## MOODY'S

#### WEEKLY MARKET OUTLOOK

#### **DECEMBER 8, 2022**

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### Fed Will Slow Despite Job Market

Nonfarm payrolls surprised to the upside in November, rising by 263,000. While the pace of job gains has slowed over the past few months, the labor market remains resilient—and seemingly immune to monetary shocks—even as other areas of the economy weaken.

While job openings and quits are starting to come down, the labor market continues to be extraordinarily tight—labor demand far exceeds labor supply. This has kept significant upward pressure on wages. Average hourly wages grew 0.6% from October to November, or 5.1% on a year-ago basis, and remain far above the pre-pandemic norm.

Inflation is playing a significant role in pushing up wages, but the reverse is

# also true. We use Granger causality tests to see if there is bidirectional flow in the causal relationship between inflation and nominal wage growth. Year-over-year growth in the Employment Cost Index for private workers is used for nominal wage growth and year-over-year growth in the CPI is used for inflation. The data span from the first quarter of 2001 to the third quarter of 2022. With various lags, the tests show that inflation Granger-causes growth in the ECI for private workers, but the direction is one way.

Therefore, we do not find evidence that nominal wage growth causes inflation, at least not with the full period of data in view. However, since inflation was essentially nonexistent prior to the current spate, we use Wald statistics to test for a structural break, which is an abrupt change in the series at a particularly point in time and find that one occurs in the fourth quarter of 2007. Adjusting the Granger causality test to accommodate this structural break, we find that nominal wage growth does, in fact, cause inflation, but to a lesser degree of statistical significance than vice versa. Hence, the Fed is right to be concerned about rapidly rising wages, in general.

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Our expectations for next week are consistent with the Fed's guidance. Following November's Federal Open Market Committee meeting, Fed Chairman Jerome Powell hinted that the committee would slow the pace of future rate hikes, even while noting that the Fed sees a higher rate path today than it did in September. Next week's meeting will mark the first deceleration of rate hikes by the central bank. The Fed will slow its pace further in 2023 before pausing to allow the lagged effect of monetary policy settle in.

Still, the questions of how high rates will ultimately go and for how long they will remain at their peak are unclear. Job and wage growth need to slide substantially more for the Federal Reserve to declare victory over inflation. We estimate that for inflation to return to its 2% target, job growth needs to decline to less than 100,000 per month and wage growth needs to slow to around 3.5%. Median projections from Fed officials show the fed funds rate peaking at 4.6% in 2023, according to the Summary of Economic Projections issued in September. This is lower than our preliminary forecast in our unpublished December baseline, which has the fed funds rate peaking at 4.83% in the second quarter of 2023.

#### Oil prices swoon

Oil prices have been falling for multiple days. West Texas Intermediate sits south of \$75 per barrel, near its lowest level since the Russian invasion of Ukraine. The declines come in the face of multiple big moves in the global market. First, the market is still digesting news of the price cap on Russian oil, which could cause more Russian oil to flow to global markets provided it is sold at sufficiently low prices. Second, the European Union embargo on Russian oil imports went into effect earlier this week. Although the ban does not include refined products until February, markets have largely shrugged in response, with players now assuming that the ban will displace less oil than previously thought.

Global demand is also weighing on prices. Despite the apparent easing of its zero-COVID policy, China's economy is weakening, and many European countries appear to be teetering on the brink of recession. In the U.S., demand continues to cool. Demand was strong throughout the fall, partly because of declining prices for refined products after they peaked during the summer. Demand typically declines around this time of year, with the market caught between summer driving and winter heating seasons. The trend has been pronounced during the past month. Refined product demand is noticeably lower than it was a year ago.

Refineries nonetheless continue to run hot. Refinery capacity utilization—which typically mirrors demand—is incredibly high for this time of year. The crack spread—the difference between consumer prices for refined products and crude oil—remains high, which means profitability is high for refineries even as crude prices come down. So far, it appears that Russia's exclusion from oil markets is having a bigger effect on product prices than crude prices, which is juicing up the crack. Diesel crack spreads are particularly high, since the East Coast largely imports diesel. Bans in many countries on importing Russian products mean that there is a more severe global scarcity for diesel. Cracks will continue to normalize, but it takes time for the supply side to respond, so they may remain elevated for most of 2023 as the world recalibrates the global energy trade.

### U.S. House Prices Moderate, Weakness Ahead

#### **BY CRISTIAN DERITIS**

Housing market indicators over the past week were mixed with lagged reports on house prices suggesting a temporary reprieve from the sharp declines earlier in the year. A collapse in the forward-looking pending home sales index points to continued price declines in the next couple of months, though November's strong employment report may offset some of the weakness.

The week ahead will bring an additional house price report from CoreLogic along with a read on overall consumer credit growth that may impact the willingness and ability of potential homebuyers to borrow. Results from the University of Michigan's Consumer Sentiment Survey will provide an indication of consumers' views on the state of the housing market.

The Moody's Analytics House Price Index exhibited a modest moderation in price declines for October, posting a 0.41% annualized decline versus 6.6% and 7.5% annualized declines in August and September. The Moody's Analytics HPI is 1.2% below its July 2022 peak and is projected to fall an additional 6% over the next 24 months.

While the national price decline is notable, there is significant variation across geographies with the San Francisco metropolitan statistical area already experiencing a 9.5% decline from its peak. At the other extreme, nearly 20% of metropolitan areas remain close to their peak levels.

House price performance is also varying by market segment with lower-price homes faring better than higher-price homes. Strained affordability due to higher interest rates will continue to provide greater support to the lower end of the market. In addition to the higher cost of borrowing, demand for higher-priced homes is susceptible to a variety of issues including weakness in equity markets, layoffs in the tech sector affecting higher-income households, and declines in demand from foreign buyers because of the strength of the U.S. dollar.

The NAR pending home sales index declined 4.6% to 77.1 in October, its third-lowest reading in history after the start of the pandemic and the Great Recession. Pending sales were down 37% nationally from October 2021. The Midwest was the only region to experience an increase over the month but was still down 32.1% on a year-ago basis. The West dropped the furthest, down 11.3% on a monthly basis and 46.2% year over year. In the South, pending sales were down 6.4% on a monthly basis and 46.2% from a year

earlier. The Northeast fell 4.3% from September and 29.5% from October 2021. Regional trends in pending sales typically foreshadow house prices, with the West likely to experience sharper year-over-year declines than the Midwest or the Northeast.

Partially offsetting the pessimism from pending sales is the recent reversal in mortgage rate trends. While rates are still nearly double what they were at the beginning of the year, they have declined by 50 basis points from the peak levels at the end of October. The mortgage rate spread, or the difference between the rate on a 30-year fixed-rate mortgage and the 10-year Treasury rate, also improved to just less than 3% after gapping out as high as 3.3%. Normally, the spread is closer to 1.75%. The mortgage rate spread should continue to narrow over time as investors step in to fill the void left by the end of the Federal Reserve's quantitative-easing program. Though a narrow spread is supportive of demand, affordability will remain under pressure as rates are unlikely to fall much below 6% soon.

The biggest wild card when it comes to forecasting the future of housing activity and house prices is the number of new household formations that will occur over the next few years. This week brought an update to the Moody's Analytics estimate of the number of households in the United States over the past 10 years based on recently released Census Bureau data. Summarizing the changes, the number of estimated households prior to the onset of the COVID-19 pandemic rose by nearly 1 million over the previous decade. In addition, the revised data displayed much larger swings in household formations during the pandemic than previously estimated with the total number of households falling by close to 1 million from the fourth guarter of 2019 to the fourth guarter of 2020 before rebounding by nearly 2.7 million by the fourth quarter of 2022.

Although the revised data have large implications for understanding behaviors during the pandemic, including movements in house prices, the estimated number of households as of the second quarter of 2022 increased by less than 200,000 with the update. Cyclical factors, including employment, income growth and housing affordability, will drive forecasts for household formations above and beyond demographic factors, including fertility and mortality rates.

### The Week Ahead in the Global Economy

#### U.S.

The U.S. economic calendar remains busy next week. The two most critical datapoints to watch are the release of November's consumer price index on Tuesday, followed by the outcome of the Federal Open Market Committee meeting on Wednesday. Conditions are favorable for the CPI to have further moderated in November. A reduction in gasoline prices, methodological quirks around health insurance prices, and leading indicators pointing to softness in the prices for vehicles, food and services will all act as headwinds to stronger price gains. As a result, we do not think there will be any cause for the Fed to deviate from the expected slowdown to a 50-basis point rate hike next week.

We will also continue to pay close attention to initial jobless claims, which remain well below our estimate of the breakeven level, or that consistent with no monthly job growth. The current break-even level for initial claims is around 270,000. We will also watch to see if the string of highprofile layoffs, which were concentrated mostly in tech, continue in December and broaden to other industries. While there has not appeared to be a meaningful uptick in UI claims as a result of higher announced layoffs, it could be a matter of timing. Many of those same high-profile layoffs in tech involved workers receiving severance pay. Until that severance pay is exhausted, workers would not be eligible to file for UI benefits. Therefore, as we get a little distance from the increase in layoff announcements, it will be important to monitor whether we see signs of higher initial UI claims.

Other key data to be released next week include the NFIB Small Business Survey, retail sales, industrial production, and business inventories.

#### Europe

The U.K.'s GDP likely inched higher in October by 0.2% month over month following a 0.6% contraction in September. The economy likely remained weak as households were pummelled by inflation and disorder in financial markets stoked fear and unease across the country. Growth in the month will in part be a reversion from September's large contraction that followed from fewerthan-normal working days. Growth in October is not much a sign of strength, therefore, and we expect the U.K. is heading into recession. However, the labour market remains a pillar of strength. The unemployment rate was likely 3.6% in the three months to October, unchanged from the September stanza. As the waters get choppier, we do expect unemployment to creep upward. But as of October, we still expect the labour market to remain tight.

The U.K.'s inflation rate likely slowed marginally in November to 11% on a year-ago basis from 11.1% in October. This will be due to base effects from the previous year and not a significant decline in prices between October and November this year. Amidst the inflationary environment, we expect the Bank of England monetary policy committee will hike rates by 50 basis points to 3.5%, in line with consensus forecasts. The European Central Bank, meanwhile, will also likely opt for a 50-basis point hike, bringing the key policy rate to 2.5%. The shift to smaller hikes does not mean an end to the tightening cycle, however. We expect at least two more hikes, with a smaller possibility that the tightening cycle could end in April.

The HICP inflation rate in the euro zone likely was confirmed at 10% on a year-ago basis in November, down from 10.6% in October. We do expect the inflation rate to pick back up again in December, and to peak in January. The euro zone's external trade deficit likely eased between October and September. The nonseasonally adjusted deficit likely rose to  $\notin$ 29.7 billion from  $\notin$ 34.4 billion previously. The euro zone's industrial production likely contracted by 1% month over month in October following a 0.9% rise in September.

#### Asia Pacific

The week will see another slew of Chinese data. China's industrial production growth is expected to slow to 3.75% year on year in November from 5% in October. We expect little to no month-on-month growth, reflecting the toll of COVID-19 restrictions on labour and output. The country's November retail sales are expected to fall 2.5% year on year, extending October's retreat as sporadic lockdowns in major cities hurt consumer confidence and limited access to shops. We expect a slight pickup in spending next year on the back of China's newly loosened COVID-19 policy.

Fixed-asset investment growth in China over the first 11 months of 2022 is expected to ease to 5.6% year on year from 5.8% at the 10-month mark. Amidst the fresh lockdowns in November, private firms will have remained hesitant to invest.

### Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
13-14-Dec	U.S.	Federal Open Market Committee meeting	High	High
15-Dec	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
15-Dec	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
15-Dec	Switzerland	Swiss National Bank monetary policy announcement	Medium	Low
15-Dec	Norway	Norges Bank monetary policy announcement	Medium	Low
15-16-Dec	European Union	European Council summit	Low	Low
20-Dec	Japan	Bank of Japan monetary policy announcement	Medium	Low
18-Jan	Japan	Bank of Japan monetary policy announcement	Medium	Low
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
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	Thailand	General election	Low	Low

### Credit Spreads Narrow Tremendously

#### **BY STEVEN SHIELDS**

#### CREDIT SPREADS

Credit spreads narrowed considerably over the past week. Moody's long-term average corporate bond spread to the 10-year Treasury narrowed 26 basis points to a 12-month low of 145 basis points. Similarly, the long-term average industrial corporate bond spread narrowed 25 basis points to 122 basis points in the period. The ICE BofA BBB U.S. corporate option-adjusted bond spread has declined to 174 basis points after reaching a 12-month high of 210 basis points in early October.

Meanwhile, the ICE BofA U.S. high-yield option-adjusted bond spread sits at 468 basis points. This compares to an average high-yield spread of 1,000 basis points during recent recessions and an average of 350 outside of recessions. The high-yield option-adjusted bond spreads approximate what is suggested by the accompanying longterm Baa industrial company bond yield spread.

One factor limiting the widening in high-yield corporate bond spreads has been robust corporate earnings growth. Profits as a share of GDP have hovered at record levels since early 2020, with the incoming cash flow improving leverage ratios.

#### DEFAULTS

Eight Moody's Investors Service-rated corporate issuers defaulted in October, up from four in September. The October defaults sent the global speculative-grade corporate default rate to 2.5% for the trailing 12 months ended in October, up from 2.3% at the end of September. The building and construction sector and the retail sector each accounted for two defaults. Both defaulters in building and construction were Chinese property developers, which indicates that funding access remains difficult for financially weak companies in this sector. Moody's expects nationwide contracted sales in China to continue to decline amid prolonged weak homebuyer sentiment and housing demand. However, the magnitude of the decline will narrow because of recent government support measures and a low base effect.

The year-to-date global default tally through October stands at 71, compared with 55 for all of 2021. The construction sector accounts for the most defaults, with 18. Banking follows with nine (eight from Ukraine and one from Poland). By region, North America has 28 defaults (25 in the US and three in Canada). The rest are from Europe (22), Asia-Pacific (18) and Latin America (three). Under the baseline forecast, Moody's Credit Transition Model predicts that the default rate will rise to 2.9% at the end of 2022 and will climb to 4.5% by October 2023. The 4.5% rate, if realized, would exceed the historical average of 4.1%.

In the leveraged loan market, four Moody's Investors Service-rated corporate issuers defaulted on loans in October. The issuer-weighted U.S. loan default rate edged higher to 1.7% in October from 1.6% in September. The global high-yield bond default rate closed at 0.9% in October when measured on a dollar-volume basis, up from 0.8% from the prior month. Across regions, the comparable rate held steady at 1.0% in the US but rose to 0.5% from 0.3% in Europe.

#### U.S. CORPORATE BOND ISSUANCE

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 14% for IG and 19% for highyield, 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 yearover-year decline of 35% for investment grade. High-yield issuance faired 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 yearago basis. High-yield issuance faired 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.

There was no corporate US\$-denominated high-yield bond issuance in the week ended December 2, leaving the yearto-date total at \$140.2 billion. Over the first 11 months of the year, high-yield issuance was 76.9% lower compared to 2021. Investment-grade bond issuance totaled \$25.63 billion last week, raising the year-to-date total to \$1.4 trillion. Cumulative U.S. corporate bond issuance has slowed considerably in the second half of the year and is tracking 35.5% lower year over year. High-yield global credit conditions will remain tight at the start of 2023 as inflation concerns, higher interest rates, and bleaker GDP growth prospects cast a cloud over the borrowing environment.

#### U.S. ECONOMIC OUTLOOK

We made some adjustments to the U.S. baseline forecast in November. Among the notable changes is our forecast for global oil prices, which we revised higher through the second quarter of 2024 to account for OPEC+'s announcement that it would cut oil production by 2 million barrels per day. In addition, the outlook for housing deteriorated, as higher mortgage rates will lead to even larger house price declines from their 2022 second-quarter peak than previously projected.

Changes to the forecast for employment, business investment, GDP, and the unemployment rate were not overly significant. Meanwhile, we are sticking to our prior baseline assumption for monetary policy, which includes rate hikes of 50 and 25 basis points in December and January, respectively. The baseline forecast is still for the Fed to engineer a soft landing and the economy to skirt a recession with inflation, over time, returning to the central bank's target.

#### **Fiscal assumptions**

The U.S. Treasury budget deficit is forecast to descend from 5.5% of GDP in fiscal 2022 to 3.9% and 4.2% in fiscal 2023 and 2024, respectively. Our forecast for the fiscal 2023 budget deficit is meaningfully different from October. Last month, we did not anticipate that the full present value cost of student debt forgiveness, as announced by President Biden in August, would be recorded in the fiscal 2022 budget deficit. Instead, our forecast had expected that the present value cost of student loan forgiveness would have been recorded in fiscal 2023, because the Biden administration had not gotten the program up and running by the end of September. Therefore, we were projecting in October a fiscal 2023 shortfall of \$1.4 trillion, or 5.2% of GDP. However, because the entire multiyear cost of student debt relief was ultimately recorded up front in the fiscal 2022 deficit, we had to strip out this prior assumption. As a result, our forecast for the current fiscal year deficit is a lower \$1 trillion.

The Biden administration estimates that recently announced student debt relief will cost \$426 billion, and debt cancellation accounts for nearly the entirety of this amount. It is important to note that this figure does not include the cost of the creation of a new income-driven repayment plan. That cost will be recorded in the deficit once the new income-driven repayment plan is finalized by the Biden administration.

#### Energy price forecast and assumptions

Moody's Analytics has raised its forecast for global oil prices through the second quarter of 2024. The principal reason for the upgrade in the price forecast is OPEC+'s announcement that it would cut oil production by 2 million barrels per day. We think the effective cut will be closer to 1 million bpd. Still, the announcement has in our view added \$5 to \$8 per barrel to global crude oil prices. Risks are weighted to the upside. National governments are burning through their emergency stockpiles of crude oil, and the EU is set to implement a ban on the import of Russian crude oil. Our higher oil price forecast reflects these changes over the past month, but if anything, prices could come in on the high side in the near term.

We have also revised our near-term forecast for U.S. natural gas prices. The Henry Hub price is expected to be \$7.10 in the fourth quarter of 2022, compared with \$8.86 last month. The forecast also remains lower for the next two quarters before converging with the previous month's expectation in the third quarter of 2023.

There are two reasons for the change in the forecast. First, autumn has been mild in the Northern Hemisphere, reducing demand for space heating. Moreover, forecasts call for mild weather to persist. Second, U.S. liquefied natural gas tankers cannot dock in European ports and unload their cargoes because of a lack of infrastructure. The EU is frantically building out its capacity to process LNG imports, principally from the U.S., but this process will take months, if not years. The Russian invasion of Ukraine occurred not even a year ago, so Europe will likely be unable to fully transition away from Russian natural gas until 2024.

#### Minor changes to GDP growth

The revisions to the baseline forecast for GDP growth were modest this month relative to recent months. Annual growth this year and next was essentially unrevised. Growth in both 2024 and 2025 was revised down by 0.2 percentage point, but at 2.1% and 2.7%, respectively, suggests an economy returning to near potential growth.

The expansion in economic activity resumed in the third quarter after pausing in the first half of 2022. U.S. GDP rose 2.6% in the third quarter, reversing all the declines over the prior two quarters, according to the Bureau of Economic Analysis' preliminary estimate. Trade was a major, if temporary, support to growth with consumer spending and government spending also contributing. Inventories were a major drag on growth with fixed investment also falling. Real disposable income rose for the first time in a year and a half as the pace of inflation slowed. The saving rate inched down to 3.3% from 3.4%.

The forecast is for no GDP growth in the final three months of this year or the first three months of next year with GDP falling 0.1% at an annualized rate in the current quarter compared with a forecast of it rising 0.2% previously. For the first quarter, growth of 0.1% is now expected rather than the 0.1% decline forecast last month. GDP is forecast to grow 0.7% in 2023, the same as in the October baseline.

#### Business investment and housing

The outlook for total real business investment did not change much in the November baseline, with growth expected to be 3.5% on an annual average basis. However, the mix has changed. Real equipment spending in 2023 is expected to rise 2.6% on an annual average basis compared with 1% in the October forecast, based on the unexpected strength of transportation equipment spending, particularly light trucks and aircraft, as reported in the third-quarter GDP release. However, real structures spending has been revised down to 7% growth from more than 12% in the October baseline, as companies begin to make firmer decisions about limiting the need for office space.

Higher mortgage interest rates have precipitated a sharp decline in housing affordability for potential homebuyers, reducing demand and causing Moody's Analytics to revise its housing forecasts down.

The national FHFA purchase-only house price index is forecast to fall 7.5% from its 2022 second-quarter peak, versus 5.6% in the October vintage. The Case-Shiller index is forecast to fall 10.5% from its 2022 second-quarter peak, versus 7.5% previously. Mortgage rate increases have been faster than anticipated earlier this year and are causing significant demand destruction as would-be buyers retreat from the market. Lower-priced homes are expected to perform better than higher-priced homes given the underlying demand from young adults and the dearth of supply of starter homes.

The slowing real estate market is causing higher new-home inventories and homebuilders to pull back on construction. This has led us to lower the permits forecast over the next few years. We expect that in the medium term permits will increase, as there is still a significant housing deficit.

Moody's Analytics has also revised its office forecast down. Even as many companies are recalling workers back to their offices, it is becoming clear that there will be a significant number of companies that will remain remote or will have reduced demand for office space due to a switch to hybrid working conditions. We expect to see lower office demand per employee in office-using industries. We have revised our forecast to have more sluggish performance in the near term and to have lower overall long-run gains.

#### Labor market

The U.S. labor market is holding up much better than expected with job gains moderating only slowly. Nonfarm payrolls increased by 261,000 jobs in October, well above expectations, but down from a revised 315,000 in September, and well below the average of 423,000 for the first nine months of the year. Job gains for August and September were revised higher by a modest combined 31,000. Revisions are expected for October as the first print response rate of 66.5% was far below the 76.7% average for the past 10 years. Underlying job gains consistent with growth in the labor force is around 100,000 to 150,000. Therefore, gains far higher than that indicate that the U.S. labor market is still in the process of normalizing from the shock of the pandemic. Even though employment well exceeds its pre-pandemic peak, it would have been about 1.5 million higher by now had the pandemic not occurred.

Goods-producing employment increased by 33,000 in October following a 48,000 gain in September. Manufacturing employment is performing remarkably well, adding 32,000 in October. Higher interest rates and resource constraints are beginning to bite construction. Payrolls advanced only 1,000 following the gain of 22,000 in September. Mining and natural resources were flat. Services expanded by 200,000, down from 271,000 in September. Leading the charge were healthcare, professional/business services, and leisure/hospitality, though net hiring moderated over the month. Financial services are slowing as loan demand eases.

Driven by local government gains, public-sector employment recouped its losses from September. Difficulty with seasonally adjusting the beginning of the school year and challenges that the public sector has had finding employees accounted for the September losses. Publicsector payrolls are still more than 500,000 lower than prior to the pandemic.

The unemployment rate rose to 3.7%, from the postpandemic low of 3.5% in September, as household employment declined by 328,000 in sharp contrast to the payroll survey, and the labor force edged lower. 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-topopulation ratio above 80%. Therefore, it seems that the labor market backtracked slightly in October and could be considered near full employment. The labor force participation rate is 0.3 percentage point below this threshold and the prime-age employment-to-population rate has fallen back below 80%.

Since October starts a new quarter, the new data set the tone for the fourth quarter. The better-than-expected October report listed the fourth-quarter average monthly employment gains to 257,000 from 131,000 in the October forecast vintage. As a result, job growth now averages 406,000 monthly for 2022, up from 375,000. However, we still expect that employment growth will decelerate dramatically in 2023 as the U.S. economy teeters on the brink of recession. We now have even weaker average gains of only 76,000 monthly in 2023, down from 96,000 in the October vintage. However, we expect that the softening in the labor market will be brief. In 2024, monthly gains will

average 105,000, slightly weaker than the 120,000 we expected in October. By 2024, we expect the labor market to be expanding consistently with underlying demographics.

Because of the slight increase in October unemployment, our fourth-quarter forecast for the unemployment rate is 3.7%, slightly higher than the 3.6% in the October baseline. Consistent with the dramatically weaker pace of job growth coupled with slightly higher labor force gains, the unemployment rate will increase through 2023, reaching 4.1% in the final three months of the year. This is unchanged for the past forecast vintage and just below the 50-basis point increase that has coincided with every recession. The unemployment rate falls in 2024, averaging 3.9% in the fourth quarter, slightly higher than in the October baseline.

Risks to our employment forecast are balanced. On the downside, per Okun's law, a 1-percentage point deceleration in GDP growth over the course of a year would amount to around 800,000 jobs per year. This would also increase the unemployment rate by about 0.5 percentage point. However, the Fed's latest Beige Book noted that employers keep hiring even as growth slows because they have a ton of open positions and need to make up for lost work. Labor demand has cooled, but it remains strong. Average hourly earnings growth has decelerated from the peak of 5.6% in March to 4.7% in October, but this is still far higher than is needed to cool inflation meaningfully. The key for the Fed is that labor demand weakens without translating into an increase in the unemployment rate. However, the Fed has a difficult balancing act. It is raising interest rates rapidly to try to cool the labor market so that inflation emanating from the labor market does not spiral out of control. However, sharply higher interest rates amid still-high inflation could weigh on consumer behavior and the labor market more than expected.

#### Monetary policy

The Federal Reserve remains committed to its tough course on inflation. At its November meeting, the Federal Open Market Committee unanimously hiked the target range for the fed funds rate by 75 basis points for a fourth consecutive time, raising the range from 3% to 3.25% to 3.75% to 4%. This was in line with our and consensus expectations. The Fed held on to its forward guidance that further rate hikes will be appropriate. However, uncertainty about the Fed's terminal target range by 2023 rose after the meeting, as Fed Chair Jerome Powell signaled rates might have to rise higher and for longer than previously expected to ensure inflation expectations remain anchored. Prior to the November meeting, markets predicted the funds rate to peak at 4.75% to 5% and to begin falling by this time next year. Immediately after the meeting, investors had rates peaking at 5% to 5.25% and not falling until 2024.

Our current baseline assumptions for the policy rate remain unchanged from our prior baseline and include 50- and 25basis point increases in December and January, respectively. Our terminal fed funds rate projection, meanwhile, remains just north of 4.5%, matching the prior baseline and the FOMC's September signaling. We expect the Fed to start cutting interest rates in late 2023 and throughout 2024. Monetary policy will be restrictive through the end of 2025, when the fed funds rate will return to its neutral rate.

We leave these assumptions unchanged despite Powell's comments. The chairman is appropriately sending a tough message to financial markets where conditions had eased in recent weeks. The Fed is attempting to persuade businesses to be more cautious in managing their payrolls and investment and consumers to be more cautious in their spending. By taking this stance, the Fed makes it less likely that the FOMC will need to follow through on a more bearish interest rate outlook, thus raising the odds the economy can make its way through the next year without a recession. Avoiding a recession will be difficult, but ironically, Powell's hawkish comments make it more likely that we will.

The key for our monetary policy forecast remains inflation. The November baseline has the CPI rising 8.1% this year, 4% in 2023, and 2.4% in 2024, a rounding difference up from the prior baseline. The assumptions around moderating inflation haven't 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.

After rising through much of October, the 10-year Treasury yield moved sideways during the past three weeks. We have the 10-year Treasury yield averaging 4.12% in the final three months of this year, compared with 3.94% in the September baseline. The 10-year Treasury yield averages

4.53% in the fourth quarter of next year, unchanged from the prior baseline. Since we estimate the equilibrium 10-year Treasury yield as 3.75%, the 10-year Treasury yield will decline in the second half of 2023 and into 2024.

On a real broad trade-weighted basis, the U.S. dollar is more than two standard deviations above its long-run average since it began to freely float in the early 1970s. The dollar's value will remain strong while U.S. rates are rising faster than those abroad, and the pandemic and Russian invasion persist as global economic threats.

#### Macroeconomic implications of midterms

Though control of the House of Representatives and the Senate remained too close to call on Wednesday, odds favor Republicans winning back the House, albeit by a smallerthan-expected margin. Historically, midterm elections have shaken up the balance of power in Congress, making it tougher for a president to achieve his legislative agenda. The same will likely be true for Biden, even though his party outperformed expectations on Election Day.

The baseline forecast had long assumed that Republicans would win back at least one chamber of Congress after the 2022 midterms, thereby rendering the Inflation Reduction Act the last major piece of fiscal legislation in Biden's current term. Tuesday's results so far do not warrant any change to our baseline forecast, which assumes policy gridlock in Washington DC over the next two years. Nevertheless, divided government poses both upside and downside risks to the U.S. macroeconomic outlook. Stock markets have historically rallied after midterm elections and, more important, performed best during periods of divided government—and best of all during Democratic presidencies with split Congresses, which is now the most likely outcome. However, divided government will likely lead to greater brinkmanship over government funding and the debt ceiling next year, which will incur needless costs for the economy.

### ECB Slowdown Doesn't Mean It's Stopping

#### **BY KAMIL KOVAR**

The December meeting of the governing council of the European Central Bank is likely to be the most important one in a while. After being in the minority for a decade, the hawks clearly have had free reign over the governing council since June. This time around, the doves are likely to mount a successful defence thanks to the November inflation report that provided them with the necessary ammunition: not only did it show inflation peaking, but it showed inflation significantly dropping from 10.6% to 10%.

More important than the size of the December hike will be what the meeting will suggest about the evolution of monetary policy going into 2023. This is like this year's June meeting, which brought little in terms of an actual decision, but highlighted how the balance of power had decisively shifted to the hawks.

#### From QE to QT in no time

A telling sign will be provided by the central bank when it outlines the exact details of its quantitative tightening process in December. Under this process, the central bank will allow its asset portfolio to gradually shrink in a passive manner as bonds mature. This will reverse its quantitative easing policy. Interestingly, the bank was buying assets up until the middle of this year, so the switch from quantitative easing to tightening will be very rapid, underlining the degree to which the central bank has abandoned its views from spring.

We think that the specifics of QT will be a part of a December compromise, in which the doves get a lower hike, while the hawks get action on the balance sheet. That said, the central bank will be wary of shocking government bond markets and is likely to proceed relatively cautiously. The degree to which this will be true will be an important signal about where the balance of power lies. We expect the central bank to start with a rundown of  $\leq$ 20 billion per month.

In any case, the runoff will apply only to the regular asset purchase program and not to the Pandemic Emergency Purchase Program. With PEPP, the bank has explicitly stated that it will keep reinvesting proceeds up until at least the beginning of 2024, and while the bank has broken its forward guidance recently, we do not expect that it will do so on PEPP reinvestments. Doing so would not only risk sparking a sell-off in bond markets, but it would also take away flexibility in reinvestments, the primary tool the central bank currently uses for addressing any dislocations. While in the worst case it could resort to using the new Transmission Protection Instrument, the bank would rather avoid activating it.

#### That shrinking feeling

Apart from assets bought by the ECB, targeted long-term refinancing operations, under which commercial banks borrowed at very favourable terms from the central bank, have been the other driver of the increase in its balance sheet over the last few years. In October, the ECB began taking the first steps toward shrinking the amount of outstanding TLTROs when it retroactively changed the interest rates applied to these loans. While we believe this was more motivated by limiting the profits of commercial banks from these loans, it will nevertheless result in a faster repayment of these loans.

Regardless of this change, large chunks of these loans—more than €1 trillion—are set to mature throughout next year. This, coupled with the dwindling bond portfolio, will mean that not only will the ECB's balance sheet shrink for the first time since 2014, but it will shrink rapidly.

#### No stopping in winter

As for the size of rate hikes in 2023, the press release from December's meeting and the follow-up conference might offer some clues as what to expect. That said, the central bank will surely stick to its mantras of data dependence and its meeting-by-meeting approach, and so the inflation prints for December, January and February will play a key role. At this point, our baseline includes two 25-basis point hikes in the February and March meetings, but the risks to this forecast are clearly to the upside. After a drop in inflation in November, December is likely to bring another increase and could plausibly bring another record high. This will complicate the narrative around euro zone inflation and make it more likely that February will bring another 50-basis point hike, rather than another shift to a lower gear.

The final decision will depend on the January inflation print, which will be a result of many countercurrents. January is when many price lists get updated, which could mean a jump in prices and inflation as firms reflect the large increase in input costs over the course of the year. However, it is not clear to what degree and how often firms have updated their prices, making this effect smaller than last January. Nevertheless, the base effect from last January is considerable, suggesting a further step-down in inflation. Additionally, Italian and Dutch energy prices are likely to record large declines: in Italy because of the quarterly update in prices reflecting lower wholesale prices, and in the Netherlands because of a government-imposed cap on consumer gas and electricity prices.

For the March meeting, the governing council will have only one additional inflation print, but it will also have new projections. A lot will ride on whether these show a further step-up in inflation, corresponding to the upward forecast miss. Assuming December projections do not significantly undershoot or overshoot, the bank should opt for a 25-basis point hike. Even if inflation surprises on the upside but still records a decline, the bank might opt for a smaller hike given that by March we should see more concrete signs of weakness in the euro zone economy. That said, a 50-basis point hike in March is clearly on the cards.

At this point, our baseline is the benign scenario and the details coming from the December meeting might prompt us to add another 25- or even 50-basis point hike during the ECB's winter meetings.

#### When will it stop?

Looking ahead, we expect that April will be the first time the bank refrains from increasing the interest rate. Apart from already-high policy rates and weakness in the economy, the other argument used by doves will be the large drop in inflation, which is sure to come in March thanks to a huge base effect and introduction of a gas price cap in Germany. This, however, does not mean that the bank will not hike again later. One reason is that while headline inflation should quickly decline from March onward, the same is not true for core inflation. Correspondingly, we expect the focus of the discussion to shift from headline to core, which creates potential for another hike at the June meeting, at which point core inflation will be slightly lower than its expected winter maximum.

While our baseline features the peak main refinancing rate at 3% and the deposit rate at 2.5%, it is easy to imagine the central bank will be more aggressive than that. Even in the absence of additional large inflation shocks, the ECB could raise rates all the way to 4% by next summer if the governing council chooses to continue a war path with inflation, ignore the improving headline inflation picture, and disregard the effects on the real economy.

In contrast, it is hard to imagine that the bank will go any slower than in our baseline, unless the economy starts tanking soon. So, the only uplifting message we can provide is that it is very unlikely that rates will keep on rising into the autumn of 2023.

### One More Australian Rate Hike in Q1

#### BY HARRY MURPHY CRUISE

The Reserve Bank of Australia lifted the cash rate by 25 basis points at its December meeting, taking official interest rates to 3.1%. The board had a lot to juggle this meeting. Since it last met, the jobs market got tighter and wage growth hit its fastest pace since 2012. Working in the other direction, the Australian Bureau of Statistics' new monthly inflation indicator showed inflation easing to 6.9% on a year-ago basis in October from September's 7.3%. In our eyes—and evidently those of the RBA—the balance of the new information was a dead heat. That saw the board continue on its business-as-usual path.

Board members will take their traditional January break. This will give them time before their February meeting to see how the economy, businesses, households and prices are responding to the rate hikes implemented through this year—all 300 basis points of them. As Tuesday's statement noted: "The Board recognises that monetary policy operates with a lag and that the full effect of the increase in interest rates is yet to be felt in mortgage payments."

The break will also give the board members time to digest December-quarter CPI data, which will be out in late January. We expect the data to show inflation edging up to just under 8% year over year. Concurrently, a reversal of some price pressures is also on the cards, notably for food, petrol and vehicles.

With inflation still much higher than desirable, a rate hike in the first quarter is surer than Santa's arrival later this month. We anticipate interest rates to plateau at 3.35% through 2023, helping to gradually unwind price pressures. As inflation returns to the RBA's target band of 2% to 3% in 2024, businesses and households will be in for a welldeserved reprieve when the board cuts rates from their contractionary levels.

### Most U.S. Changes Are Downgrades

#### **BY OLGA BYCHKOVA**

#### U.S.

U.S. credit downgrades outnumbered upgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade bonds and industrial, financial and utility companies. Downgrades comprised 10 of the 14 rating changes and 69% of affected debt.

The largest downgrade, accounting for 64% of debt affected in the period, was issued to CSC Holdings LLC with its corporate family and probability of default ratings lowered to B2 from B1, the senior secured credit facility and senior guaranteed notes cut to B1 from Ba3, and the senior unsecured notes reduced to Caa1 from B3. The ratings action reflects the weak operating trends the company has experienced in 2022 and Moody's Investors Service's expectation that earnings, cash flows, and key credit metrics will remain under pressure over at least the next 12 to 18 months and possibly longer. The credit rating agency said a further downgrade could be considered if the scale of the company declined, liquidity deteriorated, there was a material and unfavorable change in operating performance, or the company adopted a more aggressive financial policy.

Upgrades were headlined by McKesson Corporation, which saw its senior unsecured ratings raised to Baa1 from Baa2, impacting 20% of debt affected in the period. According to Moody's Investors Service Vice President Vladimir Ronin, "The upgrade reflects McKesson's strong business performance, stable profit margins, excellent scale, and financial policies that support a higher rating, even after consideration of liabilities under the opioid settlement, and incorporating the divestiture of a majority of the company's European businesses, and moderation of certain COVID-19related revenue." The credit agency could further upgrade the ratings if McKesson continues a solid operating performance, sustains absolute earnings levels despite headwinds such as ongoing pricing pressure for generic drugs, and demonstrates a commitment to conservative financial policies. In turn, the ratings could be downgraded if McKesson adopts more aggressive financial policies or faces a material slowdown of growth. The positive outlook reflects Moody's expectation for ongoing growth underpinned by strong performance in oncology and biopharma services, as well as in McKesson's prescription technology solutions business segment.

#### Europe

In Western Europe, downgrades outstripped upgrades 5-to-3 but comprised only 38% of affected debt. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade industrial and financial firms.

The largest downgrade, accounting for 29% of affected debt in the period, was issued to U.K.-based speculative-grade industrial company Tullow Oil PLC. Moody's Investors Service lowered the company's corporate family and probability of default ratings to Caa1 from B3 and the rating of the outstanding \$1.7 billion backed senior secured notes due 2026 to Caa1 from B2. Concurrently, Moody's confirmed the Caa2 rating of the \$800 million backed senior unsecured notes due 2025. The outlook has been changed to negative. The rating actions reflect Moody's Investors Service's downgrade of the Government of Ghana's long-term issuer rating to Ca from Caa2 and the concurrent downward revision of Ghana's local currency and foreign currency country ceilings to Caa1 and Caa2, respectively, from B2 and B3.

Ghana currently accounts for around 70% of Tullow's oil production and 2P oil reserves, and as such the company has a large operational concentration in the country. Moody's thus deems that the creditworthiness of Tullow cannot be completely delinked from the credit quality of Ghana, as the rating agency believes that a weaker sovereign can potentially create a drag on the credit profile of companies operating within its borders. Although Tullow has so far been relatively immune to the increasingly difficult Ghanaian economic environment, it remains exposed to the risk of adverse changes in the operating environment stemming from governmental decisions, for instance by means of future, more adverse policies on the oil and gas sector which could drain on the company's cash generation and undermine Tullow's ability to service its debt obligations.

The largest upgrade last week was made to German speculative-grade industrial company Thyssenkrupp AG, which saw its long-term corporate family, probability of default, and senior unsecured notes ratings raised to Ba3 from B1. According to Moody's Investors Service, the ratings upgrades reflect a further strengthening of the company's capital structure and an ongoing structural improvement of its business profile supported by a successful implementation of various restructuring and cost efficiency measures. These efforts enhance the company's resilience to economic cycles, the rating agency said. The change impacted 53% of debt affected in the period.

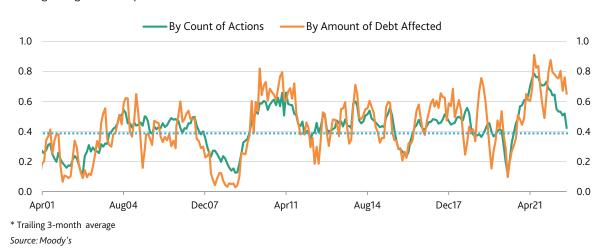


FIGURE 1 Rating Changes - US Corporate & Financial Institutions: Favorable as a % of Total Actions

#### FIGURE 2 Rating Key

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

#### FIGURE 3 Rating Changes: Corporate & Financial Institutions - US

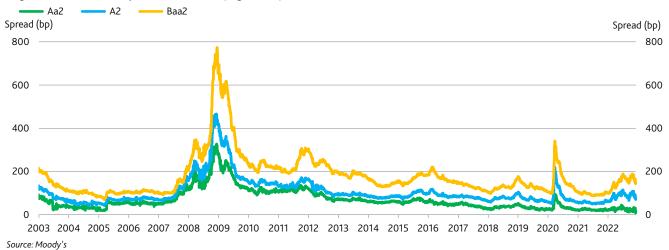
Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/S G
11/30/2022	FOREST CITY ENTERPRISES, LP	Financial	SrSec/BCF/LTCFR		D	B2	B3	SG
11/30/2022	FRANCHISE GROUP, INC.	Industrial	SrSec/BCF		D	Ba3	B1	SG
12/1/2022	U.S. BANCORP-MUFG UNION BANK, N.A	Financial	SrUnsec/LTIR/LTD	700	U	A2	A1	IG
12/1/2022	GABELLI MULTIMEDIA TRUST INC.	Financial	PS	115	D	A2	A3	IG
12/1/2022	PREMIER BRANDS GROUP HOLDINGS LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
12/2/2022	FENDER MUSICAL INSTRUMENTS CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
12/2/2022	RUSSELL INVESTMENTS CAYMAN MIDCO, LTD.	Financial	SrSec/BCF/LTCFR/PDR		D	Ba2	Ba3	SG
12/2/2022	ALTICE USA, INCCSC HOLDINGS, LLC	Industrial	SrUnsec/SrSec/BCF/ LTCFR/PDR	18035	D	B3	Caa1	SG
12/2/2022	CD&R SMOKEY BUYER, INC.	Industrial	SrSec/BCF/LTCFR/PDR	700	D	B2	B3	SG
12/5/2022	MCKESSON CORPORATION	Industrial	SrUnsec	5569.75	U	Baa2	Baa1	IG
12/5/2022	PEABODY ENERGY CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR	1193.884	U	B2	Ba3	SG
12/5/2022	GLOBAL MEDICAL RESPONSE, INC.	Industrial	SrSec/BCF/LTCFR/PDR	600	D	B2	B3	SG
12/6/2022	EFS COGEN HOLDINGS I LLC	Utility	SrSec/BCF		D	Ba2	Ba3	SG
12/6/2022	CQP HOLDCO LP	Industrial	SrSec/BCF/LTCFR/PDR	1400	U	B2	B1	SG
Source: Moody's								

Source: Moody's

### FIGURE 4 Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
12/1/2022	THYSSENKRUPP AG	Industrial	SrUnsec/LTCFR/PDR/ MTN	3346.787	U	B1	Ba3	SG	GERMANY
12/1/2022	METSA BOARD CORPORATION	Industrial	LTIR		U	Baa3	Baa2	IG	FINLAND
12/1/2022	TELEPIZZA GROUP S.AFOODCO BONDCO, S.A.U.	Industrial	SrSec/LTCFR/PDR	350.8625	D	Caa2	Caa3	SG	SPAIN
12/2/2022	TULLOW OIL PLC	Industrial	SrSec/LTCFR/PDR	1800	D	B2	Caa1	SG	UNITED KINGDOM
12/2/2022	LILAS FRANCE SAS-FINANCIERE LABEYRIE FINE FOODS SAS	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	FRANCE
12/2/2022	THE CO-OPERATIVE BANK HOLDINGS LIMITED-THE CO-OPERATIVE BANK FINANCE P.L.C.	Financial	SrUnsec/LTIR/LTD	549.719	U	B1	Ba3	SG	UNITED KINGDOM
12/6/2022	ASTON MIDCO LIMITED	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	JERSEY
2/6/2022	SCHOELLER PACKAGING B.V.	Industrial	SrSec/LTCFR/PDR	261.8377	D	B3	Caa1	SG	NETHERLANDS
Source: Moody's									

#### MARKET DATA



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

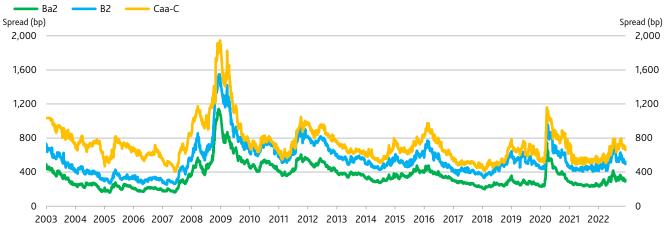


Figure 2: 5-Year Median Spreads-Global Data (High Yield)

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Source: Moody's

#### CDS Movers

#### Figure 3. CDS Movers - US (November 30, 2022 – December 7, 2022)

CDS Implied Rating Rises	CDS Impl		
lssuer	Dec. 7	Nov. 30	Senior Ratings
United States of America, Government of	Aaa	Aa1	Aaa
John Deere Capital Corporation	Aa3	A1	A2
American Honda Finance Corporation	A2	A3	A3
Microsoft Corporation	Aa1	Aa2	Aaa
Merck & Co., Inc.	A1	A2	A1
Gilead Sciences, Inc.	A3	Baa1	A3
Truist Financial Corporation	Baa2	Baa3	A3
PNC Financial Services Group, Inc.	Aa2	Aa3	A3
Tenet Healthcare Corporation	B2	B3	B3
Eli Lilly and Company	Aa1	Aa2	A2

CDS Implied Rating Declines	CDS Impl				
Issuer	Dec. 7	Nov. 30	Senior Ratings		
Ally Financial Inc.	Ba3	Ba2	Baa3		
Comcast Corporation	A3	A2	A3		
Energy Transfer LP	Baa3	Baa2	Baa3		
Oracle Corporation	Baa2	Baa1	Baa2		
Citibank, N.A.	Baa3	Baa2	Aa3		
CVS Health Corporation	A3	A2	Baa2		
Walmart Inc.	Aa3	Aa2	Aa2		
Home Depot, Inc. (The)	Aa3	Aa2	A2		
Amgen Inc.	Aa3	Aa2	Baa1		
American Express Company	A3	A2	A2		

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Dec. 7	Nov. 30	Spread Diff
Rite Aid Corporation	Caa2	3,622	3,159	463
CSC Holdings, LLC	B1	1,120	985	135
Embarq Corporation	Caa2	1,205	1,089	116
Nordstrom, Inc.	Ba1	551	457	94
Lumen Technologies, Inc.	B2	969	876	93
Glatfelter Corporation	Caa2	865	779	86
American Greetings Corporation	Caa1	649	579	70
NRG Energy, Inc.	Ba2	392	322	69
Deluxe Corporation	B3	759	698	62
Kohl's Corporation	Baa2	517	461	56

CDS Spread Decreases	CDS Spreads			
Issuer	Senior Ratings	Dec. 7	Nov. 30	Spread Diff
Pitney Bowes Inc.	B3	952	1,021	-70
Anywhere Real Estate Group LLC	B2	945	1,008	-63
Credit Suisse (USA), Inc.	A3	448	501	-53
Service Properties Trust	B1	475	520	-45
Pactiv LLC	Caa1	547	590	-44
K. Hovnanian Enterprises, Inc.	Caa2	1,212	1,253	-40
R.R. Donnelley & Sons Company	Caa1	335	368	-33
Ventas Realty, Limited Partnership	Baa1	95	120	-25
Hertz Corporation (The)	Caa1	468	490	-22
Freedom Mortgage Corporation	B2	899	919	-20

#### CDS Movers

#### Figure 4. CDS Movers - Europe (November 30, 2022 – December 7, 2022)

CDS Implied Rating Rises	CDS Impl		
Issuer	Dec. 7	Nov. 30	Senior Ratings
France, Government of	Aaa	Aa1	Aa2
Spain, Government of	Aa3	A1	Baa1
Banco Santander S.A. (Spain)	A2	A3	A2
Ireland, Government of	Aaa	Aa1	A1
ABN AMRO Bank N.V.	A1	A2	A1
ING Bank N.V.	Aa2	Aa3	A1
Portugal, Government of	Aa3	A1	Baa2
Banque Federative du Credit Mutuel	Baa1	Baa2	Aa3
Credit Agricole Corporate and Investment Bank	Aa3	A1	Aa3
Finland, Government of	Aaa	Aa1	Aa1

CDS Implied Rating Declines	CDS Impl	CDS Implied Ratings		
Issuer	Dec. 7	Nov. 30	Senior Ratings	
Deutsche Bank AG	Baa3	Baa2	A1	
ENEL Finance International N.V.	Baa1	A3	Baa1	
BNP Paribas Fortis SA/NV	A2	A1	A2	
Trinseo Materials Operating S.C.A.	Caa2	Caa1	B2	
Sappi Papier Holding GmbH	B1	Ba3	Ba2	
United Kingdom, Government of	Aaa	Aaa	Aa3	
Italy, Government of	Baa3	Baa3	Baa3	
Germany, Government of	Aaa	Aaa	Aaa	
Kreditanstalt fuer Wiederaufbau	Aaa	Aaa	Aaa	
Rabobank	Aa2	Aa2	Aa2	

CDS Spread Increases		CDS Spreads			
Issuer	Senior Ratings	Dec. 7	Nov. 30	Spread Diff	
Trinseo Materials Operating S.C.A.	B2	928	884	44	
United Group B.V.	Caa1	974	940	34	
Sappi Papier Holding GmbH	Ba2	379	349	30	
Stonegate Pub Company Financing 2019 plc	Caa2	642	627	16	
Jaguar Land Rover Automotive Plc	B1	896	883	14	
FCE Bank plc	Baa3	209	197	13	
Carnival plc	B3	1,299	1,287	12	
Picard Bondco S.A.	Caa1	757	748	9	
Virgin Media Finance PLC	B2	440	433	7	
Telecom Italia S.p.A.	B1	427	421	6	

CDS Spread Decreases		CDS Spreads			
Senior Ratings	Dec. 7	Nov. 30	Spread Diff		
Caa1	2,300	2,426	-126		
B2	526	581	-56		
Baa2	390	433	-43		
A3	322	360	-38		
Caa1	2,467	2,505	-38		
Caa2	1,077	1,111	-34		
Caa2	580	610	-31		
Caa3	1,957	1,987	-30		
Baa1	190	219	-29		
Baa1	88	115	-27		
	Caa1 B2 Baa2 A3 Caa1 Caa2 Caa2 Caa3 Baa1	Caa1     2,300       B2     526       Baa2     390       A3     322       Caa1     2,467       Caa2     1,077       Caa2     580       Caa3     1,957       Baa1     190	Senior Ratings         Dec. 7         Nov. 30           Caa1         2,300         2,426           B2         526         581           Baa2         390         433           A3         322         360           Caa1         2,467         2,505           Caa2         1,077         1,111           Caa3         1,957         1,987           Baa1         190         219		

Source: Moody's, CMA

#### **CDS Movers**

#### Figure 5. CDS Movers - APAC (November 30, 2022 - December 7, 2022)

CDS Implied Rating Rises	CDS Impl	ied Ratings	_
lssuer	Dec. 7	Nov. 30	Senior Ratings
Commonwealth Bank of Australia	A2	A3	Aa3
Westpac Banking Corporation	A3	Baa1	Aa3
Sumitomo Mitsui Banking Corporation	Aa3	A1	A1
Australia and New Zealand Banking Grp. Ltd.	A2	A3	Aa3
Oversea-Chinese Banking Corp Ltd	Aa1	Aa2	Aa1
Mitsubishi Corporation	Aaa	Aa1	A2
Takeda Pharmaceutical Company Limited	Aa2	Aa3	Baa2
Nomura Holdings, Inc.	Baa1	Baa2	Baa1
Shinhan Bank	Aa3	A1	Aa3
Chubu Electric Power Company, Incorporated	Aaa	Aa1	A3

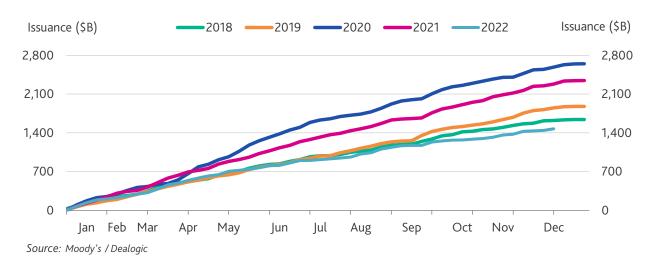
CDS Implied Rating Declines	CDS Impl		
Issuer	Dec. 7	Nov. 30	Senior Ratings
Korea, Government of	A1	Aa3	Aa2
Indonesia, Government of	Baa2	Baa1	Baa2
Philippines, Government of	Baa2	Baa1	Baa2
Sumitomo Mitsui Trust Bank, Limited	A2	A1	A1
Malayan Banking Berhad	Baa2	Baa1	A3
Korea Gas Corporation	Baa2	Baa1	Aa2
Rizal Commercial Banking Corporation	Ba1	Baa3	Baa3
LG Chem, Ltd.	Baa3	Baa2	A3
Tenaga Nasional Berhad	Baa2	Baa1	A3
Japan, Government of	Aaa	Aaa	A1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Dec. 7	Nov. 30	Spread Diff
Rizal Commercial Banking Corporation	Baa3	193	165	27
Indonesia, Government of	Baa2	100	87	13
Philippines, Government of	Baa2	100	86	13
Transurban Finance Company Pty Ltd	Baa2	136	128	9
LG Electronics Inc.	Baa2	137	127	9
Suncorp-Metway Limited	A1	88	80	8
Malayan Banking Berhad	A3	92	84	8
Tenaga Nasional Berhad	A3	94	86	8
NBN Co Limited	A1	114	107	7
Malaysia, Government of	A3	76	70	7

CDS Spread Decreases		CDS Spreads		
lssuer	Senior Ratings	Dec. 7	Nov. 30	Spread Diff
Pakistan, Government of	Caa1	4,545	5,145	-601
Vanke Real Estate (Hong Kong) Company Limited	Baa2	425	594	-169
Lenovo Group Limited	Baa2	306	340	-34
Tata Motors Limited	B1	312	334	-21
GMR Hyderabad International Airport Limited	Ba3	319	334	-15
Nissan Motor Co., Ltd.	Baa3	153	164	-11
Bank of East Asia, Limited	A3	108	116	-9
Hutchison Whampoa International (03/33) Ltd.	A2	64	72	-8
Korea Expressway Corporation	Aa2	57	64	-7
Bank of China (Hong Kong) Limited	Aa3	103	109	-6

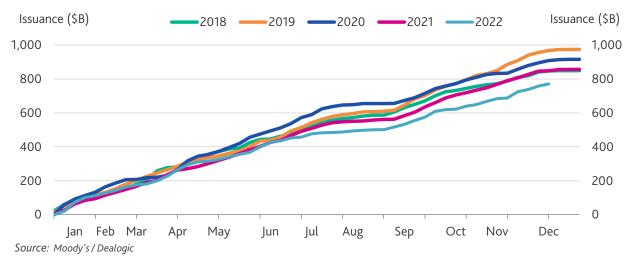
Source: Moody's, CMA

#### **ISSUANCE**



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





#### ISSUANCE

		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	25.632	0.000	26.639
Year-to-Date	1,284.764	140.204	1,472.436
		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	11.072	2.176	13.258

#### Figure 8. Issuance: Corporate & Financial Institutions

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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