the 10th straight month in December, the year-over-year decline is still not as sharp as that seen during prior downturns.

Also, it is important to note that historically, a decline in the leading economic index has coincided with an uptick in jobless claims—and jobless claims are indeed a component of the index. But to date, jobless claims remain quite low, which along with a historically low unemployment rate, signal ongoing labor market strength. A final reason to suspect that a recession may not be dead ahead is that consumer confidence improved in December, and has risen even further in January, according to the preliminary estimate from the University of Michigan. So far, consumers appear to be keeping the faith thanks to improvements in inflation, lower energy prices, and a still-strong labor market.

# Why Is the U.S. Labor Market so Tight?

BY MATT COLYAR and JUSTIN BEGLEY

Through stubbornly high inflation in 2022 and an aggressive commitment from the Federal Reserve to stamp it out, the U.S. labor market has remained extraordinarily tight. For every unemployed person, there are nearly two open positions that businesses are looking to fill. Headline-grabbing layoff announcements from well-known tech and media companies have become a frequent occurrence but have not yet resulted in any observable uptick in national jobless data. The unemployment rate and weekly claims for unemployment insurance are hovering near 50-year lows.

The shortage of workers has frustrated employers, pushed up wages, and become the paramount concern of Fed policymakers. This is because wages and prices tend to have a simultaneous relationship. That is, rising pay puts upward pressure on prices, and vice versa, due to the propensity of employers to pass higher labor costs to consumers by raising prices. This is particularly true in service industries where labor represents a disproportionately large share of firms' operating costs. In turn, workers demand higher pay to keep up with rising costs. The cycle may continue until a dreaded wage-price spiral ensues. The Fed is keenly watching services inflation and myriad measures of wage growth to determine whether this hard-to-break cycle is taking hold.

## Three ways to loosen

There are three ways—of varying preferability—that this tightness could loosen further and obviate some upward pressure on wages. Two of the ways require a reduction in labor demand. The first of these is a decline in job openings. This represents the least painful form that a reduction in a firm's labor needs could take. Contrasted with layoffs to existing jobs, fewer job openings limit income loss but weaken workers' leverage to demand higher wages. Labor demand, however, has not abated much since the Fed began this cycle of rate hikes; job openings, according to the Job Openings and Labor Turnover [Survey](#), remain stubbornly high. The second way reduced demand for labor would manifest is by a sufficiently large uptick in joblessness. This is the most economically painful and the most familiar way that inflation is brought to heel.

The third and most desired avenue by which slack could be delivered to the U.S. labor market would be an increase in labor supply. The labor force is bigger today than it was prior to the pandemic, but only modestly. In the economic expansion prior to the pandemic, the labor force was growing by about 1 million per year in the U.S. By December 2022, the labor force had grown by just 200,000 since late

2019, spending most of the intervening three years slowly climbing out of a pandemic-induced hole.

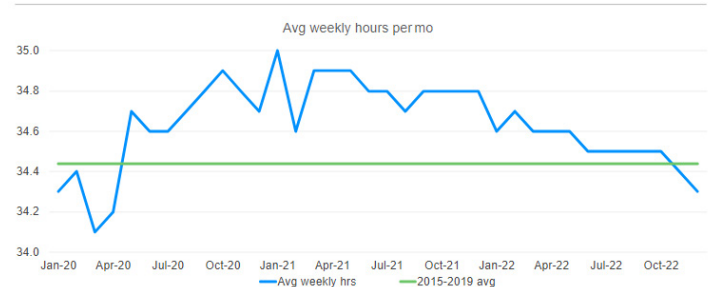
A strong and sustained inflow of labor force participants would deliver a rebalancing that would not require an increase in joblessness but would ease wage growth and boost economic output. The rub is that there is no obvious source of this influx, and several factors contribute to the problem. Baby boomers are retiring en masse, and a period of [curtailed immigration](#) in the U.S. is further constraining labor supply. At the same time, men without college degrees were nearly twice as likely to be out of the labor force in 2022 than they were in 2000. All of these have contributed to labor constraints that have been the bane of employers for the past two years.

Yet another contributing factor is at play—a reduction in work hours.

## Working hard or hardly working?

When the pandemic set the stage for mass labor shortages and an extraordinarily tight labor market, employers attempted to compensate by stretching the existing labor supply further. Most of the expanded work hours fell on part-timers—many of whom transitioned to full-time work. In the aftermath of the pandemic recession, part-time jobs, as a share of total employment, have stabilized at a level not seen in more than four decades. This sent the average number of hours worked per week for all private employees to a record high. Yet the average time spent working in a given week has come down after peaking in early 2021, even falling below the pre-pandemic average by the end of 2022.

After Peaking in 2021, Hours Worked Per Week Has Steadily Descended



Sources: FRED, BLS, Moody's Analytics

In part, the decline in average weekly hours is owed to a growing labor force. But even with the total number of available workers fully restored to its pre-pandemic level, employers continue to struggle for an adequate supply of labor to meet their needs, which has kept the

unemployment rate near a record low. The labor market may be even tighter than the current unemployment rate and prime-age employment-to-population ratio indicate.

Fewer work hours is one of the reasons why. Since the turn of the century, the amount of time that prime-aged (25-54) labor force participants spent at work each week has fallen more than one hour, or around 2.5% of the standard 40-hour workweek. The cutback over the prior two decades has been more dramatic for prime-aged men, who have seen a reduction of about 2.5 hours. This cohort is scaling back even more in today's environment. Consequently, while women have kept up the work grind, average work hours for men in 2022 significantly underperformed compared with the years leading up to the pandemic, amplifying the labor market's current tightness.

College-educated workers are leading the way in work-hour reductions, particularly college-educated men. Such a reduction appears to be voluntary given the available evidence. Job openings for the white-collar, professional industries that employ this cohort remain elevated above their historical norm, indicating the demand for work is there. Further, with the labor market as tight as it is, and given the skills that college graduates possess, there are a plethora of opportunities for these individuals to work more hours. Indeed, college-educated men have been scaling back their workweeks for at least two decades. A recent [study](#) from the National Bureau of Economic

Research suggests a similar explanation—that prime-age college-educated men are choosing to reduce their working hours.

Some of this may have to do with things like child-care needs, as the number of people that are absent from work is still riding above the pre-pandemic norm. Further, previous [analysis](#) found that more than 1.5 million prime-age workers struggle with long-COVID symptoms, which may impact their ability to work normal hours. But, given the longevity of the propensity of workers to reduce the number of hours they work, the pandemic is not likely the only explanation, if it even still is at all. The authors of the aforementioned study conjecture that a shift in preferences toward a greater work-life balance can likely explain some of the pullback, especially in the wake of the "quiet quitting" movement. To be sure, the pandemic was the catalyst in resetting such priorities as it opened the door to more flexible and remote work arrangements. As a result, those who can afford to, namely college-educated, higher-earning workers, have chosen to work fewer hours on average.

The tightness of the labor market has likely given these specialized, not-as-easily replaceable workers the confidence to dictate a more favorable work/life balance. Therefore, as long as low unemployment persists, reduced hours will continue to be a tightening mechanism in the labor market.

# The Week Ahead in the Global Economy

## U.S.

The U.S. economic calendar will be jam packed with critical data releases. On Tuesday, the employment cost index for the fourth quarter of 2022 is expected to show that wage growth continues to moderate. On Wednesday, we will get December data on job openings, which will show that labor demand further moderated, albeit very slowly.

While the Federal Reserve closely watches both the employment cost index and job openings, neither is likely to alter the course of monetary policy as the Federal Open Market Committee concludes its meeting on Wednesday. Both our expectation and the strong consensus is that the Fed will again throttle back rate hikes, this time to just 25 basis points as evidence mounts that inflation is coming back under control and a soft landing is still in the cards.

We will also continue to pay close attention to initial jobless claims as the timeliest indicator of changes in the labor market. Claims remain well below our estimate of the break-even level, or that consistent with no monthly job growth. While weaker hiring will certainly play a role in the path of the labor market, it is hard to imagine a significant deterioration occurring without a meaningful uptick in layoffs and unemployment insurance claims.

Friday will bring the first employment report of the new year. While the monetary policy implications will be limited given the timing of the report, it is still critical that we see job growth continuing to moderate to allow the labor market to cool and wage growth to slow.

Other key data out next week include Conference Board consumer confidence, construction spending, the ISM manufacturing index, vehicle sales, productivity, and factory orders.

## Europe

Next week will be full of important releases for the euro zone. At the forefront will be the preliminary estimate of HICP inflation for January and the preliminary estimate of GDP in the fourth quarter. We estimate that inflation declined to 9% year over year in January from 9.2% in December. The deceleration will stem from the energy segment thanks to lower natural gas and electricity prices.

However, there will be some forces slowing the decline, such as the rebound in German energy inflation following the one-off policy effect in December, and the lifting by 15% of France's price cap on electricity and gas. Meanwhile, we see food inflation remaining strong and a pickup in core inflation. Firms update their price lists at the start of the new year, and the PMI surveys from January reported a tangible increase in selling prices by manufacturers and service-providers.

Meanwhile, as of our January baseline forecast, we expect that euro zone GDP contracted 0.4% quarter on quarter during the fourth quarter. High inflation and low consumer and business confidence will have caused private consumption and fixed investments to contract. However, there are some upside risks that might mean GDP did not decline by as much. Chief of these is the significant decline in natural gas and oil prices in the final quarter of the year. The pass through to utility bills likely did not come quickly enough to make a large difference, but the stabilization in the energy crisis may have prompted more spending.

Indeed, sentiment indicators gradually improved during the period. There were also government support schemes, that may boost spending, such as Germany's policy to cover utility bills during December. Ultimately, even with these improvements to the outlook, recession risks persist for the euro zone.

## Asia Pacific

Hong Kong's economy will have remained in the doldrums in the last quarter of 2022, likely contracting 4% year on year. That would mean the economy contracted 3.6% across the year. Investment and trade will be the biggest drags on the economy in the final quarter and the year as a whole on account of high interest rates passing through from the dollar peg. Consumption will also be down.

Meanwhile, we expect China's Manufacturing Purchasing Manager's Index for January to tick up to 49.8 points, just below the neutral threshold of 50 points. Since the easing of COVID-19 restrictions, case numbers have rocketed. The jump in cases will likely lead to short-term labour disruptions and in turn feed through to production.

# Geopolitical Calendar

| Date      | Country         | Event  | Economic Importance | Financial Market Risk |
|-----------|-----------------|--|---------------------|-----------------------|
| 7-Feb     | Australia       | Reserve Bank of Australia monetary policy announcement | Medium              | Low                   |
| 8-Feb     | India           | Reserve Bank of India monetary policy announcement     | Medium              | Low                   |
| March     | Beijing         | National People's Congress                             | High                | Medium                |
| 7-Mar     | Australia       | Reserve Bank of Australia monetary policy announcement | Medium              | Low                   |
| 23-24-Mar | European Union  | European Council summit                                | Low                 | Low                   |
| 10-Mar    | Japan           | Bank of Japan monetary policy announcement             | Medium              | Low                   |
| 2-Apr     | Finland         | General election                                       | Medium              | Low                   |
| 4-Apr     | Australia       | Reserve Bank of Australia monetary policy announcement | Medium              | Low                   |
| 28-Apr    | Japan           | Bank of Japan monetary policy announcement             | Medium              | Low                   |
| April     | Solomon Islands | General election                                       | Low                 | Low                   |
| May       | New Zealand     | 2023 budget  | Low                 | Low                   |
| May       | Thailand        | General election                                       | Low                 | Low                   |
| 29-30-Jun | European Union  | European Council summit                                | Low                 | Low                   |
| 14-Oct    | New Zealand     | General election                                       | Low                 | Low                   |
| 29-Oct    | Argentina       | General election                                       | Medium              | Medium                |
| 29-Oct    | Colombia        | Regional elections                                     | Low                 | Low                   |
| 25-Jun    | Guatemala       | General election                                       | Low                 | Low                   |
| 30-Apr    | Paraguay        | General election                                       | Low                 | Low                   |

# Odd Up for a 'Soft Landing'

BY STEVEN SHIELDS

## CREDIT SPREADS

Credit spreads, and financial conditions more broadly, eased considerably over the past month as odds of the Federal Reserve achieving its desired soft-landing have increased. Over the past week, both Moody's long-term average corporate and industrial bond spreads widened a modest 2 basis points to 151 and 131 basis points, respectively. Yield spreads on corporate debt have declined since November and are well below the levels seen during the summer and fall of 2022.

The ICE/BofA U.S. BBB corporate bond spread index averaged 170 basis points over the past month compared with averages of 250 basis points during each of the past six recessions and 100 outside of a recession. Meanwhile, the ICE/BofA U.S. high-yield corporate bond spread index narrowed to average 450 basis points over the past month compared with averages of 350 basis points out of recession and 1,000 in a recession.

## DEFAULTS

Eight Moody's-rated corporate debt issuers defaulted in December, up from five in November, closing out a challenging year for fixed-income markets as the macroeconomic environment worsened and financing conditions tightened. The global speculative-grade default rate edged up to 2.8% for the trailing 12 months ended in December from 2.6% in November.

The December defaulters included two more China property companies, pointing to the continuing credit risk in this sector resulting from the real estate downturn in China. The two defaulters were Times China Holdings Limited and Dexin China Holdings Company Limited. We expect recent policy support from Chinese authorities to boost funding conditions for financially strong developers but not financially weak ones as creditors and investors remain selective.

U.S. defaults picked up in December, with five defaults of rated issuers, up from three in November and two in October. The defaulting companies were Diebold Nixdorf Inc (technology), BW NHHC Holdco Inc (healthcare), Rite Aid Corporation (retail), Moran Foods LLC (wholesale) and Screenvision LLC (media). Distressed exchanges will likely continue to be prevalent among U.S. defaulters, particularly for low-rated firms owned by private equity, for whom this default type is more common.

The default tally in 2022 was 90, up from 55 a year earlier. The construction & building sector had the most defaults, with 23, all from China. Banking followed with 10 (eight from Ukraine, one from Poland and one from Angola). By

region, North America had 38 defaults (35 in the US and three in Canada). The rest were from Europe (24), Asia-Pacific (23), Latin America (four) and Africa (one).

Corporate defaults will rise in 2023 as macroeconomic growth slows and financing conditions weaken, which will erode corporate earnings and cash flow. US inflation, as measured by the year-over-year change in the Consumer Price Index, has eased from its recent peak of 9.1% but remained high at 6.5% in December. As a result, we expect the fed funds rate to increase further this year.

Under our baseline scenario, Moody's Credit Transition Model predicts that the global speculative-grade default rate will climb to 5.1% in 2023. At this level, the default rate would surpass the historical average of 4.1%. The 2023 default rate forecast considers the ramp-up of rating downgrades in the fourth quarter of 2022.

## U.S. CORPORATE BOND ISSUANCE

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 14% for IG and 19% for high-yield, wherein US\$-denominated offerings increased 45% for IG and grew 12% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 32% for high-yield, wherein US\$-denominated offerings increased 142% for IG and grew 45% for high yield.

Third-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 6% for IG and an annual advance of 44% for high-yield, wherein US\$-denominated offerings increased 12% for IG and soared upward 56% for high yield.

Fourth-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 3% for IG and an annual advance of 8% for high-yield, wherein US\$-denominated offerings increased 16% for IG and 11% for high yield.

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

Issuance weakened in the second quarter of 2021 as worldwide offerings of corporate bonds revealed a year-



over-year decline of 35% for investment grade. High-yield issuance fared noticeably better in the second quarter.

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

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

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

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

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

Fourth-quarter corporate debt issuance remained suppressed. US\$-denominated high-yield issuance ended the year at \$2.47 billion, reflecting a drastic 77% decline from 2021. Meanwhile investment-grade bond issuance totaled \$1.29 trillion in 2022, a 20.8% decline from 2021. Over the past 12 months total US\$-denominated issuance has tracked at a near-decade low.

For the period ended January 25, US\$-denominated high-yield issuance totaled \$6.7 billion. This brings the year-to-date total to \$12.5 billion. Meanwhile, investment-grade bond issuance totaled \$17.87 billion in the same period, increasing the year-to-date total to \$120.2 billion. Cumulative issuance through the first four weeks of 2023 is tracking 29.4% less than the over same period last year. Moody's Investors Service expects issuance volumes will be driven by some return to refinancing activity in 2023, but this will be limited, especially in the first half of the year because of relatively low levels of maturing debt. However,

the maturity wall is higher for 2024 and Moody's expects most companies to address these maturities a year in advance.

#### U.S. ECONOMIC OUTLOOK

We made minor adjustments to the U.S. baseline forecast in January as new data and tweaks to our monetary policy adjustments altered the outlook slightly. Fundamentally, the outlook remains the same. Given the Federal Reserve's rhetoric, we pushed the first cut in the federal funds rate back one meeting into 2024. Its aggressive increases are taking a toll on housing markets though perhaps less than desired on labor markets. The economy remains vulnerable to falling into recession this year, an increasingly widespread expectation judging by various surveys of economic forecasters and other commentators. Views on the timing and severity of a possible downturn vary considerably, although in general the consensus holds that if it were to happen, it would be mild.

#### Fiscal assumptions

Federal government spending added 0.2 percentage point to annualized real GDP growth in the third quarter. This was the first positive contribution from federal spending last year after subtracting 0.4 and 0.2 percentage point from growth in the first and second quarters, respectively. An alleviation in cost pressures for the Pentagon and a rebound in nominal nondefense expenditures supported real federal spending in the third quarter.

The U.S. Treasury budget deficit will shrink from 5.5% of GDP in fiscal 2022 to 4.2% in fiscal 2023 and 2024. However, federal fiscal conditions will deteriorate over the next decade. An aging population will apply upward pressure on entitlement spending, while higher interest rates and a larger debt load will boost net outlays for interest. The Congressional Budget Office estimates that net interest payments will exceed defense spending in fiscal 2029. Consequently, the Treasury budget shortfall will increase to 5.7% of GDP by fiscal 2032. Meanwhile, the debt-to-GDP ratio will rise from 97% in fiscal 2022 to 112% in fiscal 2032. Longer term, lawmakers will pass a medley of entitlement, tax and immigration reform to put the federal budget on a sustainable trajectory.

Despite the significant buildup of federal debt during the pandemic, lawmakers will not pass budget cuts as they did after the Great Recession. While fiscal austerity may not be as much of a risk, a divided Congress will not enact any economic support if the economy falls into a recession in 2023.

#### Energy price forecast and assumptions

Moody's Analytics has revised its oil and gas price forecasts through 2024. The most significant changes to the oil price

forecast occur in the first half of 2023. Preparation for the European Union sanctions that took effect in December has mitigated the fallout on oil prices and created relief selling. This is because many major oil importers secured their oil supplies ahead of time to ensure the implementation of sanctions did not disrupt their economies.

In the past month, weak demand has also led to substantial oil price erosion. U.S. oil demand is 7% lower than it was a year earlier. This is demand destruction resulting from the cumulative effect of high oil prices. Warm weather is another reason for weak demand; Northern Hemisphere heating degrees through this point in the winter are among the lowest of the past 20 seasons.

Our natural gas price forecast has been reduced from \$7 per million BTUs to \$6.25 in the first half of 2023. We view the recent collapse as weather-driven and temporary. Liquefied natural gas contract prices are still much higher than current Henry Hub prices. However, arbitrage opportunities are unavailable because the Freeport LNG hub is still offline, German gas inventory is essentially maxed, and there is a lack of infrastructure to receive more U.S. cargo. Germany recently did welcome the first LNG carrier at its new Wilhelmshaven terminal, which portends the capability of the EU to quickly replace Russian trade with greater trans-Atlantic ties.

#### Minor changes to GDP growth

U.S. GDP rose 3.2% in the third quarter, according to the Bureau of Economic Analysis' third estimate, more than reversing the declines over the prior two quarters. Trade was a major, if temporary, support to growth, with consumer spending, business investment and government spending also contributing. Inventories and housing investment were major drags on growth.

Revisions to the baseline forecast for real GDP growth are modest. The forecast for real GDP now shows nearly steady growth in the final quarter of 2022 but much less growth in the first quarter of 2023. Annual growth in 2022 and 2023 is 2.1% and 1.3%, respectively, modestly higher than last month, mostly because of the stronger fourth quarter of last year. Growth in 2024 was revised up slightly to 2.1%, and growth in 2025 was unchanged at 2.7%. Both figures still suggest an economy returning to near-potential growth.

#### Business investment and housing

Business investment decelerated substantially in the first half of 2022 amid the tightening by the Fed and the uncertainties caused by the Russian invasion of Ukraine. However, since then, the pace has been more buoyant than expected. Revised BEA data show that total real capital spending in the third quarter rose 6.2% annualized, compared with the initial published figures of 3.7% in the

advance estimate and 5.1% in the second release. Further, after jumping in August, nondefense capital goods shipments adjusted for inflation continued to rise through November and are now back to their highest point since May 2019.

On balance, the outlook for total real business investment is little changed from the December forecast. Real investment will rise by 5.2% on an annual average basis in 2023, with equipment spending rising by 4.7%. Structures will finally begin to rebound, but spending will remain well below what it was back in 2019 for a long time.

House prices are expected to continue their recent decline, falling 10% from peak to trough nationally and as much as 20% in some markets. While applications for construction permits and housing starts will remain depressed, building activity will continue throughout the year, given the large number of housing units that remain under construction because of supply-chain bottlenecks. The delivery of additional multifamily properties will place downward pressure on rents and help address the nation's housing deficit.

#### Labor market

The labor market remains resilient but is slowly moderating. Payroll employment was in line with our expectations in December, rising by 223,000, while the October and November figures were revised modestly lower. The average gain for the past three months of 247,000 shows a downward trend. The average for the prior three months was 366,000.

Our forecast is for the unemployment rate to rise steadily this year after averaging 3.6% in the fourth quarter. The unemployment rate will average 4.1% in the final three months of 2023, slightly lower than the 4.2% in the December forecast and just below the 50-basis point increase that has coincided with every recession. The unemployment rate will fall slightly in 2024, averaging 3.9% in the fourth quarter, identical to that in the December baseline.

We assume a full-employment economy is one with approximately a 3.5% unemployment rate, around a 62.5% labor force participation rate, and a prime-age employment-to-population ratio a little north of 80%. Demographic headwinds have kept the overall participation rate below that threshold. However, with the other two conditions met and nominal wage growth still running near 5%, it is safe to say the economy is at full employment.

#### Monetary policy

Interest rates will continue to rise in early 2023 as the Federal Reserve remains committed to its fight against

inflation. However, policymakers slowed the pace of hiking to 50 basis points at the Federal Open Market Committee's December meeting, raising the target range for the federal funds rate to 425-450 basis points. The slowdown follows signals that inflation is moderating, most notably evidenced by two consecutive better-than-expected CPI reports in November and December.

Our assumptions for the policy rate in the January outlook are similar to the previous baseline. Like in December, we expect 25-basis point increases to the fed funds rate at the January and March FOMC meetings. Therefore, our terminal fed funds rate projection in 2023 still falls just shy of 5%. We expect the Fed to keep rates at this level before cutting them at the first FOMC meeting in 2024. This is a slightly more contractionary outlook than in the previous baseline, which had the first cut at the December meeting this year. Monetary policy will remain restrictive through the end of 2025, when the fed funds rate returns to its neutral rate.

The baseline outlook reflects our expectation that inflationary pressures from supply-side frictions, energy markets, shelter, and U.S. labor market conditions will continue to soften throughout the year. The path for the Fed remains narrow: Policymakers cannot ease up too early and have repeatedly pointed to tight financial market conditions as the central monetary policy mechanism to dampen demand. Hawkish rhetoric at the December meeting reflected this concern; however, as U.S. demand is showing signs of sustained cooling, keeping interest rates too high for too long risks choking off the expansion and pushing up unemployment.

Inflation, thus, remains the key to the baseline outlook. The January vintage has the CPI rising 8% in 2022, 4% in 2023, and 2.4% in 2024, a rounding difference down from the prior baseline. The assumptions around moderating inflation have not changed and include a reduction in U.S. supply-chain stress, below-potential GDP growth, declines in global energy prices, and moderating nominal wage growth.

# Bank of England to Deliver Another Rate Hike

BY DAVID MUIR

Developments since the mid-December meeting of the [Bank of England](#)'s Monetary Policy Committee have tended to reinforce the case for maintaining a resolute approach to tightening monetary policy. The pace of economic growth has proved more resilient than expected, according to official data, and domestic inflation pressures have gathered strength. In its meeting on 2 February, we expect the MPC to raise the policy rate by 50 basis points, to 4%.

The U.K. economy looks likely to have avoided a contraction in the fourth quarter of last year, a somewhat stronger performance than expected in our baseline, or in the forecasts of the Bank of England. To be sure, the possibility of growth turning negative in the first quarter can't be ruled out. Consumer confidence slipped back this month, and January's flash composite PMI indicated a faster rate of contraction in business activity. However, firms' optimism around prospects for the year ahead also strengthened, reaching an eight-month high. Indeed, with natural gas prices declining significantly, the euro zone economy seemingly on a firmer footing, according to survey data, and the Chinese economy reopening, the economic outlook has brightened somewhat.

Meanwhile, the decline in headline [CPI inflation](#) in December to 10.5%—below the rate of 10.9% forecast by the BoE—disguises a strengthening in domestic price pressures. Reflecting the moderation of global price pressures, core goods inflation decelerated to 5.8%, undershooting the BoE's forecast of 6.3%. Lower petrol prices also contributed to the fall. However, the MPC is likely to focus more on the acceleration of domestic price and wage growth. Core services CPI—which the BoE

designates as service sector CPI excluding air travel and package holidays, and education—rose 6.3% in December, from 5.8%, exceeding the BoE's forecast of 6.0%. And business surveys show that despite the slowdown in economic growth, companies continue to have some success in passing on costs to protect profit margins. At the same time, at the BoE's horizon for bringing inflation to target, firms' inflation expectations remain elevated. Wage growth is also accelerating, reaching 6.4% on an economy-wide basis in the three months to November—above the BoE's expectation of 5.75% for the fourth quarter.

Tight [labour market](#) conditions have caused wage pressures to strengthen. And though there are signs that labour demand has been weakening with vacancies falling for a seventh consecutive month, the BoE appears to have once again been too optimistic in its expectations around labour supply; in the three months to November, the economic activity rate was a little below the assumptions for the fourth quarter. A more pessimistic view on the economy's supply capacity would reinforce the case for a tighter stance for monetary policy; in February's monetary policy report, the MPC will undertake its annual review of supply-side judgments.

As in December's meeting, some MPC members could argue that the impact on the economy from the tightening in monetary policy undertaken last year has yet to be fully transmitted, making further rate increases unwarranted. However, with evidence accumulating that domestic inflation pressures are gaining traction, we expect the majority will instead coalesce around another 50-basis point increase.

# China's Reopening Begins to Set In

BY HARRY MURPHY CRUISE and SARAH TAN

Although COVID-19 case numbers have soared in China in recent months, financial markets have rallied on expectations of a better 2023. From its late November trough, the FTSE Xinhua A200 has jumped 10.3%. The yuan has also unwound much of the losses of the second half of 2022. It should strengthen as the economic recovery takes hold through the middle of this year. The change in China's approach to managing COVID-19 and the reopening of its economy will allow much-touted building stimulus to finally hit the economy. The iron ore price has rallied in anticipation of this, with investors betting on a surge in iron ore demand through this year. Having dropped to around \$80 a tonne in November, the iron ore price is back above \$120 per tonne and expected to track higher.

Getting a handle on case numbers in China isn't easy. The National Health Commission reported 59,983 deaths between December 8 and January 12. Without doubt, these numbers understate the true state of play. Indeed, ahead of the Lunar New Year, the chief epidemiologist at China's Centre for Disease Control was quoted as saying that the Omicron strain "has already infected 80% of the population." Regardless, it's clear that the sudden reopening has caused disruptions. The abrupt relaxation of containment measures in December triggered panic buying of pharmaceutical drugs. With supplies running dry and empty shelves at pharmacies a common sight, medicine imports surged by almost a third between November and December as locals looked to overseas sources. The

increased demand also pushed prices higher; traditional Chinese medicine prices jumping 3.1% year on year in December—well above the 1.6% rise in the CPI.

On the roads, congestion rose sharply in major cities following the easing of restrictions. Ministry of Transport data shows 320 million cars took to the nation's highways between 7 January and 18 January. That's 13% more than in the same period of 2022 and 12% more than that period of 2019. Subway usage also bounced, but with cases incredibly high, it's apparent many locals are keener to commute by car than public transport. Like many places around the world, it will take time for public transport journeys to return to pre-pandemic levels. Up in the sky, domestic air travel is experiencing a strong rebound. Seat capacity is higher than pre-pandemic levels in the 10 largest Chinese provinces, buoyed by Lunar New Year travel. International air travel isn't seeing the same gains. Seat capacity on scheduled flights so far in January is still 88% below pre-pandemic levels.

The early winners of the reopening are Hong Kong, Macao and South Korea. Many Chinese citizens have reportedly flocked to Hong Kong and Macao to be vaccinated with mRNA vaccines that their home country does not provide. Application for permits to travel between Hong Kong, Macao and Taiwan have surged since China's borders reopened on 8 January 2023.

# Downgrades Outnumber Upgrades, Again

BY OLGA BYCHKOVA

## U.S.

U.S. credit downgrades outnumbered upgrades for the third consecutive week since the beginning of the year, coming in at 8-to-5 in the latest weekly period and comprising 51% of affected debt. In line with the bleak start of 2023, in 2022 U.S. rating changes were predominantly negative with downgrades exceeding upgrades 354:333.

Last week, the changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade bonds and industrial and financial companies. The largest downgrade, accounting for 34% of debt affected in the period, was issued to a global retail pharmacy operator Walgreens Boots Alliance Inc. with its senior unsecured ratings lowered to Baa3 from Baa2 and the backed senior unsecured commercial paper rating cut to Prime-3 from Prime-2. The rating outlook is negative. The ratings action reflects Moody's Investors Service's view that Walgreens' credit metrics will not meaningfully improve for at least 24 months as the company has increased its debt levels to finance an additional investment in Village MD to support its acquisition of Summit Health and that the expected progress in reducing its stubbornly high debt balance will be slow. Although Walgreens has suspended share repurchases and intends to prioritize debt reduction over shareholder returns, the credit rating agency expects that free cash flow available to repay debt will be limited by the annual payments under the pending opioid settlement as well as by the investments being made by Walgreens to support its strategic initiatives.

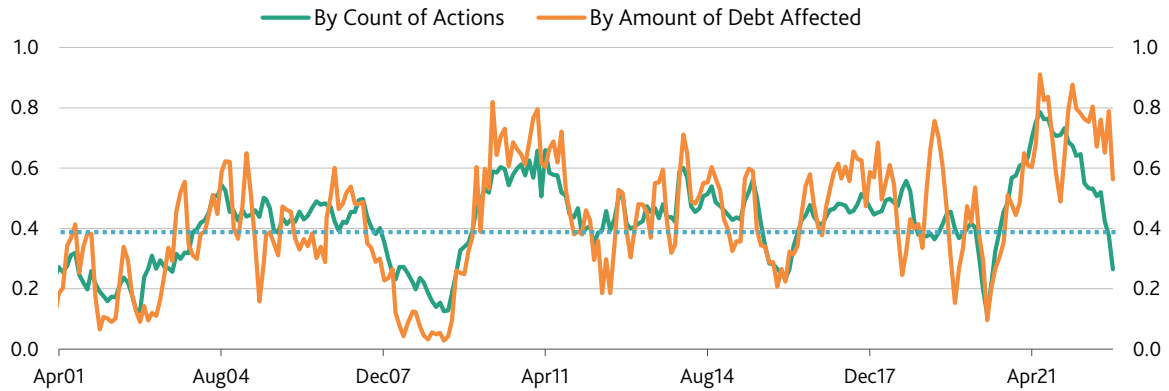
Upgrades were headlined by Caesars Entertainment Inc., which saw Ba3 ratings assigned to its proposed \$1.75 billion senior secured term loan B and \$1.25 billion senior secured notes, the corporate family and probability of default ratings raised to B1 and B1-PD from B2 and B2-PD, respectively, existing senior secured notes due 2025 upgraded to Ba3 from B1, and existing senior unsecured notes due 2027 and 2029 upgraded to B3 from Caa1, impacting 33% of debt affected in the period. The outlook is stable. The ratings changes reflect Moody's Investors Service's expectation for sizeable year over year improvements in EBITDA as the company's digital business has ramped significantly, and losses have been reduced dramatically. The upgrades also reflect the strong underlying operations of the company's regional and Las Vegas operations with the expectation for continued debt reduction funded from positive free cash flow. The rating agency also anticipates Caesars to benefit from prior investments in its regional properties, which include new builds that will come on line as well as renovations and expansions.

## EUROPE

Rating activity was lighter across Western Europe with Moody's Investors Service issuing just one upgrade and two downgrades, comprising 57% of affected debt. The larger downgrade, accounting for 34% of debt affected in the period, was issued to German apparel retailer Takko Fashion S.a r.l., which saw its corporate family rating lowered to Caa3 from Caa2 and the probability of default rating cut to Ca-PD from Caa2-PD. Concurrently, Moody's Investors Service downgraded to Ca from Caa2 the rating on the €510 million backed senior secured notes due in November 2023 issued by Takko Luxembourg 2 S.C.A., a wholly owned subsidiary of Takko. The outlook has been changed to negative for both entities. The rating action reflects the very high probability of a debt restructuring in the next 3 to 6 months as the company has not yet managed to refinance the €80 million super senior term loan facility due May 2023 and the €510 million backed senior secured notes due November 2023, the rating agency said. It added that given the higher interest rates and wider credit spreads in today's capital markets compared with the last refinancing of the company in 2017, Takko's current capital structure appears unsustainable and therefore a balance sheet restructuring is highly likely.

## RATINGS ROUND-UP

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



\* Trailing 3-month average

Source: Moody's

FIGURE 2  
Rating Key

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

FIGURE 3

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

| Date      | Company  | Sector     | Rating                      | Amount (\$ Million) | Up/Down | Old LTD Rating | New LTD Rating | IG/SG |
|-----------|--|------------|-----------------------------|---------------------|---------|----------------|----------------|-------|
| 1/18/2023 | MORAN FOODS LLC  | Industrial | SrSec/BCF/LTCFR/PDR         |                     | D       | Caa1           | Caa3           | SG    |
| 1/18/2023 | TORTOISECOFIN BORROWER LLC                               | Financial  | SrSec/BCF/LTCFR/PDR         |                     | D       | B3             | Caa1           | SG    |
| 1/18/2023 | BCPE NORTH STAR HOLDINGS, LP-BCPE NORTH STAR US HOLDCO 2 | Industrial | SrSec/BCF/LTCFR/PDR         |                     | D       | B2             | B3             | SG    |
| 1/19/2023 | LEIDOS HOLDINGS, INC.                                    | Industrial | SrUnsec/CP                  | 3471.97             | U       | Baa3           | Baa2           | IG    |
| 1/19/2023 | EASTERN POWER, LLC                                       | Industrial | SrSec/BCF                   |                     | D       | B1             | B2             | SG    |
| 1/19/2023 | COINBASE GLOBAL, INC.                                    | Financial  | SrUnsec/LTCFR               | 2000                | D       | Ba2            | B1             | SG    |
| 1/19/2023 | PARTY CITY HOLDCO INC-PARTY CITY HOLDINGS INC.           | Industrial | SrSec/LTCFR/PDR             | 1823.338            | D       | Caa3           | C              | SG    |
| 1/20/2023 | W&T OFFSHORE, INC.                                       | Industrial | LTCFR/PDR                   |                     | U       | Caa1           | B3             | SG    |
| 1/20/2023 | WALGREENS BOOTS ALLIANCE, INC.                           | Industrial | SrUnsec/CP                  | 7701.965            | D       | Baa2           | Baa3           | IG    |
| 1/20/2023 | BRAZOS DELAWARE II, LLC                                  | Industrial | LTCFR/PDR                   |                     | U       | B2             | B1             | SG    |
| 1/20/2023 | JHW CJF TOPCO, INC.-ALPHIA, INC.                         | Industrial | SrSec/BCF/LTCFR/PDR         |                     | U       | Caa1           | B3             | SG    |
| 1/23/2023 | CAESARS ENTERTAINMENT, INC.                              | Industrial | SrSec/SrUnsec/BCF/LTCFR/PDR | 7400                | U       | B1             | Ba3            | SG    |
| 1/24/2023 | SERTA SIMMONS BEDDING, LLC                               | Industrial | PDR                         |                     | D       | Ca             | D              | SG    |

Source: Moody's

FIGURE 4

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

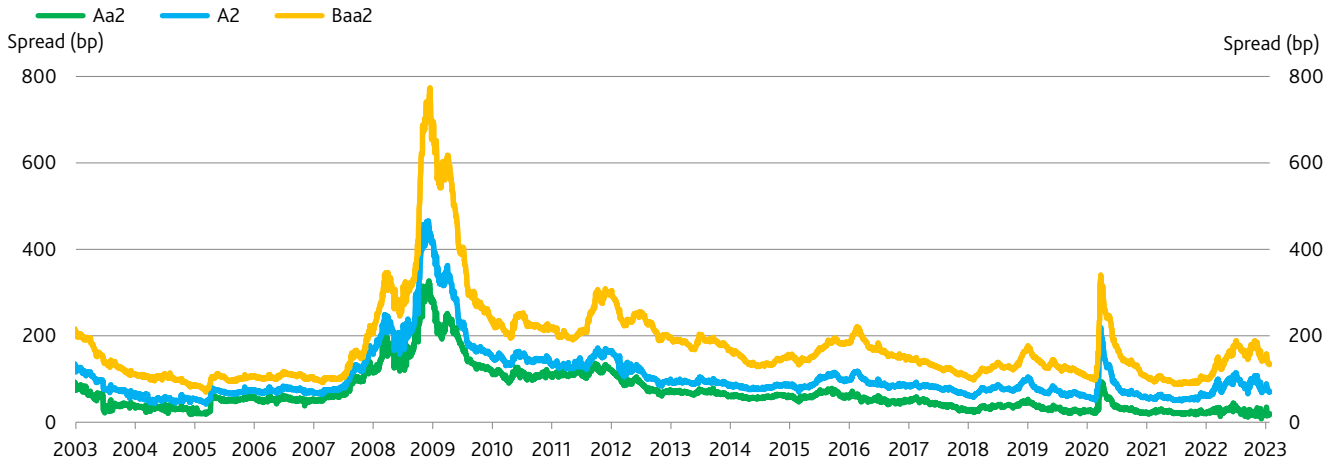
| Date      | Company                                    | Sector     | Rating          | Amount (\$ Million) | Up/Down | Old LTD Rating | New LTD Rating | IG/SG | Country    |
|-----------|--|------------|-----------------|---------------------|---------|----------------|----------------|-------|------------|
| 1/19/2023 | TAKKO FASHION S.A R.L.                     | Industrial | SrSec/LTCFR/PDR | 552.37848           | D       | Caa2           | Ca             | SG    | LUXEMBOURG |
| 1/23/2023 | ITALMATCH CHEMICALS S.P.A.                 | Industrial | SrSec/LTCFR/PDR | 704.01178           | U       | Caa1           | B3             | SG    | ITALY      |
| 1/24/2023 | TELEPIZZA GROUP S.A.-FOODCO BONDCO, S.A.U. | Industrial | SrSec/LTCFR/PDR | 362.83684           | D       | Caa3           | Ca             | SG    | SPAIN      |

Source: Moody's



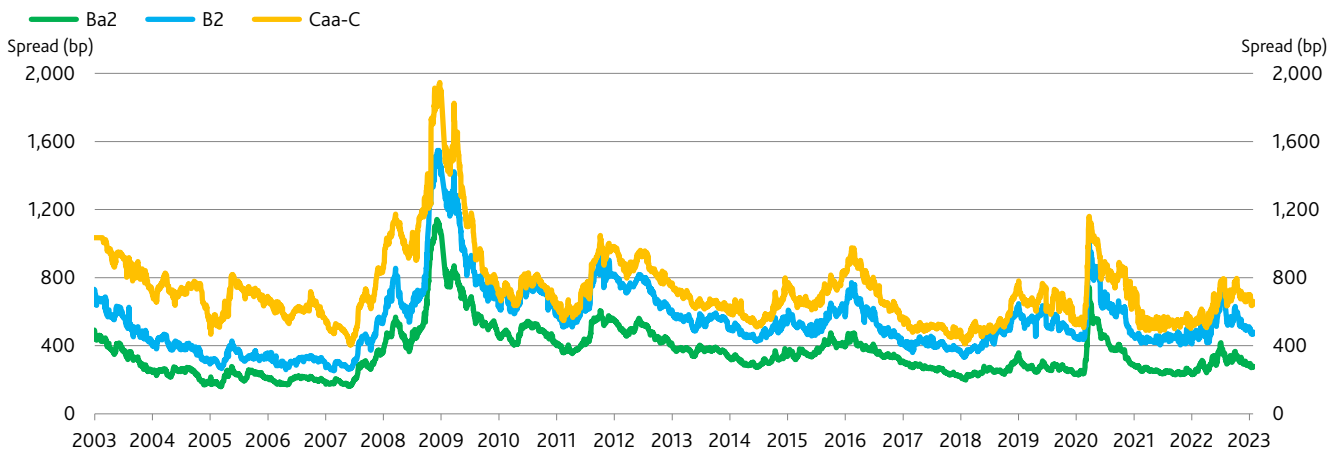
MARKET DATA

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 (January 18, 2023 – January 25, 2023)

| CDS Implied Rating Rises            | CDS Implied Ratings |         |                |
|-------------------------------------|---------------------|---------|----------------|
|                                     | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                              |                     |         |                |
| CMS Energy Corporation              | Aa3                 | A2      | Baa2           |
| Ally Financial Inc.                 | Ba2                 | Ba3     | Baa3           |
| Coca-Cola Company (The)             | Aa2                 | Aa3     | A1             |
| U.S. Bancorp                        | Aa2                 | Aa3     | A2             |
| Dish DBS Corporation                | Caa3                | Ca      | B3             |
| Archer-Daniels-Midland Company      | Baa1                | Baa2    | A2             |
| AvalonBay Communities, Inc.         | Baa2                | Baa3    | A3             |
| Kinder Morgan Energy Partners, L.P. | A1                  | A2      | Baa2           |
| Republic Services, Inc.             | A2                  | A3      | Baa2           |
| Ventas Realty, Limited Partnership  | A3                  | Baa1    | Baa1           |

| CDS Implied Rating Declines               | CDS Implied Ratings |         |                |
|---|---------------------|---------|----------------|
|   | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                                    |                     |         |                |
| General Mills, Inc.                       | A1                  | Aa2     | Baa2           |
| AutoZone, Inc.                            | A1                  | Aa2     | Baa1           |
| Omnicom Group, Inc.                       | A1                  | Aa2     | Baa1           |
| Ford Motor Credit Company LLC             | Ba3                 | Ba2     | Ba2            |
| Procter & Gamble Company (The)            | Aa3                 | Aa2     | Aa3            |
| Amgen Inc.                                | A2                  | A1      | Baa1           |
| Bank of New York Mellon Corporation (The) | A3                  | A2      | A1             |
| Merck & Co., Inc.                         | A2                  | A1      | A1             |
| Lowe's Companies, Inc.                    | A2                  | A1      | Baa1           |
| Gilead Sciences, Inc.                     | A1                  | Aa3     | A3             |

| CDS Spread Increases                 | CDS Spreads    |         |         |             |
|--------------------------------------|----------------|---------|---------|-------------|
|                                      | Senior Ratings | Jan. 25 | Jan. 18 | Spread Diff |
| Issuer                               |                |         |         |             |
| Embarq Corporation                   | Caa2           | 1,156   | 1,000   | 155         |
| Lumen Technologies, Inc.             | B2             | 929     | 804     | 125         |
| CSC Holdings, LLC                    | B1             | 1,307   | 1,213   | 94          |
| Staples, Inc.                        | Caa2           | 1,584   | 1,511   | 73          |
| Pitney Bowes Inc.                    | B3             | 871     | 815     | 56          |
| Qwest Corporation                    | Ba2            | 380     | 329     | 51          |
| Smithfield Foods, Inc.               | Ba1            | 197     | 150     | 48          |
| Goodyear Tire & Rubber Company (The) | B2             | 423     | 378     | 45          |
| Nordstrom, Inc.                      | Ba1            | 561     | 519     | 42          |
| Kohl's Corporation                   | Ba2            | 544     | 505     | 38          |

| CDS Spread Decreases                | CDS Spreads    |         |         |             |
|-------------------------------------|----------------|---------|---------|-------------|
|                                     | Senior Ratings | Jan. 25 | Jan. 18 | Spread Diff |
| Issuer                              |                |         |         |             |
| Rite Aid Corporation                | Caa2           | 4,544   | 4,720   | -176        |
| American Greetings Corporation      | Caa1           | 556     | 669     | -112        |
| K. Hovnanian Enterprises, Inc.      | Caa2           | 828     | 879     | -51         |
| Liberty Interactive LLC             | B3             | 2,476   | 2,510   | -34         |
| TEGNA Inc.                          | Ba3            | 489     | 520     | -31         |
| Ally Financial Inc.                 | Baa3           | 260     | 290     | -30         |
| Nissan Motor Acceptance Company LLC | Baa3           | 227     | 258     | -30         |
| Service Properties Trust            | B2             | 504     | 530     | -26         |
| Buckeye Partners, L.P.              | B1             | 246     | 267     | -22         |
| Travel + Leisure Co.                | B1             | 308     | 330     | -22         |

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (January 18, 2023 – January 25, 2023)

| CDS Implied Rating Rises      | CDS Implied Ratings |         |                |
|-------------------------------|---------------------|---------|----------------|
|                               | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                        |                     |         |                |
| Credit Suisse Group AG        | Ba2                 | Ba3     | Baa2           |
| Standard Chartered Bank       | Aa2                 | Aa3     | A1             |
| KBC Bank N.V.                 | Aa2                 | Aa3     | A1             |
| Eni S.p.A.                    | A3                  | Baa1    | Baa1           |
| NXP B.V.                      | A1                  | A2      | Baa3           |
| SSE plc                       | A2                  | A3      | Baa1           |
| HSBC Bank plc                 | Aa3                 | A1      | A1             |
| Faurecia S.E.                 | B1                  | B2      | Ba2            |
| Bank of Scotland plc          | Aa3                 | A1      | A1             |
| National Westminster Bank Plc | A2                  | A3      | A1             |

| CDS Implied Rating Declines                 | CDS Implied Ratings |         |                |
|---|---------------------|---------|----------------|
|   | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                                      |                     |         |                |
| Banco Bilbao Vizcaya Argentaria, S.A.       | A3                  | A2      | A3             |
| Greece, Government of                       | Baa3                | Baa2    | Ba3            |
| Natixis                                     | A3                  | A2      | A1             |
| Santander UK plc                            | A3                  | A2      | A1             |
| NatWest Markets Plc                         | Baa2                | Baa1    | A1             |
| Orange                                      | A1                  | Aa3     | Baa1           |
| Stellantis N.V.                             | Ba1                 | Baa3    | Baa2           |
| TotalEnergies SE                            | Aa3                 | Aa2     | A1             |
| Bayerische Motoren Werke Aktiengesellschaft | A3                  | A2      | A2             |
| Mercedes-Benz Group AG                      | Baa1                | A3      | A3             |

| CDS Spread Increases           | Senior Ratings | CDS Spreads |         |             |
|--------------------------------|----------------|-------------|---------|-------------|
|                                |                | Jan. 25     | Jan. 18 | Spread Diff |
| Issuer                         |                |             |         |             |
| Garfunkelux Holdco 3 S.A.      | Caa2           | 1,282       | 1,131   | 152         |
| Novafives S.A.S.               | Caa2           | 920         | 879     | 41          |
| CPI Property Group             | Baa3           | 668         | 631     | 37          |
| Iceland Bondco plc             | Caa2           | 1,025       | 1,000   | 25          |
| ZF Europe Finance B.V.         | Ba1            | 458         | 434     | 24          |
| Bellis Acquisition Company PLC | Caa1           | 719         | 697     | 22          |
| Crown European Holdings S.A.   | Ba1            | 155         | 134     | 21          |
| Constellium SE                 | B2             | 324         | 303     | 21          |
| Avon Products, Inc.            | Ba3            | 381         | 363     | 18          |
| Ardagh Packaging Finance plc   | Caa1           | 719         | 702     | 17          |

| CDS Spread Decreases               | Senior Ratings | CDS Spreads |         |             |
|------------------------------------|----------------|-------------|---------|-------------|
|                                    |                | Jan. 25     | Jan. 18 | Spread Diff |
| Issuer                             |                |             |         |             |
| Vedanta Resources Limited          | Caa1           | 1,913       | 1,981   | -67         |
| Jaguar Land Rover Automotive Plc   | B1             | 813         | 852     | -39         |
| Boparan Finance plc                | Caa3           | 1,462       | 1,491   | -29         |
| Trinseo Materials Operating S.C.A. | B2             | 706         | 730     | -24         |
| Sappi Papier Holding GmbH          | Ba2            | 332         | 351     | -18         |
| OI European Group B.V.             | Ba3            | 339         | 353     | -14         |
| Hamburg Commercial Bank AG         | Baa1           | 160         | 172     | -13         |
| NIBC Bank N.V.                     | Baa1           | 160         | 173     | -13         |
| Picard Bondco S.A.                 | Caa1           | 684         | 695     | -12         |
| Dufry One B.V.                     | B1             | 359         | 370     | -11         |

Source: Moody's, CMA

## CDS Movers

Figure 5. CDS Movers - APAC (January 18, 2023 – January 25, 2023)

| CDS Implied Rating Rises             | CDS Implied Ratings |         |                |
|--------------------------------------|---------------------|---------|----------------|
|                                      | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                               |                     |         |                |
| SoftBank Group Corp.                 | Ba2                 | B2      | Ba3            |
| Electric Power Development Co., Ltd. | Aa2                 | A1      | A2             |
| Export-Import Bank of Korea (The)    | Aa2                 | Aa3     | Aa2            |
| Sumitomo Mitsui Banking Corporation  | A1                  | A2      | A1             |
| Thailand, Government of              | Aa3                 | A1      | Baa1           |
| Woori Bank                           | Aa2                 | Aa3     | A1             |
| Nissan Motor Co., Ltd.               | Baa3                | Ba1     | Baa3           |
| Korea Electric Power Corporation     | Aa2                 | Aa3     | Aa2            |
| Kyoto, City of                       | Aa1                 | Aa2     | A1             |
| Japan Finance Corporation            | A1                  | A2      | A1             |

| CDS Implied Rating Declines       | CDS Implied Ratings |         |                |
|-----------------------------------|---------------------|---------|----------------|
|                                   | Jan. 25             | Jan. 18 | Senior Ratings |
| Issuer                            |                     |         |                |
| Bendigo and Adelaide Bank Limited | Baa2                | Baa1    | A3             |
| Woolworths Group Limited          | Baa1                | A3      | Baa2           |
| Wesfarmers Limited                | Aa3                 | Aa2     | A3             |
| SGSP (Australia) Assets Pty Ltd   | Baa1                | A3      | A3             |
| Marubeni Corporation              | Aa2                 | Aa1     | Baa2           |
| Toyota Industries Corporation     | Baa3                | Baa2    | A2             |
| Japan, Government of              | Aa1                 | Aa1     | A1             |
| China, Government of              | A1                  | A1      | A1             |
| Australia, Government of          | Aaa                 | Aaa     | Aaa            |
| Korea, Government of              | Aa2                 | Aa2     | Aa2            |

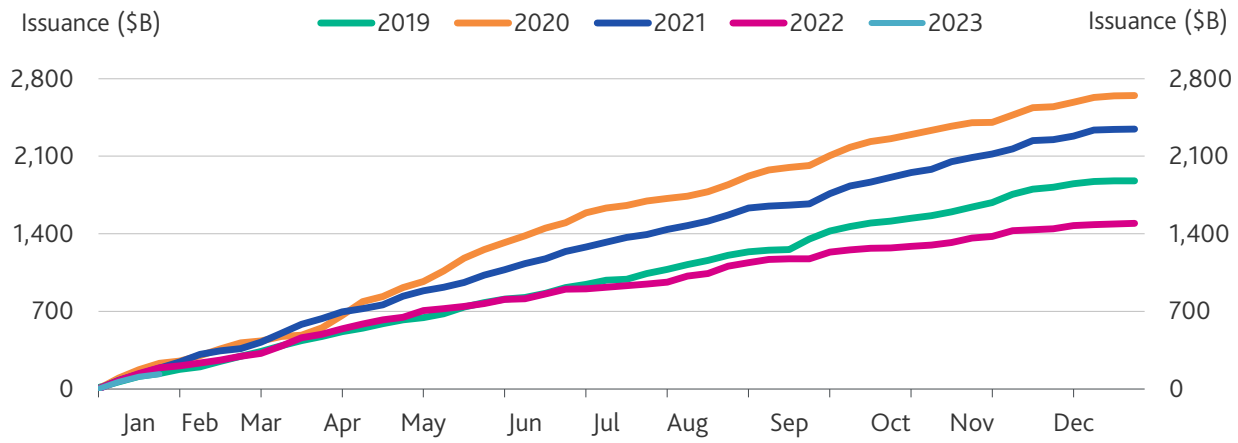
| CDS Spread Increases              | Senior Ratings | CDS Spreads |         |             |
|-----------------------------------|----------------|-------------|---------|-------------|
|                                   |                | Jan. 25     | Jan. 18 | Spread Diff |
| Issuer                            |                |             |         |             |
| Pakistan, Government of           | Caa1           | 3,495       | 3,220   | 275         |
| Bendigo and Adelaide Bank Limited | A3             | 99          | 67      | 32          |
| Toyota Industries Corporation     | A2             | 120         | 102     | 17          |
| Scentre Management Limited        | A2             | 123         | 109     | 14          |
| Development Bank of Kazakhstan    | Baa2           | 246         | 232     | 14          |
| SK Innovation Co. Ltd.            | Baa3           | 312         | 302     | 10          |
| SK Hynix Inc.                     | Baa2           | 198         | 190     | 8           |
| LG Electronics Inc.               | Baa2           | 127         | 120     | 7           |
| Woolworths Group Limited          | Baa2           | 70          | 64      | 6           |
| Wesfarmers Limited                | A3             | 45          | 41      | 3           |

| CDS Spread Decreases                 | Senior Ratings | CDS Spreads |         |             |
|--------------------------------------|----------------|-------------|---------|-------------|
|                                      |                | Jan. 25     | Jan. 18 | Spread Diff |
| Issuer                               |                |             |         |             |
| SoftBank Group Corp.                 | Ba3            | 278         | 380     | -103        |
| Nissan Motor Co., Ltd.               | Baa3           | 136         | 154     | -18         |
| Adani Green Energy Limited           | B2             | 463         | 479     | -16         |
| National Australia Bank Limited      | Aa3            | 58          | 66      | -8          |
| Kazakhstan, Government of            | Baa2           | 195         | 203     | -7          |
| Qantas Airways Ltd.                  | Baa2           | 140         | 147     | -7          |
| Kia Corporation                      | Baa1           | 100         | 107     | -7          |
| Flex Ltd.                            | Baa3           | 110         | 116     | -6          |
| Electric Power Development Co., Ltd. | A2             | 41          | 46      | -6          |
| Lenovo Group Limited                 | Baa2           | 250         | 257     | -6          |

Source: Moody's, CMA

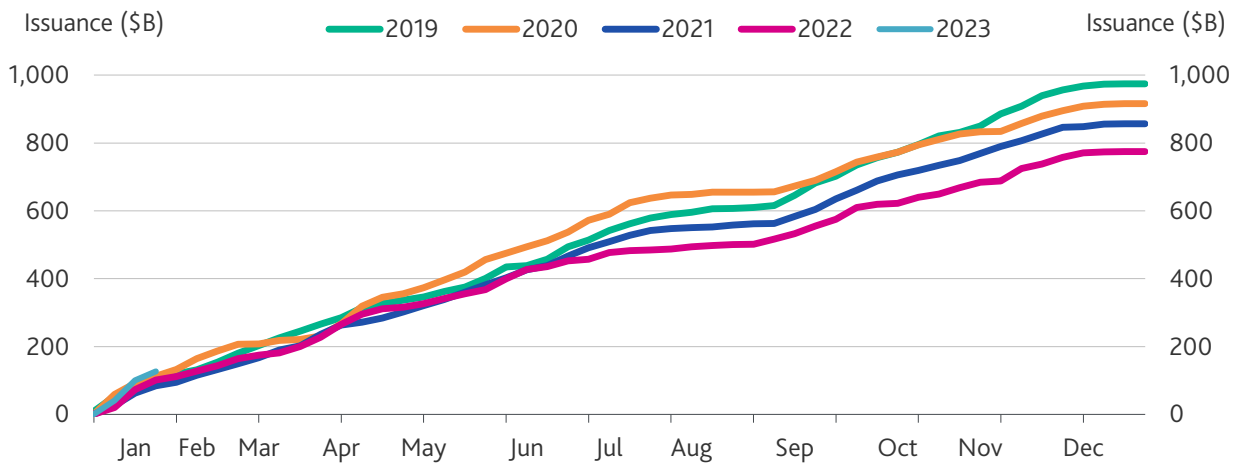
ISSUANCE

**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<br>\$B    | Amount<br>\$B | Amount<br>\$B |
| Weekly       | 17.865           | 6.700         | 24.791        |
| Year-to-Date | 120.196          | 12.500        | 133.986       |

|              | Euro Denominated |               |               |
|--------------|------------------|---------------|---------------|
|              | Investment-Grade | High-Yield    | Total*        |
|              | Amount<br>\$B    | Amount<br>\$B | Amount<br>\$B |
| Weekly       | 21.774           | 4.680         | 26.536        |
| Year-to-Date | 111.808          | 8.950         | 126.700       |

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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