

**WEEKLY MARKET  
OUTLOOK**

DECEMBER 15, 2022

**Lead Author**

Dante DeAntonio  
Director

**Asia Pacific**

Sarah Tan  
Economist

Heron Lim  
Economist

**Europe**

Ross Cioffi  
Economist

Barbara Teixeira Araujo  
Economist

**U.S.**

Scott Hoyt  
Senior Director

Steven Shields  
Economist

Matt Orefice  
Data Specialist

**Inside Economics Podcast:**



[Join the Conversation](#)

# The Fed Sticks to Script

After starting 2022 at zero, the Federal Reserve's most aggressive tightening cycle since the early 1980s has lifted the target range for the fed funds rate to end the year at 4.25% to 4.5%. A unanimous Federal Open Market Committee announced the well-anticipated 50-basis point increase to the target range of the fed funds rate at the conclusion of its December meeting. With two consecutive CPI reports that showed inflationary pressures easing materially in recent months, Wednesday's FOMC meeting offered a view into how the committee's outlook has changed and what that might mean for monetary policy in 2023 and 2024.

**'Substantially more evidence' needed**

Fed Chair Jerome Powell, in the post-meeting press conference, acknowledged that recent data showing easing price growth have been encouraging. November's CPI report came in softer than expected, with core CPI growing 0.2%, its lowest figure since late 2021. However, Powell said, "it will take substantially more evidence to have confidence that inflation is on a sustained downward path." The risks of declaring victory too soon, only for inflation to re-emerge, have been consistently stressed by Fed officials as more dangerous than an overly restrictive policy stance. In addition to Powell's comments, forward guidance provided by the FOMC shows policymakers' expectations for inflation, and what will be needed to get it under control, have been pulled up since September and were finalized after November's CPI data were released on Tuesday.

The median projection for the fed funds rate by the end of 2023 rose from 4.6% in September to 5.1% in December. In December's dot plot, the most dovish FOMC participants projected the fed funds rate to peak where the most hawkish participants expected it to as recently as September. This upward shift is driven by fear that wage growth, which has not been offset by a sustained increase in productivity, will make inflation elevated and much harder to bring down. By the end of 2023, the median projection for the unemployment rate rose from September's figure of 4.4% to 4.6%.

**Table of Contents**

**Top of Mind** ..... 3

**Week Ahead in Global Economy**... 5

**Geopolitical Risks**..... 6

**The Long View**

    U.S. ....7

    Europe ..... 11

    Asia-Pacific .....12

**Ratings Roundup** ..... 14

**Market Data** ..... 17

**CDS Movers**..... 18

**Issuance** ..... 21

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

This would represent a full percentage point increase from the low of 3.5% in September. The median forecast for real GDP growth in 2023 was lowered from 1.2% to 0.5% from September to December.

In the post-meeting press conference, Powell said he believed a recession was not inevitable and referred to businesses not wanting to let go of workers due to their post-pandemic experience of struggling to find help and their expectation that labor supply issues are here to stay. In this environment, firms would retain staff and instead take down job postings. This would provide some slack in the labor market and ease upward wage pressures with less damage to incomes and consumer spending. This outlook aligns closely with our latest baseline forecast. We expect economic growth to decelerate in 2023 but avoid recession. The same factor Powell mentioned—a structurally tight labor market—frames our thinking as well. However, with growth at just 0.5% next year, there is little room for anything to go wrong.

#### **Inflation outlook**

Though the October and November consumer price indexes were softer than expected, two months do not make a trend, and it would be premature for the Fed to declare victory when inflation remains well above its 2% target. However, the December CPI will likely show that the cold front hitting inflation is here to stay, at least through year's end. This matters for the near-term risks to our monetary policy outlook, because an upside surprise to the December CPI would possibly throw a wrench into our current forecast for a 25-basis point rate hike at the January meeting of the Federal Open Market Committee.

In December, energy is shaping up to be a drag once again on the headline CPI. U.S. gasoline futures, a leading indicator of the CPI for gasoline, have steadily fallen since late October. In early December, gasoline futures have already dropped by nearly 30 cents per gallon, pointing to further relief at the pump through Christmas. During the same period, natural gas futures have shown greater volatility, though they suggest for now that the CPI for energy services may come down further in December.

The Fed typically looks through the gyrations in the CPIs for energy and food and focuses instead on core CPI, as this is a better gauge of underlying inflation. On a year-ago basis,

the core CPI was up 6% in November, down from 6.7% in September, which had been the strongest pace since August 1982. This moderation in core CPI inflation is entirely attributable to goods excluding food and energy. Core goods inflation peaked at 12.4% in February but fell to 3.7% in November, the lowest since March 2021.

#### **Vehicle prices' bumpy ride**

The CPIs for new and used vehicles are largely to blame for this roller coaster ride that core goods prices have taken over the past year and a half. The good news is that wholesale used-vehicle prices have posted six straight months of declines, which will continue to feed through into the December CPI for used vehicles. In November, the CPI for new vehicles was flat, and improving domestic auto production and inventories will help limit the upside risk to this component of the core CPI in December.

Despite the favorable trends in core goods prices, it is ultimately services that account for nearly three-quarters of the core CPI. The CPI for shelter—the largest component of the core services CPI—is unlikely to moderate meaningfully until around mid-2023. However, outside shelter, one does not have to squint hard to see pockets of forthcoming weakness in the December CPI for nonenergy services.

Daily round-trip domestic airfares, as measured by travel app Hopper, point to year-end softness in the CPI for airline fares, which hit an all-time high as recently as May when the reopening of the economy collided with higher jet fuel prices. Elsewhere within transportation services, the CPI for car and truck rentals could build on November's 2.4% decline, with national average daily rental car rates from Hopper flirting with lows not seen since February. Finally, the CPI for health insurance will continue to shave about 5 basis points off the December change in the core CPI. This is a methodological quirk reflecting the surge in payouts from health insurers for elective surgeries and routine checkups in 2021 as the economy reopened.

In conclusion, the December CPI is unlikely to throw a curveball to the upside. However, further strength in the CPI for shelter, as well as the still-strong pace of wage growth in labor-intensive services, will ensure that the Fed continues to hike interest rates in early 2023, albeit at a slower pace than before.

# Consumers to Spend (a Bit) More in 2023

BY SCOTT HOYT

U.S. [consumer](#) spending has been an important contributor to the economic expansion since the pandemic-driven recession in 2020. Real spending growth has led economic growth throughout on a year-over-year basis and has led nearly every quarter. If the U.S. is to avoid recession next year as Moody's Analytics expects, continued—at least modest—growth in real spending is essential.

One thing that has been striking about the strength of consumer spending growth over the last two years has been the changing drivers—a trend that will continue next year. After fears and restrictions drove spending sharply lower as COVID-19 initially hit the economy, spending rebounded and was lifted by government stimulus. The end of the stimulus and higher [inflation](#) then took a big bite out of real incomes, and wealth began to fall. However, all the saving done early in the pandemic allowed consumers to keep increasing their spending.

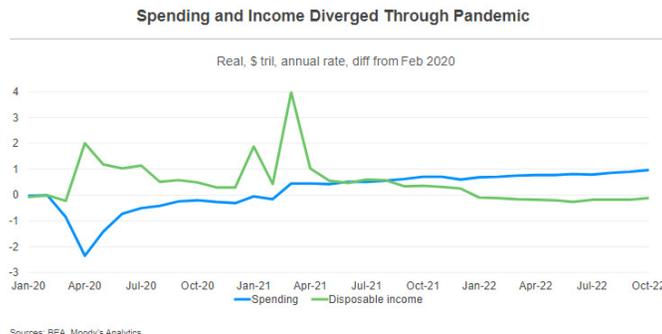
Drivers Keep Changing, but Spending Holds Up						
% change	2018	2019	2020	2021	2022	2023F
Real spending	2.878	1.986	-2.991	8.294	2.831	2.113
Real disposable income	3.32	3.455	6.22	1.862	-6.455	2.749
Real wage income	2.829	3.232	0.322	4.587	2.149	2.059
Saving rate (% of disp. income)	7.575	8.825	16.8	11.9	3.215	3.542
Consumer price deflator	2.134	1.492	1.102	4.027	6.237	3.443
Real wealth	-1.384	10.374	11.381	8.235	-9.611	-0.699

Sources: BEA, Federal Reserve, Moody's Analytics

Next year, falling wealth and shrinking excess savings that consumers are willing to spend will become drags, but income growth will hold up and fading inflation will lift after-tax income and confidence.

## 2020: fear and restrictions

When the pandemic hit, consumers were told to stay home for all but essential purposes. Fear encouraged this behavior. Millions lost their [jobs](#), but for many, all or more than all lost income was replaced by government support in the form of expanded unemployment insurance, stimulus payments, and other support. Income growth accelerated. In aggregate, helped by lower inflation, real income growth nearly doubled. Despite this, both the inability to leave home and fears for the future reduced real spending. Spending fell and saving soared. The year was unique in many ways.



The restrictions began to gradually loosen after several weeks and consumers who were home much more than in the past decided to use some of their income to upgrade their homes. Spending quickly began to rebound.

## 2021: stimulus and wealth

The year that followed was a year of financial abundance. Jobs came back, raising aggregate wage growth dramatically. Low interest rates supported asset prices. The stock market roared back, and house price growth accelerated dramatically. This had begun in 2020, and since wealth is normally measured at the end of the period, measured growth was stronger in that year, but the realization of the improvement and impact on spending was likely centered in 2021. By March spending had fully recovered to its prior trend, and it maintained that through the remainder of the year.

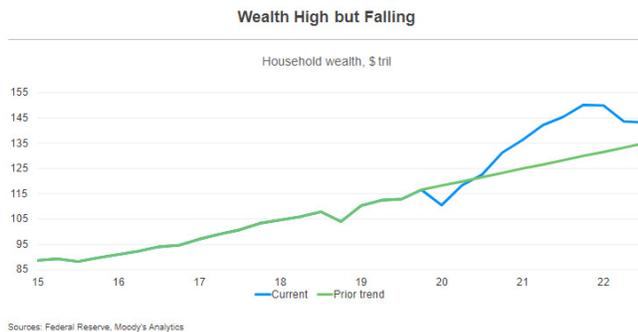
Of course, one reason spending recovered so strongly was the massive stimulus the government provided. Stimulus checks were distributed in both January and March, with the latter being the largest round of stimulus checks on record. This left consumers flush with cash. Spending surged in March. While real incomes fell nearly steadily through the remainder of the year, real spending remained at its high level and actually modestly added on as consumers gradually took their saving from higher than pre-pandemic norms to near and then slightly below them.

## 2022: disappearing

Most of the windfalls have disappeared this year. Virtually all the pandemic-era stimulus ended with the end of 2021. Growth in wage rates accelerated, but this was offset by slowing job growth as the economy began to approach pre-pandemic employment levels and the Federal Reserve took action to cool inflation. Growth in real wage income fell sharply, though it remained healthy. However, because of

the loss of stimulus, total after-tax income was well below its 2021 level. It was a drag on spending growth.

Household wealth turned as well. The stock market peaked near the end of 2021 and has mostly been between 15% and 25% below that peak since early summer. Clearly household wealth has turned from a support to spending growth to a drag that is likely to continue as house prices are now falling.



The other big impediment to spending growth this year was soaring inflation. By nearly any measure, consumer price inflation hit a 40-year high this summer and has slowed only a little since. This not only took a big bite out of household budgets, substantially undermining real income and growth, but also hit consumer confidence. The University of Michigan sentiment index, which tends to track household finances, especially gasoline and equity prices, plunged to a record low. Meanwhile, the Conference Board measure, which is more sensitive to labor market conditions, held up much better.

Despite these drags, spending growth remained healthy in 2022. The support came from the remaining growth in wage income and, probably more important, consumers' decision to use some of the money they had saved up during the pandemic. Excess saving peaked in September 2021 at \$2.5 trillion. It started 2022 at nearly that level. By September, \$560 billion, more than 20% had been spent. Close to an additional \$200 billion could be gone by year's end. Consumers have used this to [cushion the blow](#) from high inflation, but this cannot go on forever.

### 2023: income again

Excess savings will not be able to support spending through 2023. Although estimates of the amount remaining are still large, it is highly unlikely all will be spent by the end of next year. A significant portion has undoubtedly been set aside by consumers for longer-run goals such as retirement,

children's education, emergency funds, and other precautionary purposes. Some of the baby boomers who retired earlier than planned may be using the funds to finance that decision. Others may be using excess savings to fill perceived holes in their retirement nest eggs. This accounting may have taken place even if the funds remain in cash equivalents, since consumers may be unsure of investment opportunities at present. In all, it is unclear how much of the excess saving is considered available by consumers. The decline in wealth in 2022 will also discourage spending from wealth or excess savings in 2023.

What will prevent consumers from having to cut their spending in 2023 is not excess saving, but income. To a degree, at first, this may seem surprising. Job growth will slow to close to zero. As the labor market loosens, growth in wage rates will slow. However, nominal income will continue to grow. Growth will slow, but price growth will slow even more. Growth in real wage income will hold about steady, while growth in total real after-tax income will accelerate. Real disposable income in 2022 was consistently below its 2021 level. The reverse will be the case next year. Real income bottomed out in June and nearly recovered all its first-half losses as inflation moderated. It will continue to grow through 2023. Overall, growth should be near pre-pandemic trends.

The pattern in real wages was similar. While above the 2021 level, real wages fell through the first half of 2022 in the face of rapid inflation. The losses have subsequently been recovered, and growth in 2023 should be near its pre-pandemic pace.

Another support to growth will come from the high inflation in 2022. This is resulting in the largest cost-of-living adjustments to many government programs in decades. Tax payments will be lowered, while Social Security and other support payments will be raised. Also, many companies appear to be raising their workers' pay by more than in recent years. Spending growth will be modest, but it will not fall under the weight of losses in wealth, slowing job growth, and low confidence because of healthy real income gains.

There are many risks—another spike in energy prices, the Federal Reserve raising interest rates too high, a collapse in stock prices, a return of the pandemic, or some other unexpected shock. However, if these can be avoided, consumers should help keep the economy out of recession in 2023.

# The Week Ahead in the Global Economy

## U.S.

The U.S. economic calendar is packed in advance of the holidays. There is no single, critical data point set to be released, but we will get a series of releases on the housing market as well as consumers. Data on housing starts and existing-home sales will show that the housing market continues to bear the brunt of higher interest rates. The psyche and wherewithal of consumers will be critical to avoiding a recession in the near term, and more positive news on inflation—and energy prices in particular—will help support consumer sentiment as reported by the University of Michigan.

We will also continue to pay close attention to initial jobless claims as the timeliest indicator of changes in the labor market. Claims fell in the most recent data and remain well below our estimate of the break-even level, or that consistent with no monthly job growth. We will continue to monitor whether the string of high-profile layoffs, which were concentrated mostly in tech, translate into a substantive increase in new filings. While there has not appeared to be a meaningful uptick in UI claims so far, 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 NAHB Housing Market Index, nominal personal income, PCE deflator, real personal spending, and new-home sales.

## Europe

Final estimates of third-quarter GDP in the U.K. and in Spain will be released in an otherwise light lead up to the Christmas holiday. However, we are not expecting changes from preliminary figures already published, so we have penciled in a 0.2% quarter-over-quarter contraction in U.K. GDP and a 0.2% increase in Spanish GDP. Spain was supported more by consumer spending, given the recovery in the tourism sector, but private consumption already began contracting in the U.K. High inflation is taking its toll on both economies with the outlook for the fourth quarter even grimmer. We expect GDP to contract across Europe over the winter.

## Asia Pacific

Japan's central bank meets and will issue its latest monetary policy statement Tuesday. The Bank of Japan has continued to stand pat with the short-term policy rate at -0.1%. Japan's November CPI report is due next Friday. October topline inflation was 3.6% year over year, up from 3% a month prior. We expect near-term inflation to average 3% to 4% given delayed pass-through of high producer prices and still-elevated global inflation. We also expect to see CPI results for Hong Kong, Singapore and Malaysia. Singapore and Taiwan will report industrial production results next Friday. And November trade numbers for Malaysia and New Zealand are due early in the week. Malaysia's monthly trade surplus declined in October, while New Zealand's trade deficit widened from the prior month.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
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

# Latest Changes to Our U.S. Baseline Forecast

BY STEVEN SHIELDS

## CREDIT SPREADS

Moody's long-term average corporate bond spread averaged 145 basis points, 5 bps wider than the 140 bps at this time last week, but narrower than the 167 bps average in November. The long-term average industrial corporate bond spread widened 7 bps to 123. It averaged 165 bps and 144 bps in October and November, respectively.

The recent ICE BofA U.S. high-yield option adjusted bond spread is well below its 12-month high of 599 bps recorded in July and decreased 21 bps over the past week to 434. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and narrower than implied by a VIX of 21.7.

## DEFAULTS

Five Moody's Investors Service-rated corporate issuers defaulted in November, down from the upwardly revised 10 defaults in October. The trailing 12-month global speculative grade corporate default rate was 2.6% as of the end of November, unchanged from the upwardly revised level in October. The building and construction sector and the retail sector each accounted for two defaults. The November defaults included two Chinese property developers: CIFI Holdings Co. Ltd and Greenland Holding Group Co. Limited, amid a record number of defaults in the sector. While Chinese policymakers recently rolled out a series of steps to support the property market, we expect these measures to boost near-term property demand only modestly.

The year-to-date global default tally through November stands at 82, compared with 55 defaults for full-year 2021. The construction sector accounts for the most defaults, with 21, all from China. Banking follows with 10 (eight from Ukraine, one from Poland and one from Angola). By region, North America has 33 defaults (30 in the US and three in Canada). The rest are from Europe (24), Asia-Pacific (21), Latin America (three) and Africa (one).

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 4.9% by November 2023. The 4.9% rate, if realized, would exceed the historical average of 4.1%.

In the leveraged loan market, two Moody's-rated corporate issuers defaulted on loans in November: Vericast Corp. and Neovia Logistics LP. The issuer-weighted U.S. loan default rate held steady at 1.8% from October to November. The global high-yield bond default rate was 0.9% in November when measured on a dollar-volume basis, unchanged from

the level at the end of October. Across regions, the comparable rate held steady at 1.0% in the U.S. and 0.5% 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 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.

After no issuance was recorded in the previous period, US\$-denominated high-yield issuance totaled \$2.27 billion in the week ended December 9. This brings the year-to-date total to \$142.47 billion. Investment-grade bond issuance rose \$6.64 billion in the same week, bringing its year-to-date total to \$1.29 trillion. Total US\$-denominated issuance is currently tracking a five-year low, decreasing 36.6% lower year over year. Moody's expects economic turbulence, including rising unemployment, and high interest rates will keep issuance depressed in 2023.

#### U.S. ECONOMIC OUTLOOK

We made some minor adjustments to the U.S. baseline forecast in December, as new data and tweaks to our monetary policy adjustments alter the outlook slightly. Fundamentally, the outlook remains the same. The Federal Reserve's aggressive increases are clearly taking a toll on housing markets, though perhaps less than desired on labor markets. The economy remains vulnerable to falling into a recession next year, an increasingly widespread expectation judging by various surveys of economic forecasters and other commentators. Views on a recession's timing and severity vary considerably, although in general, the consensus holds that if it were to happen it would start late in the first half of 2023 and would be a mild downturn. That is, it would not be as long or severe as the typical recession. To put this in context, since World War II there have been 12 recessions lasting 10 months on average, with real GDP declining more than 2% peak to trough on average. Given the current size of the labor force, a typical recession would result in the loss of some 4 million jobs that would push the unemployment rate up to a peak of 6% from the current 3.5%.

Moody's Analytics updated its estimate of the number of U.S. households to be formed in 2023-2024, shifted some formations to 2025-2026, and assumed a modest level of demand destruction with some households unable to form because of low affordability. We also added one more 25-basis point increase in the federal funds rate as the labor market is not responding as desired by the Federal Reserve.

#### Fiscal assumptions

The U.S. Treasury budget deficit will shrink from 5.5% of GDP in fiscal 2022 to 3.9% and 4.2% in fiscal 2023 and 2024, respectively. Federal fiscal conditions will steadily deteriorate over the next decade, though. An aging population will apply upward pressure on entitlement spending, while the combination of higher interest rates and a larger debt load will boost net outlays for interest. The Congressional Budget Office estimates that net interest payments will even exceed defense spending in fiscal 2029. Consequently, the Treasury budget shortfall will increase to 5.8% of GDP by fiscal 2032. Meanwhile, the debt-to-GDP ratio will rise from 97% in fiscal 2022 to 112% in fiscal 2032. Longer term, Moody's Analytics assumes that lawmakers will pass a combination of entitlement, tax and immigration reform to put the federal budget on a sustainable trajectory.

Despite the significant buildup of federal debt during the pandemic, the baseline forecast does not expect lawmakers to pass budget cuts as they did in the aftermath of the Great Recession. While fiscal austerity may not be as much of a risk as it was about a decade ago, a divided Congress is unlikely to enact any economic support if the economy falls into a recession in 2023 due to lingering concerns over the debt and inflation.

#### Energy price forecast and assumptions

Moody's Analytics has not materially changed its energy price forecasts in the December baseline. The forecast for oil prices in 2023 was raised by less than \$1 per barrel. Our natural gas price forecast was lowered by 10 cents per million BTU.

The implementation of the EU's embargo on Russian crude oil and the coming into force of the G-7 and EU's cap on the price of Russian crude oil imports has so far not disrupted the global oil market, in line with expectations. There have been some complications such as the inability for tankers to pass through Turkish waters and fuel shortages in Hungary. But the Hungarian shortages have been driven by the government's price cap and panic buying, and issues have not been widespread across the Continent. Therefore, these sticking points have not had a material effect on global oil prices.

Risks to our forecast are somewhat balanced but tilt to the downside. West Texas Intermediate crude is expected to

average \$86.85 in calendar year 2023, \$13 above current levels. Concerns about the durability of the global economic expansion are presently outweighing the risk of oil shortages caused by the implementation of Russian oil sanctions. Russian sanctions are having a greater impact on petroleum product markets, and the trend is expected to continue into early next year as the EU bans on Russian diesel go into effect in February 2023.

### Minor changes to GDP growth

U.S. GDP rose 2.9% in the third quarter, according to the Bureau of Economic Analysis' second estimate, reversing all of the declines over the prior two quarters. Trade was a major, if temporary, support to growth with consumer spending, business investment and government spending also contributing. Inventories and housing investment were major drags on growth. Growth was revised from the earlier-reported 2.6% with widespread small upward revisions. Real disposable income rose for the first time in a year and a half as the pace of inflation slowed. The saving rate fell to 2.8% from a downwardly revised 3.2%. Profits fell 1.1% (not annualized) after rising 4.6% previously. Gross domestic income rose 0.3% after falling 0.8% after revision.

Revisions to the baseline forecast for real GDP growth were modest. The forecast for real GDP now shows very modest growth in the final quarter of 2022 and even less growth in the first quarter of 2023. Annual growth this year and next is 1.9% and 0.9%, respectively, only slightly higher than last month. Growth in 2024 was revised down by 0.1 percentage point to 2% and growth in 2025 was unchanged, at 2.7%, both still suggesting an economy returning to near-potential growth.

### Business investment and housing

The climate for business investment is not materially better than in November, but it is not worse either. Recent data show that corporate cash flow is still elevated, with the ratio of profits to nominal GDP near an all-time high. And although we have moved up the peak fed funds rate in the forecast, the additional increase is only 25 basis points. Further, high-frequency data were positive in October, with strong growth in real nondefense nonaircraft capital goods shipments up significantly for the first time in more than a year. Revised third-quarter national income and product accounts data show real fixed investment rose 5.1% annualized, compared with 3.7% in the advance report. Almost all of the upward revision was in structures, which declined much less than in the advance report.

Based upon all of the above, we increased the outlook for total real business investment to 5.1% annualized in 2023, up from 3.7% in the November forecast. Real equipment spending in 2023 is projected to rise 4.5% annualized compared to 2.6% in November. And transportation

equipment, particularly motor vehicles, could rise more than expected if diminishing supply disruptions allow production to increase more. Real structures spending will rebound more than expected in October, in part because of the revised 2022 third-quarter number. But even after a recovery over the next couple of years, the level of spending will be more than 10% below what it was back in 2018.

Moody's Analytics updated its estimate of the number of households in the United States over the past 10 years based on recently released census data. This change along with expectations for a slowing economy in 2023 caused us to review and adjust our assumptions for future household formations. We reduced the number of households to be formed in 2023-2024, shifted some formations to 2025-2026, and assumed a modest level of demand destruction with some households unable to form in the future due to affordability pressures.

Adjustments to household formations impacted our outlook for future home construction as well. We lowered our outlook for 2023 single-family permits and starts with a modest reduction in completions given that many homes remain in the pipeline. We assumed a more limited impact on multifamily construction under the assumption that demand for apartment rentals will remain relatively robust as high mortgage rates limit the possibility of households to purchase homes. The record level of multifamily units under construction will keep completions elevated in 2023 even as the overall housing market moderates.

Moody's Analytics lowered its forecast for multifamily commercial real estate price growth during the next year due to the growing number of apartment units currently under construction. Elevated rent levels have been priced in for the most part, rent appreciation is decelerating, and vacancy rates are expected to rise with the delivery of the new units in the pipeline.

### Labor market

The U.S. labor market continues to hold up with job gains moderating only slowly. Nonfarm payrolls increased by 263,000 jobs in November, well above expectations, but well off of the more-than-400,000 average gain during the first 10 months of the year. Revisions to job gains in September and October subtracted 23,000.

In sharp contrast to the payroll survey, household employment declined by 138,000 in November, following a 328,000 decline in October. Household employment has trended flat for much of the year while payrolls have continued to climb at a brisk pace. One possible explanation for the discrepancy is that workers on severance—there have been many, particularly in tech industries—remain on payrolls while receiving severance. Temp help and the

workweek, both of which tend to lead changes in overall employment, have declined. Thus, the labor market is likely weaker than the payroll survey indicates.

The labor force contracted for a third consecutive month in November driving the labor force participation rate down to 62.1%, lower than it was at the start of the year. The unemployment rate was unchanged at 3.7%, while the employment-to-population ratio for prime-age workers was 79.7%. All these metrics fall short of what we would expect in a fully employed economy.

Our labor market outlook did not change with the release of the November employment report. Payroll employment is expected to increase by 257,000 monthly in the fourth quarter before decelerating to an average of 76,000 per month in 2023 as the U.S. economy teeters on the brink of recession. But the softening will be brief and, by 2024, the labor market should be expanding again, consistent with underlying demographics. The weaker pace of job growth in 2023 will cause the unemployment rate to increase from its current 3.7% to 4.2% in the first quarter of 2024. This is unchanged from the November forecast vintage.

### Monetary policy

The Federal Reserve continues its fight against inflation. In late November, Fed Chair Jerome Powell indicated in a talk at the Brookings Institution that policymakers will likely slow the pace of hikes, as signs indicate that inflation is decelerating modestly. However, at 7.76% year-over-year consumer price growth in October, inflation remains uncomfortably high above the Fed's 2% target. Powell, therefore, reiterated his previously expressed view that the fed funds rate needs to substantially rise above its target range prior to the December meeting of the Federal Open Market Committee of 3.75% to 4%. Uncertainty remains for the time being about how high the policy rate will ultimately have to go. After a better-than-expected November jobs report showed few signs of decelerating wage growth, financial markets now expect the fed funds rate to breach 5% narrowly in 2023.

Our current baseline assumptions for the policy rate raises the terminal range by 25 basis points from our prior baseline. We continue to expect 50- and 25-basis point increases in December and January, respectively, but have added to the outlook an additional 25-basis point hike at the March meeting. Our terminal fed funds rate projection in 2023, therefore, now falls just shy of 5%. 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.

The change in assumptions reflects our concerns about the recent easing in financial conditions, despite few signs that labor markets have sufficiently softened. After a better-than-expected October CPI report, U.S. stock markets rallied, and credit conditions eased. Policymakers are unlikely to welcome market bullishness, as the Fed has repeatedly pointed to tighter financial market conditions as the central monetary policy mechanism to dampen demand. More hawkish gesturing is likely at the December FOMC meeting. 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.

Inflation remains the key for our monetary policy forecast. The December baseline has the CPI rising 8.1% this year, 4.1% in 2023, and 2.4% in 2024, a rounding difference up from the prior baseline. The assumptions around moderating inflation have not changed and include a reduction in U.S. supply-chain stress, below-potential GDP growth, declines in global energy prices, and moderating nominal wage growth.

Reflecting broader financial market optimism, the 10-year Treasury yield fell through November to 3.5%, its lowest level since mid-September. This is reflected in our outlook that the 10-year Treasury yield will average 3.81% in the final three months of this year, compared with 4.12% in the November baseline. The 10-year Treasury yield averages 4.23% in the fourth quarter of next year, down from 4.53% in the prior baseline. We estimate the 10-year Treasury yield will decline in the second half of 2023 and into 2025.

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.

# Throttling Back, for Now, at the ECB and BoE

BY ROSS CIOFFI and BARBARA TEIXEIRA ARAUJO

The European Central Bank hiked its policy rates by 50 basis points Thursday, bringing the main refinancing operations rate to 2.5%. This marks a slowdown from the 75-basis point hikes that prevailed at the previous two meetings, but the policy stance of the ECB remains hawkish on the whole. The ECB still wants to tighten monetary conditions further. Despite easing slightly in November, inflation is far too high in the euro zone. At 10% year over year, it is five times the target rate. Core inflation meanwhile continues to accelerate, and this is an important indication of medium-term inflation trends taking root.

The ECB is concerned about this prospect, with its inflation forecasts being pushed higher as well. It now foresees inflation averaging 6.3% in 2023, 2.4% in 2024, and 2.3% in 2025, implying that inflation will not be able to decline back to target within the short-term forecast window. This tops our own forecast, as we see the target being reached by the end of 2024.

The other important policy news was that the ECB set a date to begin quantitative tightening, or decreasing its asset portfolio built up under its Asset Purchase Programme. APP holdings will decline at a pace of €15 billion per month in the second quarter of 2023. The pace of decline will be decided upon after that. The caution is warranted because of potentially damaging dynamics in bond markets which could pass onwards to more vulnerable euro zone members, like Italy. That said, the portfolio must be reduced to deepen the fight against inflation; the ECB faces a challenging balancing act ahead. More details about the APP and the Pandemic Emergency Purchase Programme will be announced throughout 2023.

Ultimately, given the hawkish stance taken Thursday, we see it as more likely that the ECB will keep up its pace of rate hikes at upcoming meetings. We currently have a 25-basis point hike pencilled in for the December baseline, but we now plan to update the upcoming January baseline with a 50-basis point hike in February, and possibly even the March meeting, depending on how inflation evolves in the first months of the new year.

## United Kingdom

The Bank of England also raised U.K. interest rates Thursday by another 50 basis points, to 3.5%, the highest since October 2008. The vote was split, with six members of the Monetary Policy Committee voting for the increase, two members preferring to leave rates unchanged, and one

voting for yet another sharp 75-bps rise. While December might mark a turning point for U.K. monetary policy as the BoE steps on the brakes and slows its pace of tightening, we think that the central bank wouldn't hesitate to resort to larger rate hikes if wage growth proves persistent, or if underlying inflation pressures fail to show signs of easing. Our forecast remains that the BoE will continue to lift rates until reaching a terminal rate of 4.5% by next spring.

Wednesday's good news on the inflation front—U.K. CPI inflation declined to 10.7% year on year in November from 11.1% in October—likely sealed the deal on the 50-basis point hike. But we still expect the central bank to remain very responsive to any evidence that inflation is failing to decline according to its expectations. We expect it is willing to do too much rather than too little and risk ending up stuck in a stagflation scenario, which means that risks are very much skewed towards a hard landing of the economy.

On the upside, the MPC noted that the Autumn Statement's extension of the Energy Price Guarantee has helped lower its 2023 inflation expectations, with CPI inflation for the second quarter of next year expected to be around 0.75 percentage point below November's Monetary Policy Report forecast.

But the MPC stated that risks around its inflation projections remain skewed to the upside, reflecting the potential for greater persistence in domestic inflationary pressures. Indeed, survey data continued to indicate that firms' expectations for wage growth for the year ahead remain strong, unrestrained by the tightening in monetary policy that has already occurred. Adding to that, underlying price pressures within the service sector, in particular, have continued to strengthen. Our expectation of rates rising above 4% in 2023 reflects the persistence of such underlying inflationary pressures.

Elsewhere, the MPC continues to see the U.K. economy as having entered a protected recession. Nonetheless, the central bank has somewhat upwardly revised its GDP forecast for the fourth quarter of this year; it expects GDP to contract by 0.1% quarter to quarter in the three months to December, down from a previous forecast of 0.3%, following a 0.2% decline in the third quarter. Our baseline forecast is for the U.K. economy to remain in contractionary territory until the second quarter of next year, and to only slowly recover after that. GDP is forecast to decline 1.2% in 2023, following a 4.4% rise this year.

# China's Rough Road to Reopening

BY SARAH TAN and HERON LIM

The recent softening of China's COVID-19 policies is intended to be a catalyst for an economic rebound, but the transition to living with the virus will bring its own disruptions to production, consumption and investment over the next few months. The country is now treating the virus as a Class B infectious disease, which is down from the highest Class A category. This effectively has China standing where most of the world was a year ago, face-to-face with COVID-19.

The changes to the zero-COVID policy, announced 7 December, are being rolled out by local governments. The revisions allow for quarantining of mild cases at home rather than in state facilities and the end of mass testing. Proof of a negative COVID-19 test result prior to entering most public places is also scrapped. Area lockdowns will be lifted if no new infections are reported for five consecutive days. Eyes are on local governments as they implement these measures.

The loosening of restrictions, while long awaited, is not a silver bullet. Indeed, they have already triggered a wave of new cases; queues have formed at fever clinics, and hospitals have reported an influx of patients. The time of year doesn't help. With winter underway, people are more likely to be indoors and in closer proximity to others. And come January, the risk will magnify when Lunar New Year sees millions of people return to their hometowns for family reunions. The infection surge will see more people quarantined, unable to work or spend. This will dampen some of the hoped-for recovery in domestic activity.

## Cheers and jeers

The revised approach to managing COVID-19 was met with cheers and jeers, and understandably so. China has yet to arm its population with adequate immunity against the virus. More than ever, vaccination efforts must be ramped up, especially for the elderly. Without a widespread rollout of mRNA vaccines, the country will remain on the back foot. It continues to rely on locally produced inactivated vaccines. These reduce the risk of hospitalisation and death from COVID-19 but offer less protection than mRNA vaccines. Time is of the essence; any delay will raise the peak of the infection curve, putting the healthcare system in jeopardy.

More broadly, uncertainty remains as to the transition strategy. Citizens, tourists and investors are looking for information on the next steps towards a full reopening. For now, the newly loosened measures show progress, but it remains to be seen how China copes with the challenges

ahead. We expect the economy to have a slow and rocky start to 2023. A steadier recovery will take shape when case numbers taper through the year. Hold on tight: China's transition will be a bumpy ride.

## HONG KONG

Our December forecast was made just as the COVID-19 policy picture became dynamic in both Mainland China and Hong Kong. While the recent forecast assumed looser pandemic restrictions, after the latest announcements, we expect to upwardly revise Hong Kong GDP in 2023, which is currently at 3.3% growth. However, it would be a small nudge up considering the myriad of other risks Hong Kong still faces, including a weaker global economy and high interest rates.

For context, Hong Kong Chief Executive John Lee Ka-chiu announced on 13 December that Hong Kong is dropping some of its remaining COVID-19 restrictions in response to popular demand and that Hong Kong's revised policy would allow for greater social and economic activity. This move was triggered by Mainland China's shift away from its zero-COVID policy. Under the new policy, residents no longer need to use a health app prior to entering any common space venues like shopping malls and provision stores, while international arrivals who return clear COVID-19 tests can immediately visit bars and restaurants, instead of the three-day wait they had to endure previously.

This policy pivot contrasts with an assumption in our December baseline that some significant COVID-19 restrictions would stay through the first half of 2023. Just on its own, the earlier lifting of controls on the movement of people should allow growth to come in stronger than our December baseline expectations.

## COVID-19 restrictions just one downside of many

But we will be cautious with our GDP revision. Crucially, some pandemic regulations remain, such as COVID-19 testing on arrival for international visitors. Visitors who test positive still need to quarantine for five days. That and other restrictions will remain a deterrent for visitors who have other travel options, limiting the upside from the eased policy from the outset. It is also unclear when other pandemic measures will be relaxed.

Also, even if restrictions lift significantly, their removal merely takes out one set of risks. Hong Kong has other challenges. For example, interest rates are a dominant risk given Hong Kong's peg to the U.S. dollar. Hikes in the U.S.

fed funds rate all but guarantee hikes to Hong Kong's commercial banks' prime rates. The 50-basis point hike in the policy rate on Thursday has resulted in the prime rates increasing by 25 bps across key commercial banks in Hong Kong. Higher rates will dent demand for loans and hurt spending. Slowing global demand is another problem for Hong Kong. Trade was a key element in Hong Kong's 2021 recovery, and if the global economy is slower, this would mean that Hong Kong's recovery upside is limited.

Therefore, the balance of risks remains on the downside for Hong Kong. And with the Hong Kong Monetary Authority

having no input via monetary policy, the onus will be on the government's fiscal response to steer the economy through. Government spending is already significantly higher than projected, putting Hong Kong on track for a deep budget deficit of more than 10% of GDP this year. Still, there ought to be sufficient fiscal reserves for Hong Kong to stave off concerns over fiscal sustainability for this fiscal year ending March 2023. However, amidst dwindling reserves, it remains to be seen if the Lee administration is up for another strongly expansionary budget in the fiscal year ending March 2024.

# Kohl's Corp. Now a Fallen Angel

BY STEVEN SHIELDS

## U.S.

U.S. corporate credit quality continued to deteriorate last week with downgrades accounting for the bulk of ratings actions. The largest downgrade in terms of debt affected was made to Kohl's Corp. Kohl's is now a fallen angel with its senior unsecured rating lowered to speculative-grade Ba2 from investment-grade Baa2. The downgrade reflects Kohl's erosion of market position and the deterioration in credit metrics to levels not reflective of an investment grade rating. Governance considerations are also reflected most notably Kohl's completion of \$658 million of share repurchases year to date including a \$500 million accelerated share repurchase program in November despite the weakness in operating performance, senior management turnover and negative free cash flow over the past twelve months.

Kosmos Energy Ltd.'s corporate family rating was lowered by Moody's Investors Service to B3 from B2 while the rating on its senior unsecured notes moved to Ca1 from B3. The downgrade of Kosmos Energy's ratings reflects increased credit risks involving the country of Ghana, where most the company's production resides today. In November, Moody's downgraded the Government of Ghana's long-term issuer rating to Ca from Caa2, and lowered Ghana's local currency and foreign currency country ceilings to Caa1 and Caa2, respectively.

In November, credit upgrades accounted for just 38% of all rating actions by Moody's Investors Service. This marks the lowest share since July 2020. However, upgrades still accounted for most of the debt affected in the month at 79%. Year to date, Moody's Investors Service has issued 298 credit upgrades and 247 downgrades. The highest number of upgrades have been issued to exploration and midstream energy firms thanks to rising energy prices, while business services have received the highest number of downgrades of any subsector.

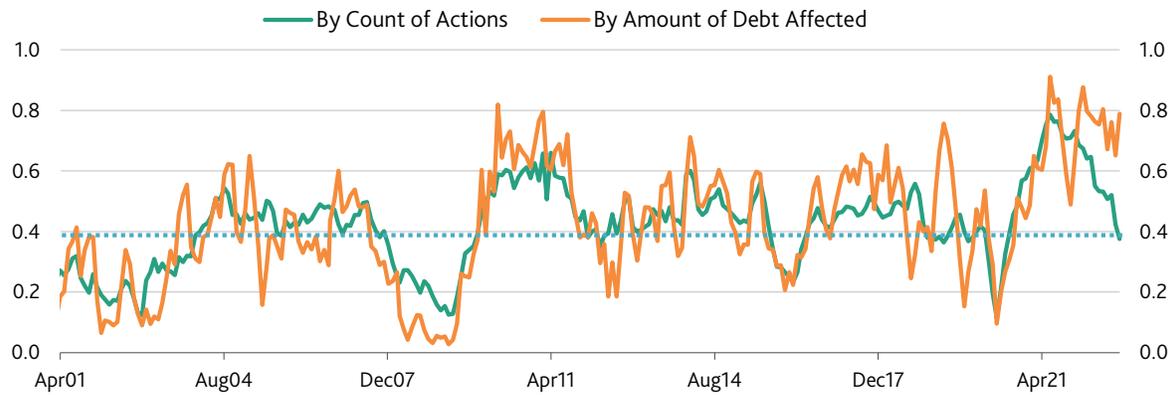
## Europe

Rating activity was light across Western Europe with Moody's Investors Service issuing only three rating changes during the period. Of the changes, SIG plc's senior secured notes due 2026 were downgraded from B1 to B2. The downgrade of the notes rating reflects the recent increase in the size of the company's super senior revolving credit facility to £90 million from £50 million. Although the RCF is currently undrawn, this change has increased the liabilities that would rank ahead of the notes under an enforcement scenario, which may reduce the recovery for the noteholders. In good news, SIG's B1 CFR was affirmed, and the outlook remains stable.

The sole European upgrade in the period was made to New Ross N25 By-Pass Designated Activity Co., which saw its senior secured debt rating lifted to A2 from A3. The rating upgrade reflects the increasingly established track record of the N25 New Ross Bypass road scheme and a continued satisfactory operational performance, following formal construction completion of the project in December 2020, coupled with good and constructive relationships between project parties.

## RATINGS ROUND-UP

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



\* Trailing 3-month average

Source: Moody's

FIGURE 2  
Rating Key

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

FIGURE 3

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

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
12/8/2022	TEXAS PRIVATE ACTIVITY BOND SURFACE TRANSPORTATION	Industrial	SrSec		U	Baa3	Baa2	IG
12/8/2022	DEASLET BROADCAST GROUP, INC.-DEASLET MEZZANINE HOLDINGS, LLC	Industrial	SrSec/LTCFR/PDR	300	D	B3	Caa1	SG
12/8/2022	NTE MOBILITY PaARTNERS SEGMENTS 3 LLC-NTE MOBILITY PARTNERS SEGMENTS 3 LLC	Industrial	Sub		U	Baa3	Baa2	IG
12/8/2022	ZEP INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
12/8/2022	TOSCA SERVICES, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
12/8/2022	FR BR HOLDINGS, L.L.C.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
12/8/2022	PAI INTERMEDIATE HOLDCO INC.-PAI HOLDCO, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B3	SG
12/8/2022	TKC MIDCO 1, LLC-TKC HOLDINGS, INC.	Industrial	SrSec/SrUnsec/BCF/LTCFR/PDR	1100	D	B1	B2	SG
12/9/2022	KOSMOS ENERGY LTD.	Industrial	SrUnsec/LTCFR/PDR	1500	D	B3	Caa1	SG
12/9/2022	PLASKOLITE PPC INTERMEDIATE II LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
12/9/2022	DYNATRACE, INC.-DYNATRACE LLC	Industrial	LTCFR/PDR		U	Ba3	Ba2	SG
12/12/2022	UGI CORPORATION-UGI INTERNATIONAL, LLC	Industrial	SrUnsec/LTCFR/PDR/MTN	421.6207	D	Ba1	Ba2	SG
12/12/2022	KOHL'S CORPORATION	Industrial	SrUnsec	1968.539	D	Baa2	Ba2	IG
12/12/2022	MED PARENTCO., LP.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Caa3	SG
12/12/2022	ICP GROUP HOLDINGS, LLC-NIC ACQUISITION CORP.	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG
12/13/2022	UGI CORPORATION-UGI UTILITIES, INC.	Utility	SrUnsec	140	D	A2	A3	IG
12/13/2022	INTRADO CORPORATION	Industrial	SrSec/BCF		U	B2	B1	SG
12/13/2022	RISING TIDE HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa2	Ca	SG

Source: Moody's

FIGURE 4

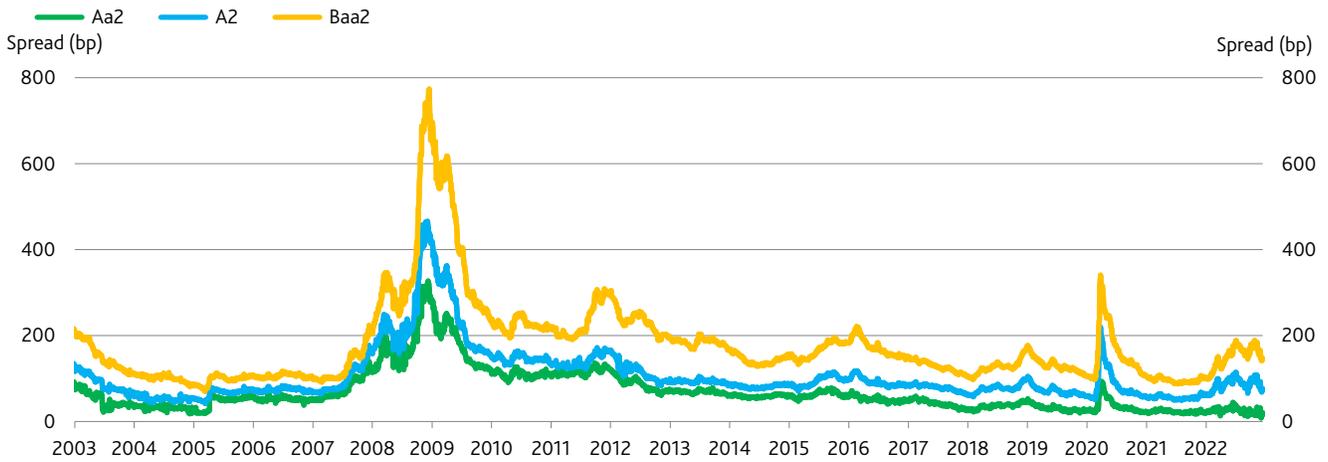
## Rating Changes: Corporate &amp; Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
12/8/2022	ATHENA BIDCO GMBH	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	GERMANY
12/12/2022	NEW ROSS N25 BY-PASS DESIGNATED ACTIVITY COMPANY	Industrial	SrSec	153.2275	U	A3	A2	IG	IRELAND
12/13/2022	SIG PLC	Industrial	SrSec	632.4311	D	B1	B2	SG	UNITED KINGDOM

Source: Moody's

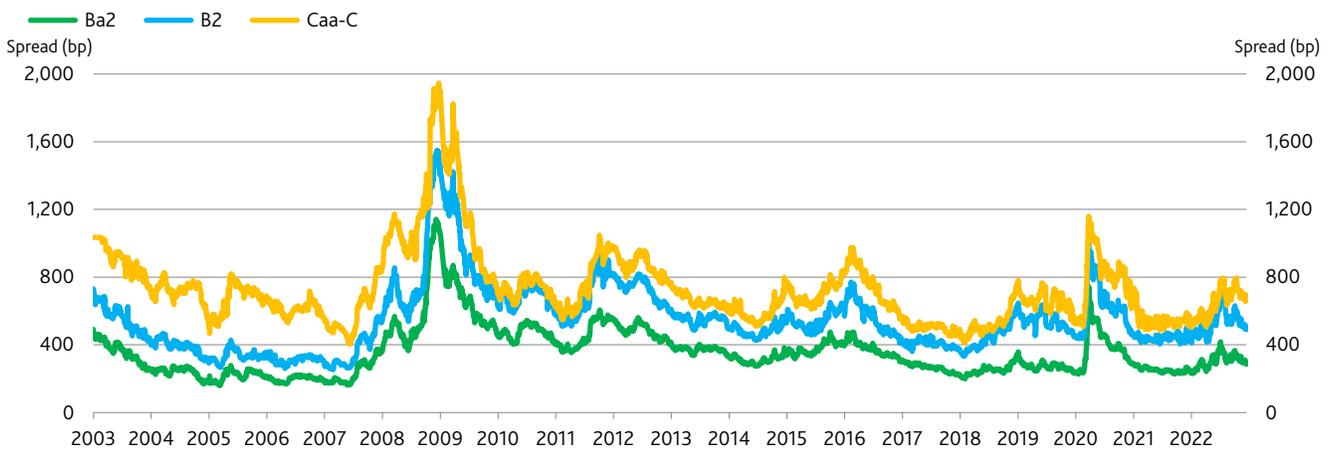
MARKET DATA

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 (December 7, 2022 – December 14, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
Campbell Soup Company	Aa3	A1	Baa2
Ally Financial Inc.	Ba2	Ba3	Baa3
Comcast Corporation	A2	A3	A3
Energy Transfer LP	Baa2	Baa3	Baa3
Citibank, N.A.	Baa2	Baa3	Aa3
CVS Health Corporation	A2	A3	Baa2
Walmart Inc.	Aa2	Aa3	Aa2
Home Depot, Inc. (The)	Aa2	Aa3	A2
Union Pacific Corporation	Aa1	Aa2	A3
3M Company	Aa3	A1	A1

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
Amazon.com, Inc.	A1	Aa2	A1
Amgen Inc.	A2	Aa3	Baa1
Wells Fargo & Company	Baa1	A3	A1
Microsoft Corporation	Aa2	Aa1	Aaa
Bank of New York Mellon Corporation (The)	A3	A2	A1
Merck & Co., Inc.	A2	A1	A1
Enterprise Products Operating, LLC	A3	A2	Baa1
CSC Holdings, LLC	Caa3	Caa2	B1
Thermo Fisher Scientific Inc.	A3	A2	A3
State Street Corporation	A2	A1	A1

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Rite Aid Corporation	Caa2	3,758	3,622	136
Carnival Corporation	B3	1,438	1,369	68
CNX Resources Corporation	B1	320	276	44
American Axle & Manufacturing, Inc.	B2	525	493	33
Nordstrom, Inc.	Ba1	581	551	30
CSC Holdings, LLC	B1	1,144	1,120	24
United Airlines, Inc.	Ba3	627	612	15
TRW Automotive Inc.	Ba1	336	323	13
SBA Communications Corporation	B1	193	182	11
EQT Corporation	Ba1	208	198	10

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Staples, Inc.	Caa2	1,539	1,758	-219
K. Hovnanian Enterprises, Inc.	Caa2	1,061	1,212	-151
Pitney Bowes Inc.	B3	820	952	-132
Pactiv LLC	Caa1	438	547	-108
Freedom Mortgage Corporation	B2	809	899	-89
Deluxe Corporation	B3	673	759	-86
Anywhere Real Estate Group LLC	B2	869	945	-76
PennyMac Financial Services, Inc.	Ba3	395	461	-66
Embarq Corporation	Caa2	1,146	1,205	-60
Travel + Leisure Co.	B1	329	387	-57

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (December 7, 2022 – December 14, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
Rabobank	Aa1	Aa2	Aa2
Deutsche Bank AG	Baa2	Baa3	A1
Heineken N.V.	Aa1	Aa2	A3
de Volksbank N.V.	Baa1	Baa2	A2
Iberdrola International B.V.	A2	A3	Baa1
Allied Irish Banks, p.l.c.	Baa1	Baa2	A1
Vinci S.A.	Aa3	A1	A3
Henkel AG & Co. KGaA	Aa1	Aa2	A2
Credit Suisse AG	Ba2	Ba3	A3
Scottish Power UK plc	Aa3	A1	Baa1

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
France, Government of	Aa1	Aaa	Aa2
Spain, Government of	A1	Aa3	Baa1
Banco Santander S.A. (Spain)	A3	A2	A2
Ireland, Government of	Aa1	Aaa	A1
ABN AMRO Bank N.V.	A2	A1	A1
Credit Agricole S.A.	A1	Aa3	Aa3
Portugal, Government of	A1	Aa3	Baa2
Credit Agricole Corporate and Investment Bank	A1	Aa3	Aa3
Finland, Government of	Aa1	Aaa	Aa1
Danske Bank A/S	A3	A2	A3

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Carnival plc	B3	1,363	1,299	65
INEOS Quattro Finance 2 Plc	B2	582	526	57
Casino Guichard-Perrachon SA	Caa1	2,506	2,467	39
United Group B.V.	Caa1	1,000	974	25
Stonegate Pub Company Financing 2019 plc	Caa2	664	642	22
Vedanta Resources Limited	Caa1	2,321	2,300	21
Verisure Midholding AB	Caa1	512	490	21
LyondellBasell Industries N.V.	Baa2	150	132	18
Credito Emiliano S.p.A.	Baa3	127	115	12
Lorca Telecom Bondco, S.A.U.	B3	495	484	11

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Novafives S.A.S.	Caa2	993	1,077	-83
ZF Europe Finance B.V.	Ba1	423	453	-30
Ardagh Packaging Finance plc	Caa1	801	830	-29
OI European Group B.V.	Ba3	385	409	-24
Picard Bondco S.A.	Caa1	733	757	-24
Boparan Finance plc	Caa3	1,934	1,957	-23
Telecom Italia S.p.A.	B1	405	427	-22
Credit Suisse Group AG	Baa2	370	390	-21
Schaeffler AG	Ba1	248	267	-19
Sappi Papier Holding GmbH	Ba2	360	379	-19

Source: Moody's, CMA

## CDS Movers

Figure 5. CDS Movers - APAC (December 7, 2022 – December 14, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
SK Innovation Co. Ltd.	Ba2	B1	Baa3
Indonesia, Government of	Baa1	Baa2	Baa2
Philippines, Government of	Baa1	Baa2	Baa2
Thailand, Government of	A1	A2	Baa1
Malayan Banking Berhad	Baa1	Baa2	A3
BDO Unibank, Inc.	Baa3	Ba1	Baa2
RHB Bank Berhad	Baa1	Baa2	A3
Marubeni Corporation	Aa1	Aa2	Baa2
LG Chem, Ltd.	Baa2	Baa3	A3
Tenaga Nasional Berhad	Baa1	Baa2	A3

CDS Implied Rating Declines	CDS Implied Ratings		
	Dec. 14	Dec. 7	Senior Ratings
Issuer			
Commonwealth Bank of Australia	A3	A2	Aa3
Sumitomo Mitsui Banking Corporation	A1	Aa3	A1
Korea Development Bank	A2	A1	Aa2
Export-Import Bank of Korea (The)	A1	Aa3	Aa2
Singapore, Government of	Aa2	Aa1	Aaa
Suncorp-Metway Limited	Baa2	Baa1	A1
Oversea-Chinese Banking Corp Ltd	Aa2	Aa1	Aa1
Shinhan Bank	A1	Aa3	Aa3
Kansai Electric Power Company, Incorporated	Aa2	Aa1	A3
Mizuho Bank, Ltd.	A2	A1	A1

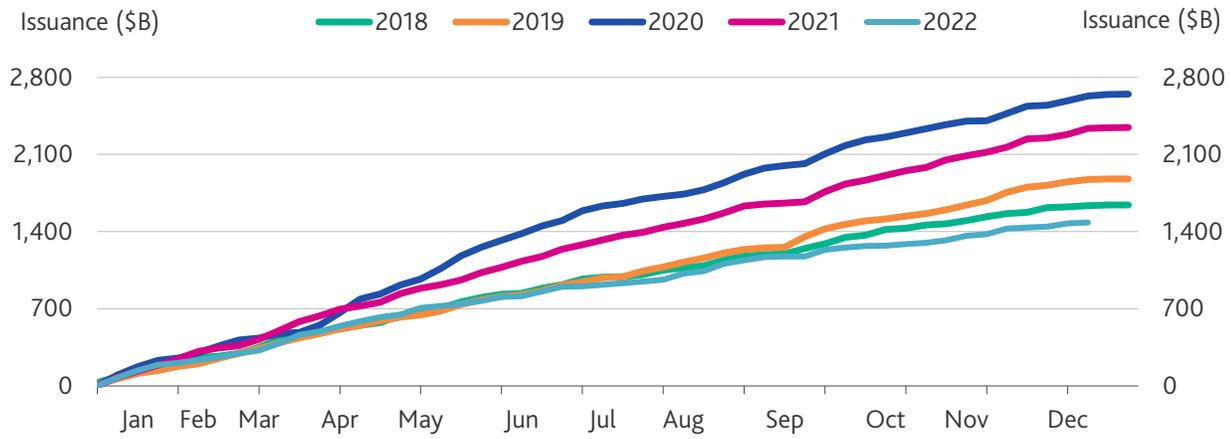
CDS Spread Increases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Development Bank of Kazakhstan	Baa2	230	192	38
GMR Hyderabad International Airport Limited	Ba3	324	319	5
Kookmin Bank	Aa3	51	49	3
Woori Bank	A1	53	51	3
Industrial Bank of Korea	Aa2	51	49	3
Hyundai Capital Services, Inc.	Baa1	70	67	3
GS Caltex Corporation	Baa1	59	56	3
SK Telecom Co., Ltd.	A3	53	50	3
Korea Development Bank	Aa2	54	52	2
Export-Import Bank of Korea (The)	Aa2	52	50	2

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Dec. 14	Dec. 7	Spread Diff
Issuer				
Pakistan, Government of	Caa1	4,233	4,545	-311
SK Innovation Co. Ltd.	Baa3	311	393	-83
Halyk Savings Bank of Kazakhstan	Ba2	431	457	-26
BDO Unibank, Inc.	Baa2	155	177	-22
CNAC (HK) Finbridge Company Limited	Baa2	189	211	-22
Rizal Commercial Banking Corporation	Baa3	175	193	-17
RHB Bank Berhad	A3	83	99	-16
Philippines, Government of	Baa2	85	100	-15
LG Electronics Inc.	Baa2	122	137	-15
Indonesia, Government of	Baa2	86	100	-14

Source: Moody's, CMA

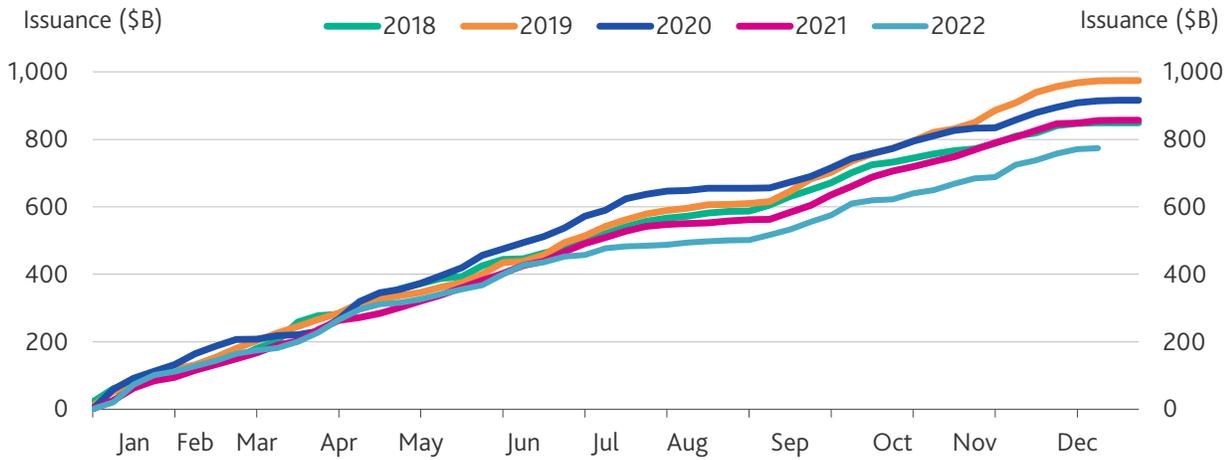
ISSUANCE

**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	6.644	2.270	9.524
Year-to-Date	1,291.409	142.474	1,481.961

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	1.544	1.811	3.386
Year-to-Date	719.224	42.606	774.165

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

---

To order reprints of this report (100 copies minimum), please call 212.553.1658.

---

**Report Number: 1352976**

---

**Editor**

**Reid Kanaley**

helpeconomy@moodys.com

---

**Contact Us**

Americas

+1.212.553.1658

clientservices@moodys.com

Europe

+44.20.7772.5454

clientservices.emea@moodys.com

Asia (Excluding Japan)

+85 2 2916 1121

clientservices.asia@moodys.com

Japan

+81 3 5408 4100

clientservices.japan@moodys.com

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moodys.com](http://www.moodys.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJJK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJJK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJJK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJJK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJJK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJJK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJJK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.