

**WEEKLY MARKET
OUTLOOK**

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A Bit Brighter

A slew of datapoints in the U.S. released this week pushed our high-frequency GDP estimate for the fourth quarter to 2.6% annualized. The increase of more than a half point in our estimate is owed in large part to October's surprisingly strong retail sales data. Retail sales had changed little between June and September before jumping in October, supported by an increase in new-vehicle sales, a surge in sales at gasoline stations, and Amazon's first Prime Early Access Sale. However, core sales grew faster than expected.

Though gains of this size will be hard to maintain, overall, prospects are for continued sales growth. Strong job and income growth, abundant cash and available credit for some, and rising prices should overcome the remaining drags from low confidence, a return to service spending, and lingering supply constraints. The pace of price increases will continue to affect sales growth.

Less encouraging, but hardly alarming, was October's industrial production data. Production was shown to have contracted 0.1% in October, and September's figure was revised down from 0.4% monthly growth to 0.1%. Utility production, volatile and dependent on weather, has fallen by more than 1% in three consecutive months and explains some of October's overall decline. Manufacturing output, which says more about the underlying demand than utilities production, rose 0.1% in October, a slight deceleration from September's 0.2% increase. Manufacturing output has held up well despite a strengthening dollar. With the currency's recent weakening, there is some upside risk for foreign demand in the near term.

Also released was the latest data on import prices. U.S. import prices fell 0.2% in October after declining in excess of 1% for three consecutive months. Imported petroleum prices were a continued weight; they were down 1.2% following a 7.2% decrease in September. Industrial supply prices also fell for the fourth consecutive month.

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Import prices of capital goods and autos were up from September, whereas those of consumer goods excluding autos fell for a second month in a row.

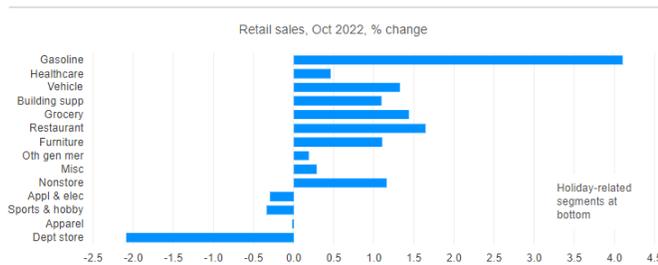
Soaring mortgage rates, dwindling affordability, and reduced demand continued to weigh heavily on the U.S. housing market. Housing starts fell from a revised 1.488 million in September (previously 1.439 million) to 1.425 million in October. The 4.2% drop was slightly below our above-consensus forecast of 4.29 million starts. Single-family starts were down 6.1% from September, while multifamily starts were largely unchanged. From a year ago, housing permits dropped 10.1%. The housing market is cooling quickly, and homebuilders are responding to higher interest rates that undermine demand. Residential investment will be a drag on third-quarter GDP growth, and October's data do not bode well for the fourth quarter.

Strong retail sales, except among holiday segments

U.S. retail sales growth in October exceeded expectations. Further, the growth was not led by vehicle dealers, though strong growth in new light-vehicle sales had suggested it would be. Excluding auto and core sales, excluding both vehicles and gasoline stations, were especially impressive, rising 1.3% and 0.9% respectively. The gain in ex auto sales was the strongest since June when sales were being lifted by soaring prices.

At first glance, strong sales seem to brighten the outlook for holiday spending. However, on closer examination, that is not the case. Traditional holiday segments did poorly in October. The strong gains were concentrated in segments not related to holiday spending like gasoline stations, restaurants, grocery stores and vehicle dealers. Many of the segments more related to holiday shopping, led by department stores but including sporting goods and hobby stores, apparel stores and appliance and electronics stores, posted sales declines.

Strong Sales Bypass Holiday Segments



Sources: Census Bureau, Moody's Analytics

Holiday sales are usually judged on a year-over-year basis, and even by that measure, current performance suggests holiday sales may disappoint. Department store sales are

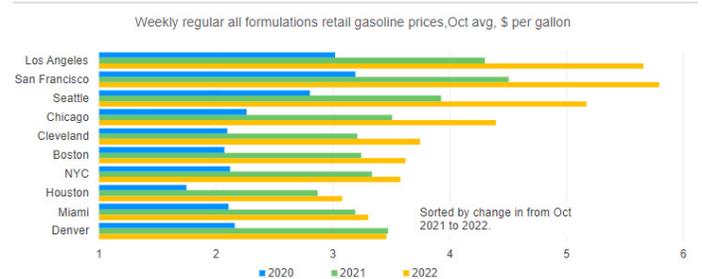
below their year-ago level, while appliance and electronics stores are suffering even more, down over 12% from last October. Results are better for other segments. Other general merchandise store sales are up 3.1%, although much of that may be in food. Also, sporting goods and hobby stores are up 2.5%. Nonstore retailers continue to dominate, up 11.5%. All in, however, holiday sales may fail to meet expectations if the data are any indication.

Inflation's uneven effect across regions

The announcement last week that consumer price growth slowed in October was met with a widespread, if shallow, exhale. Investors and consumers in particular seem heartened by the idea that inflation may have peaked, suggesting that the Federal Reserve may be succeeding in cooling the economy without triggering large-scale job losses. But regionally, the degree to which improvement was evident varies noticeably. While one month is hardly enough to draw conclusions, the most recent figures suggest some changing patterns as price growth stabilizes; specifically, the middle of the country is experiencing the most pronounced relief while the West and Northeast improve more incrementally.

For the first time since inflation hovered around a point and a half two years ago, the nation's highest rate of CPI growth does not rely on the fast-growing, car-dependent South or the commodity-driven Midwest. While price gains have begun to slow meaningfully in those regions, the decline is more superficial in the western U.S., moving it into the top spot for inflation. Within the region, two separate but related stories are unfolding. The Mountain West entered October already experiencing the most rapid price gains of any region on a year-over-year basis. Continued growth in housing costs shoulders much of the blame, as the lag associated with measured rents means that recent cooling in its housing market is not yet reflected in the Rockies.

Gasoline Prices Have Skyrocketed on West Coast



Sources: Energy Information Administration, Moody's Analytics

The Pacific Coast, meanwhile, is getting even less relief; year-over-year consumer price growth barely budged in October despite moving decisively lower nearly everywhere else. This is especially problematic given that the census

division is already the nation's most expensive with California a notoriously costly state and Hawaii by far the nation's priciest. While unaffordability is weighing on house prices, that is not yet reflected in consumer prices—but motor fuel costs most certainly are.

With gasoline and housing costs such a critical determinant of regional CPI differences, there is reason for cautious

optimism around inflation even in those areas where it has persisted. The supply of motor fuels should increase as California's refineries reopen and the initial price shock associated with the Russian invasion of Ukraine fades. While gasoline prices on the West Coast will remain high, they should at least move in the right direction enough to push price pressures down.

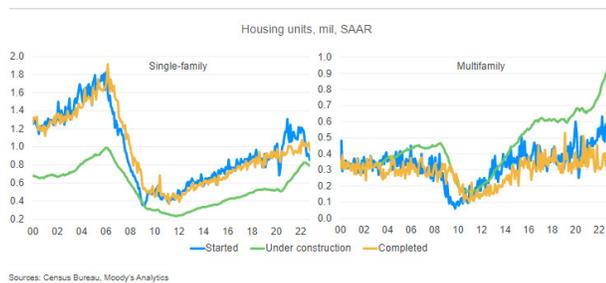
Multifamily Housing Punches Above Weight

BY BERNARD YAROS

Soaring mortgage rates, deteriorating affordability, and reduced demand are weighing on the U.S. housing market. Housing [starts](#) fell from a revised 1.488 million in September (previously 1.439 million) to 1.425 million in October. The 4.2% drop was slightly below our above-consensus forecast of 4.29 million starts. In October, new residential construction continued to showcase a growing bifurcation between single- and multifamily activity.

Single-family starts were down 6.1% from September, hitting their lowest level since May 2020. The pipeline of single-family units under construction shrank for the fifth consecutive month, as the collapse in starts has allowed homebuilders to start making a dent in their backlog of single-family projects, which is still large from a historical perspective. On the other hand, multifamily starts were largely unchanged from September and are up 18% from a year earlier. In addition, the number of multifamily units under construction continues to climb to its highest level since the early 1970s.

Multifamily Is Holding Its Own as Single-Family Weakens

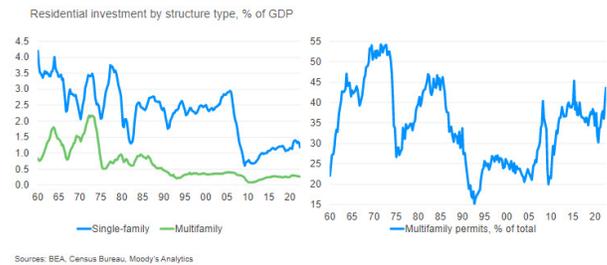


We have hypothesized in the past that the burgeoning pipeline of multifamily projects partly explains why residential construction employment has not yet fallen and why job [openings](#) in construction have risen for two consecutive months to their highest since April. Multifamily builders, facing a decades-high backlog of projects, are likely absorbing any labor slack that is emerging in the single-family industry. This may very well continue to stave off an immediate decline in residential construction payrolls, which typically begin falling one to two years prior to the start of a recession.

Residential investment in single-family structures accounts for a larger share of GDP than that in multifamily structures. Also, single-family investment has historically contributed

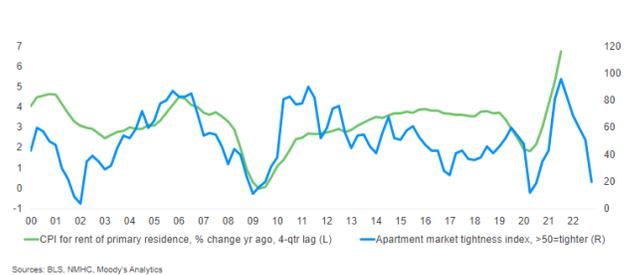
more to volatility in GDP growth. Nevertheless, the multifamily market is playing an ever larger role in producing more available housing units. In the third quarter, the share of housing permits that were for multifamily units rose to its second-highest level since the mid-1980s.

Multifamily Share of Total Permits Has Surged in 2022



Apartment market conditions are already loosening, even as we wait for more of these multifamily units under construction to become completed. The National Multifamily Housing Council's market tightness [index](#) fell from 51 in the second quarter to 20 in the third quarter, the lowest since mid-2020. A reading below 50 indicates that, on net, apartment markets across the U.S. are becoming looser and vice versa.

Looser Apartment Market Conditions Point to Slower Tenant Rent Inflation



This is important from the perspective of the Federal Reserve, which is laser-focused on inflation. The market tightness index historically leads the consumer price [index](#) for rent of primary residence by four quarters and suggests that rental inflation for tenants—currently at its highest since the early 1980s—will start moderating appreciably next year. For context, the CPI for tenant rent accounts for nearly a tenth of the CPI excluding food and energy, which is a better gauge of underlying inflation than the headline CPI

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar is quiet but for a flurry of data reports scheduled Wednesday due to the Thanksgiving holiday on Thursday. The advanced estimate for durable goods orders is released Wednesday. October's data follows a surprise 0.4% increase in September. Manufacturing has held up well in the latter half of 2022 despite inflation and rising borrowing costs. The Bureau of Economic Analysis' second estimate of third-quarter GDP is likely to come in at an annualized rate of 2.6%, unchanged from its preliminary estimate. We expect new-home sales to have descended from September's 603,000 annualized units to 575,000 annualized units in October. The University of Michigan Consumer Sentiment Survey unexpectedly fell in November, according to the survey's preliminary estimate. The revised estimate, scheduled for release next week, is unlikely to show a significant change.

Europe

The schedule is light regarding major releases. France will publish data on the number of job seekers in October, which we estimated to have declined further, to 2.89 million after dropping to 2.91 million in September. PMI data during the month reported significant increases in employment, pointing to a tightening in the labour market. However, we do expect unemployment to begin rising slowly this winter as the economy starts backtracking under the weight of sky-high inflation and demand weakening globally.

There will be final estimates of Germany's third-quarter GDP. These will likely confirm a growth rate of 0.3% quarter over quarter in the September stanza. We are likely to see some support from household and government

consumption, whereas net trade likely detracted from GDP. Investments may benefit from easing supply conditions during the period.

Finally, Russia's industrial production likely slumped 3.5% year over year in October, after a 3.1% decline in September. Factories in the country are likely still bumping up against supply constraints as they rework their global supply chains since the West applied sanctions. The manufacturing PMI is still in expansionary territory with a reading of 50.7 in October, but this was a strong slowdown from the score of 52 in September.

Asia Pacific

Monetary tightening will be an important theme. The Reserve Bank of New Zealand will forge ahead with its aggressive tightening. We look for a 75-basis point hike, bringing the policy rate to 4.25%. Inflation remains uncomfortably high in New Zealand despite the central bank being amongst the most aggressive in Asia-Pacific. Demand- and supply-side pressures are elevated. The country's relatively high prevalence of fixed-rate mortgages means that households will not feel the full brunt of monetary tightening until 2023. We have a mild recession baked into the baseline forecast for next year as high borrowing costs alongside elevated inflation cause households to meaningfully retreat.

The Bank of Korea will likely deliver a 50-basis point increase, bringing its policy rate to 3.5%. High inflation alongside the weak won is encouraging the central bank to hike. Households are sensitive to rising borrowing costs because of their relatively hefty debt burdens.

Geopolitical Calendar

| Date | Country | Event | Economic Importance | Financial Market Risk |
|-----------|-----------------|--|---------------------|-----------------------|
| 6-18-Nov | U.N. | U.N. Climate Change Conference 2022 (COP 27), hosted by Egypt | Medium | Low |
| 8-Nov | U.S. | Midterm elections | High | Medium |
| 10-13-Nov | ASEAN | ASEAN Summit, hosted by Cambodia | Medium | Low |
| 15-16-Nov | G-20 | G-20 Heads of State and Government Summit, hosted by Indonesia | Medium | Low |
| 18-19-Nov | APAC | Economic Leaders' Meeting, hosted by Thailand | Low | Low |
| 19-Nov | Malaysia | General election | Low | Low |
| 24-Nov | Sweden | Riksbank monetary policy announcement | Medium | Low |
| 7-Dec | Australia | Reserve Bank of Australia monetary policy announcement | Medium | Low |
| 7-Dec | India | Reserve Bank of India monetary policy announcement | Medium | Low |
| 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 |
| 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 |

Inflation, Interest Rates, Lower Growth Cast Cloud Over Borrowing

BY STEVEN SHIELDS

CREDIT SPREADS

Corporate credit spreads remain elevated but have narrowed considerably over the past month. The ICE BofA BBB U.S. corporate option adjusted bond spread narrowed 13 basis points to 183 basis points in the period. The spread has declined nearly 30-basis points from the 12-month high registered in early October.

Similarly, the Bloomberg Barclays high-yield option adjusted spread narrowed to 449 basis points. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread but is wider than implied by the current VIX reading of 24.1.

Despite bear market conditions for equities, high-yield spreads remain well below the 1,000-basis point spread indicative of a distressed bond market, and corporate default rates, though rising, remain low. 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

Four Moody's-rated corporate issuers defaulted in September, down from 11 in August. The four September defaulters were Canada-based Bausch Health Companies Inc., U.S.-based Phoenix Services International LLC, U.K.-based Crown UK Holdco Limited and Germany-based Schur Flexible GmbH. The largest defaulter was Bausch Health, a global developer and manufacturer of pharmaceutical, medical device and over-the-counter products.

The year-to-date default tally climbed to 63 through September, which surpasses the count of 55 for all of 2021. The construction sector remains the largest contributor to defaults, with 16. Banking followed with eight, all of which were Ukrainian banks. By region, North America had 25 defaults (23 in the U.S. and two in Canada). The rest were in Europe (19), Asia-Pacific (16) and Latin America (three).

Under our 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 4.3% in September 2023. The 4.3% rate, if realized, would exceed the historical average of 4.1%.

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.

There was \$7.2 billion in US\$-denominated high-yield issuance in the week ended November 11, considerably higher than the \$1.5 billion issued in the previous period. This brings the year-to-date total at \$137.9 billion. Meanwhile, investment-grade bond issuance totaled \$45.16 billion last week, increasing the year-to-date total to \$1.25 trillion. Issuance has slowed considerably in the second half of the year and is 29.4% over the past twelve months. High-yield Global credit conditions will remain tight at the start of 2023 as persistent inflation, 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 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. Public-sector payrolls are still more than 500,000 lower than prior to the pandemic.

The unemployment rate rose to 3.7%, from the post-pandemic 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-to-population 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 25-basis 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 smaller-than-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.

U.K. Unveils New Budget Package

BY GAURAV GANGULY

The budget plans unveiled in the [U.K.](#) government's Autumn Statement are a marked departure from the mini-budget announced a few weeks ago by previous Prime Minister Liz Truss and her chancellor. Instead of a package of unfunded fiscal spending, Thursday's budget gives details on a string of expenditure cuts and tax increases designed to demonstrate the government's fiscal credibility.

The coming fiscal austerity

The U.K. is about to embark on an extended period of fiscal austerity leading to fiscal tightening of £55 billion, equally spread between revenue increases and expenditure decreases. The government's aim is to ensure public debt as a share of GDP is declining in five years' time, a target that will be achieved, according to the Office for Budget Responsibility. Measures announced Thursday provide some fiscal support initially, with most of the tightening taking place in later years.

Many of the fiscal promises outlined in the mini-budget of 23 September by previous Chancellor Kwasi Kwarteng had already been cancelled by 14 October under current Chancellor Jeremy Hunt. The measures that remain include the reversal of National Insurance contributions, the increase in the threshold for Stamp Duty and Land Tax (now to be reversed in March 2025), an uplift to the investment tax allowance for corporations, and incentives offered to start-ups and to share option plans. In a bid to lessen the fiscal impact of the Energy Price Guarantee, the period of support was shortened from two years to six months.

Tax measures

Tax measures announced Thursday include lowering the threshold for the top rate of income tax and freezing other thresholds. Tax relief on capital gains and dividends will be scaled back over a period of two years. Temporary windfall

taxes on energy companies will rise from 25% to 35% and will be in place for six years. Electricity generators will pay a 45% levy on excess profits. These two measures are expected to raise £14 billion in the next fiscal year.

Uncertainty over the future of the Energy Price Guarantee was resolved, and the cap will stay in place for an extra year, though the limit will be raised to £3,000, which implies a 20% increase in retail energy prices in April.

Pensioners and vulnerable households have been offered additional support. In April state pensions and benefits will rise 10.1%, and low-income households and those with disabilities will be entitled to additional support to ease the cost-of-living crisis through next year.

Public expenditures

Meanwhile, on public expenditure, the government will mostly adhere to the plans previously outlined in the Spending Review, which last until 2025. In the subsequent three years, the spending of government departments is intended to grow by 1% in real terms, a relatively austere stance.

The OBR forecasts that the economy will be in recession until mid-2023 with output contracting around 2% and the support measures announced by the government preventing a sharper fall. The OBR forecast is similar in duration to our November baseline though somewhat more severe.

Market reaction to the statement has been muted, suggesting that the announcements in the budget were widely anticipated. This is a budget designed to calm markets and help the U.K. win back fiscal credibility after the chaos of the last few months.

Why a Drop in GDP Can Be Good News

BY STEFAN ANGRICK

The surprise contraction in [Japan's](#) third-quarter GDP has caused a lot of head-scratching. Preliminary estimates of GDP tend to do that, as Japanese output sees some of the largest revisions within the OECD. But Monday's release showing a 0.3% quarter-on-quarter decline (1.2% q/q in annualised terms) was particularly odd. Like most analysts, we thought the run of better-than-expected monthly data had the economy on track to eke out moderate GDP growth on the quarter. When GDP showed a surprise decline instead, commentary quickly pointed to a surging import bill, yen weakness, or disruptions from COVID-19. None of these plausibly explain the downturn.

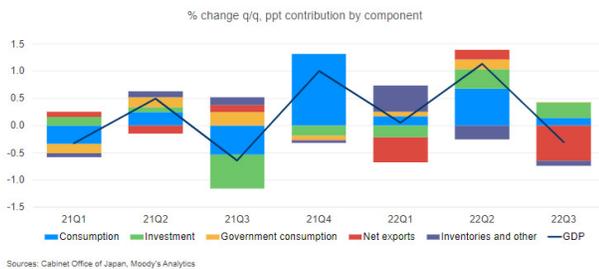
value of goods and services imported but doesn't mechanically impact import volumes. Import volumes may change as a result of higher import prices, but economically, the logic here is that higher prices for foreign goods and services reduce the volumes imported. In other words, Japan's third-quarter import volumes rose despite, not because of, higher import prices and a weaker yen.

Not an unqualified negative

We also caution against seeing imports as an unqualified negative for the economy. The standard calculation of GDP defines it as the sum of private consumption, investment, government consumption and net exports ($GDP = C + I + G + X - M$). Imports—be they cars, vaccines or IT services—are already captured in C, I and G. Subtracting the M variable simply subtracts the part that's been produced elsewhere from C, I and G. Put another way, when a household buys a car from overseas, consumption rises by the same volume amount as imports; the net impact on GDP is zero.

A more plausible interpretation of Monday's data is to see the numbers as a reflection of Japan's belated COVID-19 recovery gaining traction, which has helped consumption and investment spending. Indeed, consumption in the third quarter arguably outperformed expectations at 0.3% q/q growth; COVID-19 waves previously stalled or reversed household spending. And seeing how the change in third-quarter net exports was driven largely by a widening deficit in services trade, the good news here is that the resumption of visitors to Japan should see the deficit narrow in the coming quarters. At the end of the day, we caution against reading too much into the first preliminary estimate of GDP. The data is choppy at the best of times and revisions are common.

Net Exports Shaved 0.7 Percentage Point Off Q3 GDP Growth



Dissecting real GDP growth shows that most of the third-quarter drop was due to net exports. Specifically, real import growth outpaced export growth from the prior quarter. It's tempting to see Japan's high import prices or a weak yen as the culprit, as both could bring down net exports by inflating Japan's import bill. But that view confuses volumes and values. Real GDP data captures changes in volumes and excludes the impact of price changes. A surge in import prices, made worse by a depreciating yen, raises the nominal

Weakening Continues for U.S. Corporate Credit Quality

BY STEVEN SHIELDS

U.S.

U.S. corporate credit quality continues to weaken with downgrades accounting for all but one credit rating change in the latest period.

The largest downgrades in terms of debt affected were issued to At Home Group Inc. and PECF USS Intermediate Holding III Corp. Moody's Investors Service downgraded At Home's corporate family rating and senior secured notes to Caa1 from B3. The downgrade reflects the difficult operating environment the company is facing including high costs and volatile demand that increases the risk that a recovery in operating performance could be longer than previously anticipated, Moody's said. The downgrade also reflects At Home's very high leverage. Absent a significant recovery in earnings, its current level of leverage is considered by Moody's Investors Service to be unsustainable.

Meanwhile, Moody's Investors Service downgraded the CFR of USS to Caa1 from B3, the company's first lien senior secured credit facility rating to B3 from B2, and its senior unsecured \$550 million notes rating to Caa3 from Caa2. The downgrade of the CFR to Caa1 from B3 reflects a material deterioration of USS' credit profile since the October 2021 leveraged buyout and Moody's expectations that debt-to-EBITDA ratio will be sustained above 8.5. Despite the company's efforts to pass-on higher operating costs to its customers, through an implementation of a fuel and payroll surcharge, Moody's said it believes that increasing macroeconomic headwinds create uncertainty around the company's ability to improve earnings meaningfully and therefore reduce leverage.

The sole U.S. credit upgrade was issued to LPL Holdings Inc., which saw its senior unsecured rating lifted to investment-grade status (Baa3). According to the ratings action, the positive action reflects the firm's consistent execution of a sound business and financial strategy that has contributed to its strong financial profile. Additionally, Moody's Investors Service determined that the firm's financial profile and policies will likely remain consistent in the longer term, including with respect to the firm maintaining a favorable target debt leverage, and that its appetite for debt-funded acquisitions will not become outsized.

In October, credit upgrades accounted for just 42% of ratings actions issued by Moody's Investors Service. This

marked the first month since October 2020 in which credit downgrades outnumbered upgrades. Year to date, Moody's Investors Service has issued 285 credit upgrades and 217 downgrades. The highest number of upgrades have been issued to exploration and midstream energy firms thanks to rising energy prices, while businesses services have received the highest number of downgrades.

Europe

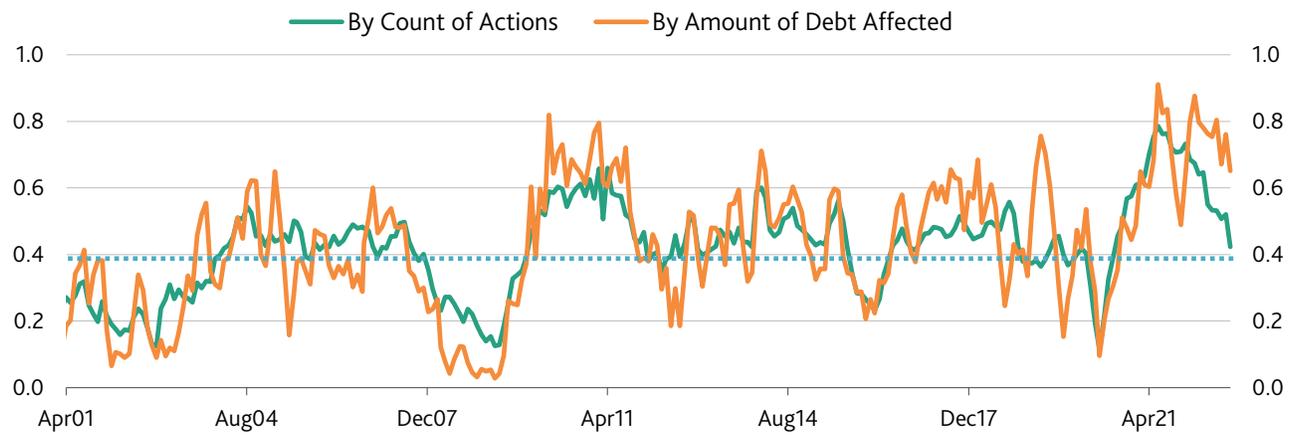
Rating activity was balanced across Western Europe with Moody's Investors Service issuing four rating changes in the period.

Of the changes, Kerry Group Plc's long-term issuer was lifted to Baa2 from Baa1. Kerry is a global supplier of ingredients and flavors to the food, beverage and pharmaceutical industries. According to Paolo Leschiutta, senior vice president at Moody's Investors Service and lead analyst for Kerry, "The rating upgrade reflects Kerry's strong track record of top line growth while maintaining stable margins, positive free cash flow, and a prudent financial policy that translates into solid credit metrics."

The key downgrade in the period was made to DekaBank Deutsche Girozentrale's junior senior unsecured debt rating lowered one-notch to A2 from A1. The downgrade was prompted by a meaningful reduction in the outstanding volume of this loss-absorbing instrument, in combination with strong balance sheet growth, according to Moody's Investors Service. All other ratings of DekaBank were unaffected by the ratings action, including the bank's Aa2 long-term bank deposit and senior unsecured debt ratings and their stable outlook.

RATINGS ROUND-UP

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



* Trailing 3-month average

Source: Moody's

FIGURE 2
Rating Key

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

FIGURE 3
Rating Changes: Corporate & Financial Institutions - US

| Date | Company | Sector | Rating | Amount (\$ Million) | Up/Down | Old LTD Rating | New LTD Rating | IG/SG |
|------------|---|------------|-----------------------------|---------------------|---------|----------------|----------------|-------|
| 11/9/2022 | PARK-OHIO INDUSTRIES INCORPORATED | Industrial | SrUnsec/LTCFR/PDR | 350 | D | Caa1 | Caa2 | SG |
| 11/9/2022 | AT HOME GROUP, INC. | Industrial | SrSec/SrUnsec/BCF/LTCFR/PDR | 1100 | D | B3 | Caa1 | SG |
| 11/9/2022 | TECOSTAR HOLDINGS, INC. | Industrial | SrSec/BCF/LTCFR/PDR | | D | B3 | Caa2 | SG |
| 11/10/2022 | VICTORS INTERMEDIATE HOLDING II CORPORATION-ACPRODUCTS HOLDINGS, INC. | Industrial | SrUnsec/SrSec/BCF/LTCFR/PDR | 550 | D | Caa2 | Caa3 | SG |
| 11/10/2022 | PECF USS INTERMEDIATE HOLDING III CORPORATION | Industrial | SrUnsec/SrSec/BCF/LTCFR/PDR | 1100 | D | Caa2 | Caa3 | SG |
| 11/11/2022 | NMN HOLDINGS II CORP-NMN HOLDINGS III CORP. | Industrial | SrSec/BCF/LTCFR/PDR | | D | B1 | B2 | SG |
| 11/14/2022 | LPL HOLDINGS II-LPL HOLDINGS, INC. | Financial | SrUnsec | 1700 | U | Ba2 | Baa3 | SG |
| 11/14/2022 | EMERGENT BIOSOLUTIONS INC. | Industrial | SrUnsec/LTCFR/PDR | 450 | D | B3 | Caa1 | SG |
| 11/14/2022 | BW GAS & CONVENIENCE HOLDINGS, LLC | Industrial | SrSec/BCF/LTCFR/PDR | | D | B1 | B2 | SG |
| 11/15/2022 | UNITED RENTALS, INC.-UNITED RENTALS (NORTH AMERICA), INC. | Industrial | SrSec | 750 | D | Baa3 | Ba1 | IG |

Source: Moody's

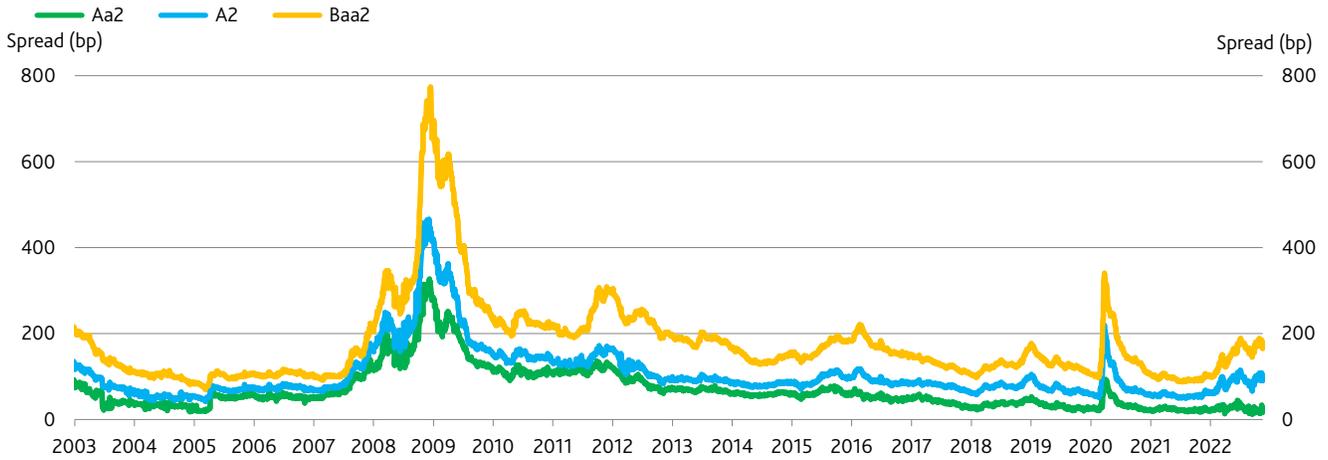
FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

| Date | Company | Sector | Rating | Amount (\$ Million) | Up/Down | Old LTD Rating | New LTD Rating | IG/SG | Country |
|------------|---|------------|---------------------|---------------------|---------|----------------|----------------|-------|----------------|
| 11/9/2022 | DEKABANK DEUTSCHE GIROZENTRALE | Financial | MTN | 752.0583 | D | A1 | A2 | IG | GERMANY |
| 11/9/2022 | REXEL SA | Industrial | SrUnsec/LTCFR/PDR | 1979.101 | U | Ba3 | Ba1 | SG | FRANCE |
| 11/9/2022 | FRIGOGLASS SAIC | Industrial | SrSec/LTCFR/PDR | 257.2831 | D | Caa2 | Ca | SG | NETHERLANDS |
| 11/10/2022 | THG HOLDINGS PLC-THG OPERATIONS HOLDINGS LIMITED | Industrial | SrSec/BCF/LTCFR/PDR | | D | B1 | B2 | SG | UNITED KINGDOM |
| 11/11/2022 | GENESIS CARE PTY LIMITED-GENESIS SPECIALIST CARE FINANCE UK LIMITED | Industrial | SrSec/BCF/LTCFR | | D | B3 | Caa2 | SG | UNITED KINGDOM |
| 11/14/2022 | DELTA TOPCO LIMITED-ALPHA TOPCO LIMITED | Industrial | LTCFR/PDR | | U | B1 | Ba3 | SG | JERSEY |
| 11/14/2022 | PLAYA HOTELS & RESORTS N.V.-PLAYA RESORTS HOLDING B.V. | Industrial | LTCFR | | U | B3 | B2 | SG | NETHERLANDS |
| 11/15/2022 | KERRY GROUP PLC | Industrial | SrUnsec/LTIR | 3174.398 | U | Baa2 | Baa1 | IG | IRELAND |

Source: Moody's

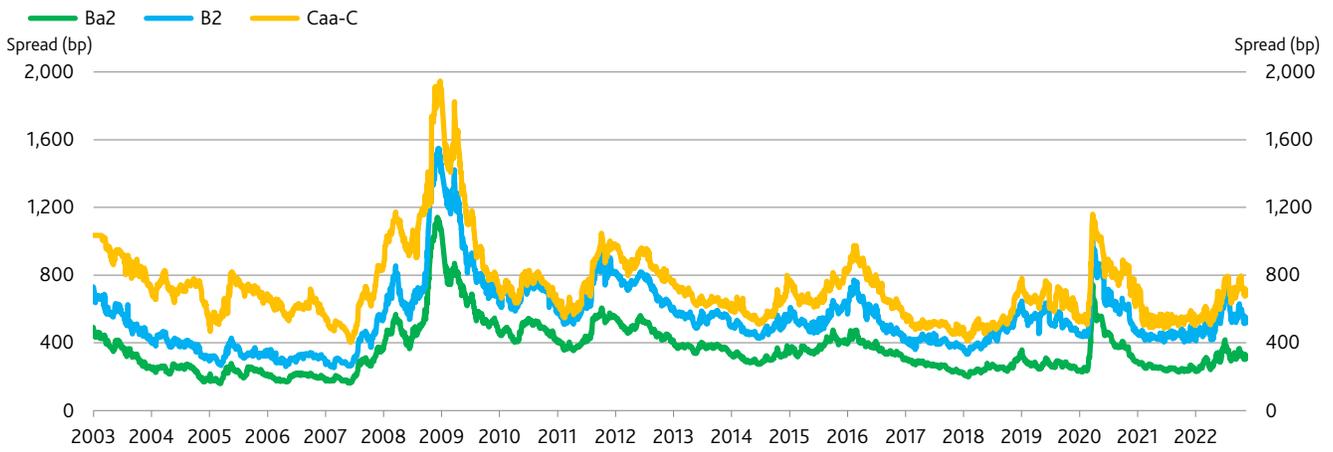
MARKET DATA

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



Source: Moody's

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



Source: Moody's

CDS MOVERS

Figure 3. CDS Movers - US (November 9, 2022 – November 16, 2022)

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|---|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| JPMorgan Chase & Co. | A3 | Baa1 | A1 |
| Wells Fargo & Company | A3 | Baa1 | A1 |
| AT&T Inc. | Baa2 | Baa3 | Baa2 |
| Verizon Communications Inc. | Baa2 | Baa3 | Baa1 |
| Comcast Corporation | A2 | A3 | A3 |
| Ford Motor Credit Company LLC | Ba2 | Ba3 | Ba2 |
| Ford Motor Company | Ba2 | Ba3 | Ba2 |
| Bank of New York Mellon Corporation (The) | Aa3 | A1 | A1 |
| Merck & Co., Inc. | Aa3 | A1 | A1 |
| Nissan Motor Acceptance Company LLC | Ba2 | Ba3 | Baa3 |

| CDS Implied Rating Declines | CDS Implied Ratings | | |
|---|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| CMS Energy Corporation | A3 | Aa1 | Baa2 |
| American Honda Finance Corporation | A3 | A1 | A3 |
| Thermo Fisher Scientific Inc. | A3 | A1 | A3 |
| BlackRock, Inc. | A3 | A1 | Aa3 |
| Clorox Company (The) | A1 | Aa2 | Baa1 |
| United States Cellular Corporation | Ba3 | Ba1 | Ba2 |
| United States of America, Government of | Aa1 | Aaa | Aaa |
| Toyota Motor Credit Corporation | Aa3 | Aa2 | A1 |
| Intel Corporation | A2 | A1 | A1 |
| Walt Disney Company (The) (Old) | Aa1 | Aaa | A2 |

| CDS Spread Increases | CDS Spreads | | | |
|------------------------------------|----------------|---------|--------|-------------|
| | Senior Ratings | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| United States Cellular Corporation | Ba2 | 315 | 213 | 102 |
| Liberty Interactive LLC | B2 | 1,758 | 1,687 | 71 |
| CMS Energy Corporation | Baa2 | 75 | 32 | 43 |
| Terex Corporation | B2 | 281 | 252 | 29 |
| Service Properties Trust | B1 | 436 | 415 | 21 |
| Deluxe Corporation | B3 | 602 | 583 | 19 |
| Carpenter Technology Corporation | B2 | 339 | 325 | 13 |
| Wendy's International, LLC | Caa2 | 233 | 220 | 13 |
| Commercial Metals Company | Ba2 | 230 | 217 | 12 |
| Sysco Corporation | Baa1 | 123 | 112 | 11 |

| CDS Spread Decreases | CDS Spreads | | | |
|--------------------------------|----------------|---------|--------|-------------|
| | Senior Ratings | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| Carnival Corporation | B3 | 1,443 | 1,834 | -391 |
| Rite Aid Corporation | Caa2 | 3,546 | 3,759 | -213 |
| Pitney Bowes Inc. | B3 | 1,225 | 1,415 | -190 |
| Staples, Inc. | Caa2 | 1,718 | 1,898 | -180 |
| American Airlines Group Inc. | Caa1 | 1,093 | 1,266 | -172 |
| Anywhere Real Estate Group LLC | B2 | 1,082 | 1,244 | -162 |
| Beazer Homes USA, Inc. | B2 | 607 | 763 | -157 |
| K. Hovnanian Enterprises, Inc. | Caa2 | 1,415 | 1,558 | -142 |
| Royal Caribbean Cruises Ltd. | B3 | 723 | 824 | -100 |
| Dish DBS Corporation | B3 | 1,331 | 1,411 | -80 |

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (November 9, 2022 – November 16, 2022)

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|--------------------------------------|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| Autoroutes du Sud de la France (ASF) | Aa3 | A2 | A3 |
| Societe Generale | A2 | A3 | A1 |
| Deutsche Bank AG | Baa2 | Baa3 | A1 |
| ABN AMRO Bank N.V. | A2 | A3 | A1 |
| Credit Suisse Group AG | Ba2 | Ba3 | Baa2 |
| Electricite de France | Baa2 | Baa3 | Baa1 |
| Lloyds Bank plc | A2 | A3 | A1 |
| Santander UK plc | A2 | A3 | A1 |
| Standard Chartered Bank | A2 | A3 | A1 |
| NatWest Markets Plc | Baa1 | Baa2 | A1 |

| CDS Implied Rating Declines | CDS Implied Ratings | | |
|-----------------------------|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| Raiffeisen Schweiz | A2 | Aa3 | A3 |
| Norsk Hydro ASA | Baa1 | A2 | Baa3 |
| Spain, Government of | A1 | Aa3 | Baa1 |
| Portugal, Government of | A1 | Aa3 | Baa2 |
| DZ BANK AG | A2 | A1 | Aa2 |
| Dexia Credit Local | Aa2 | Aa1 | Baa3 |
| UniCredit Bank AG | Baa1 | A3 | A2 |
| Danske Bank A/S | A3 | A2 | A3 |
| Swedbank AB | A3 | A2 | Aa3 |
| Bayerische Landesbank | A2 | A1 | Aa3 |

| CDS Spread Increases | Senior Ratings | CDS Spreads | | |
|--|----------------|-------------|--------|-------------|
| | | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| Stonegate Pub Company Financing 2019 plc | Caa2 | 660 | 626 | 34 |
| Vedanta Resources Limited | Caa1 | 2,571 | 2,538 | 34 |
| Vue International Bidco plc | C | 632 | 606 | 26 |
| Banca Monte dei Paschi di Siena S.p.A. | Caa1 | 423 | 409 | 14 |
| Norsk Hydro ASA | Baa3 | 84 | 71 | 13 |
| Virgin Money UK PLC | Baa1 | 359 | 348 | 11 |
| Hamburg Commercial Bank AG | Baa1 | 234 | 224 | 10 |
| Stagecoach Group Plc | Baa3 | 212 | 202 | 10 |
| Alliander N.V. | Aa3 | 64 | 56 | 9 |
| Novo Banco, S.A. | B3 | 171 | 164 | 7 |

| CDS Spread Decreases | Senior Ratings | CDS Spreads | | |
|------------------------------|----------------|-------------|--------|-------------|
| | | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| Casino Guichard-Perrachon SA | Caa1 | 2,625 | 3,074 | -449 |
| Carnival plc | B3 | 1,369 | 1,739 | -370 |
| Novafives S.A.S. | Caa2 | 1,524 | 1,800 | -276 |
| Garfunkelux Holdco 3 S.A. | Caa2 | 1,211 | 1,443 | -232 |
| CECONOMY AG | Ba3 | 1,018 | 1,163 | -145 |
| Iceland Bondco plc | Caa2 | 1,198 | 1,297 | -99 |
| ZF Europe Finance B.V. | Ba1 | 376 | 475 | -98 |
| Grifols S.A. | B3 | 610 | 700 | -90 |
| United Group B.V. | Caa1 | 889 | 978 | -89 |
| Boparan Finance plc | Caa3 | 1,882 | 1,968 | -86 |

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (November 9, 2022 – November 16, 2022)

| CDS Implied Rating Rises | CDS Implied Ratings | | |
|---|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| Vanke Real Estate (Hong Kong) Company Limited | Caa1 | Caa3 | Baa2 |
| Japan, Government of | Aaa | Aa1 | A1 |
| China, Government of | A3 | Baa1 | A1 |
| Korea, Government of | Aa3 | A1 | Aa2 |
| Philippines, Government of | Baa1 | Baa2 | Baa2 |
| Sumitomo Mitsui Trust Bank, Limited | A1 | A2 | A1 |
| Export-Import Bank of China (The) | A3 | Baa1 | A1 |
| Malaysia, Government of | A3 | Baa1 | A3 |
| Oversea-Chinese Banking Corp Ltd | Aa2 | Aa3 | Aa1 |
| China Development Bank | Baa1 | Baa2 | A1 |

| CDS Implied Rating Declines | CDS Implied Ratings | | |
|---|---------------------|--------|----------------|
| | Nov. 16 | Nov. 9 | Senior Ratings |
| Issuer | | | |
| Lenovo Group Limited | B1 | Baa3 | Baa2 |
| Toyota Industries Corporation | Baa2 | A3 | A2 |
| Mitsubishi UFJ Financial Group, Inc. | A1 | Aa3 | A1 |
| Sumitomo Mitsui Banking Corporation | A1 | Aa3 | A1 |
| Australia and New Zealand Banking Grp. Ltd. | A3 | A2 | Aa3 |
| DBS Bank Ltd. | Aa3 | Aa2 | Aa1 |
| Hong Kong SAR, China, Government of | Aa3 | Aa2 | Aa3 |
| MUFG Bank, Ltd. | A1 | Aa3 | A1 |
| Indian Railway Finance Corporation Limited | Baa3 | Baa2 | Baa3 |
| Telstra Corporation Limited | A2 | A1 | A2 |

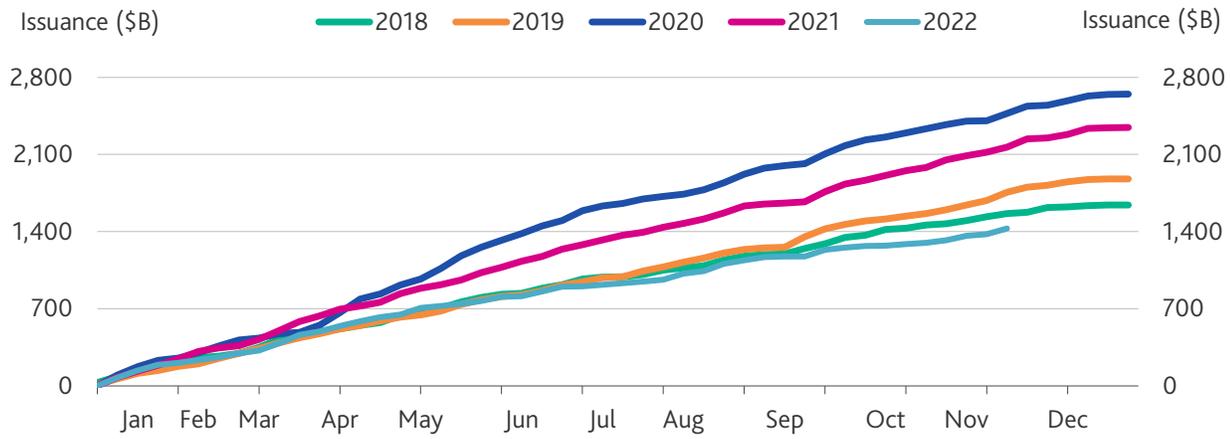
| CDS Spread Increases | CDS Spreads | | | |
|--|----------------|---------|--------|-------------|
| | Senior Ratings | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| Pakistan, Government of | Caa1 | 4,871 | 4,309 | 562 |
| Lenovo Group Limited | Baa2 | 373 | 177 | 196 |
| Indian Railway Finance Corporation Limited | Baa3 | 132 | 114 | 18 |
| SK Innovation Co. Ltd. | Baa3 | 401 | 383 | 17 |
| RHB Bank Berhad | A3 | 91 | 74 | 16 |
| Toyota Industries Corporation | A2 | 98 | 81 | 16 |
| Development Bank of Kazakhstan | Baa2 | 206 | 196 | 10 |
| Flex Ltd. | Baa3 | 125 | 115 | 10 |
| LG Chem, Ltd. | A3 | 118 | 110 | 8 |
| Tenaga Nasional Berhad | A3 | 91 | 83 | 8 |

| CDS Spread Decreases | CDS Spreads | | | |
|---|----------------|---------|--------|-------------|
| | Senior Ratings | Nov. 16 | Nov. 9 | Spread Diff |
| Issuer | | | | |
| Vanke Real Estate (Hong Kong) Company Limited | Baa2 | 821 | 1,114 | -293 |
| Canara Bank | Ba1 | 126 | 176 | -50 |
| Nissan Motor Co., Ltd. | Baa3 | 182 | 225 | -43 |
| CITIC Group Corporation | A3 | 123 | 148 | -24 |
| Kazakhstan, Government of | Baa2 | 227 | 248 | -22 |
| Bank of China (Hong Kong) Limited | Aa3 | 106 | 126 | -21 |
| India, Government of | Baa3 | 106 | 125 | -20 |
| State Bank of India | Baa3 | 109 | 128 | -20 |
| Bank of China Limited | A1 | 94 | 112 | -19 |
| Korea Gas Corporation | Aa2 | 92 | 112 | -19 |

Source: Moody's, CMA

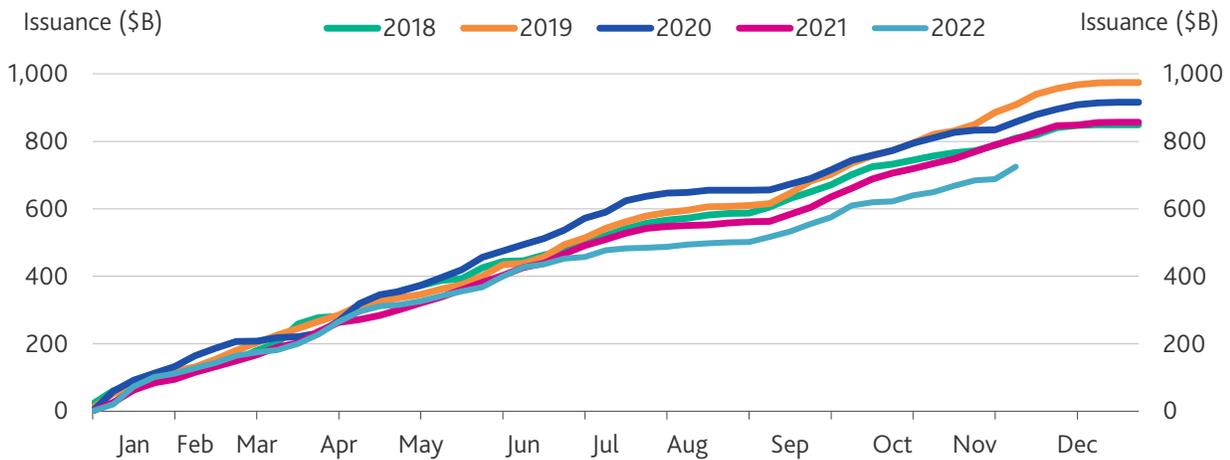
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

ISSUANCE

Figure 8. Issuance: Corporate & Financial Institutions

| | USD Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 45.156 | 7.210 | 52.881 |
| Year-to-Date | 1,246.460 | 137.984 | 1,428.521 |

| | Euro Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 33.134 | 2.440 | 35.920 |
| Year-to-Date | 674.246 | 38.001 | 724.397 |

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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