Moody's

WFFKI Y MARKET **OUTLOOK**

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Unanimous...Sort Of

The Federal Open Market Committee took a break from rate hikes in June, but communication since then from Federal Reserve Chair Ierome Powell and other committee members has been unequivocally hawkish. Though there were no dissenting votes, a cadre of voting members would have preferred another 25-basis point increase or at least would have supported one. This was evident in the Fed's June Summary of Economic Projections. Just two of the FOMC's 18 members believed the current stance of monetary policy is enough. Of the remaining 16, 12 expected a further 0.5-point increase to the policy rate would be needed. In March, a majority had expected that the then-current fed funds rate would be enough to bring inflation to heel. Robust economic data, largely coming from the labor market, led policymakers

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to revise upward both their growth forecasts and, subsequently, the restraint needed to slow things down.

FOMC staff expect the <u>U.S. economy</u> to suffer a mild recession beginning in late 2023. Nearly as likely, they believe, is that U.S. growth will continue to decelerate but remain positive while a recession is avoided. Moody's Analytics estimates that growth will slow for the remainder of this year and into next, but the economy will skirt a recession.

U.S. purchasing managers are overly pessimistic

Purchasing managers at U.S. manufacturing firms were downright pessimistic in June. The ISM manufacturing index, which measures the breadth of growth in manufacturing, fell from 46.9 in May to 46 in June, its lowest point since May 2020. Moreover, all five components of the ISM manufacturing index—production, new orders, inventories, supplier deliveries and employment—were in contractionary territory for only the second time since late 2015. This simultaneous drop into a contraction by all five components of the ISM manufacturing index has occurred during recessions but also during periods when the collective psyche was on edge as was the case in late 2015 following China's stock market crash.



THIS REPORT WAS REPUBLISHED ON 07/06/2023 TO CORRECT A TYPOGRAPHICAL ERROR IN FIGURE 3 ON PAGE 19.

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.

Incoming data this week continue to highlight the disconnect between the hard and soft data in U.S. manufacturing. In May, U.S. factory orders were up 0.3%, while nondefense capital goods orders excluding aircraft, a barometer of future business investment, rose 0.7%. Meanwhile, construction spending on manufacturing structures was up 1% in May and is nearly 77% higher than a year earlier. Therefore, it is important to not put too much stock in the soft data, particularly when purchasing managers cannot seem to shake off their pessimism despite the resilience of the hard data.

The hard-data and sentiment components of the ISM manufacturing index are not observable but can be estimated. To do so, we mapped the five components of the ISM manufacturing survey to the hard data on

manufacturing. We then modeled each component based on its hard data. The ISM's methodology for constructing its composite index is applied to these new subindexes to create a hard-data ISM index. This ISM index is consistent with the actual data on employment, industrial production, new orders, inventories, and supplier deliveries.

The ISM manufacturing index has waded into contractionary territory, or below its neutral threshold of 50, for eight consecutive months, and the bulk of this deterioration in the ISM survey is due to negative sentiment. In May, our hard-data ISM index stood at 51.7, compared with a reading of 46.9 in the actual ISM index. This 4.8-percentage point gap is our estimate of the drag that negative sentiment among purchasing managers is exerting on the ISM index.

TOP OF MIND

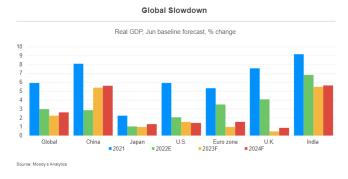
Global Outlook: A Bumpy Ride

BY STEPHEN CICCARELLA

The global economy accelerated slightly in the first quarter due primarily to stronger household consumption in both the U.S. and China, but growth remains well below trend. Although headline inflation has downshifted steadily on softening energy prices, core inflation has not responded as significantly to the aggressive interest rate tightening cycle conducted by major central banks since early 2022.

While the resilience of the U.S. labor market and the sharp fall in natural gas prices in Europe have supported growth this year, the initial exuberance that followed China's abandonment of its zero-COVID policy has turned to caution; recent hard data show the Chinese economy struggling to gain traction. We expect a bumpy ride for the global economy this year as the polycrisis from the pandemic and the Russia-Ukraine war continues to unwind and sectoral fragilities are exposed.

Global real GDP will slow to 2.2% year over year in 2023 in the Moody's Analytics June baseline forecast, weaker than the estimated 3% in 2022. Recession risks are uncomfortably high and additional negative shocks could undermine growth this year.



Across countries and regions—focusing on the major economies of the U.S., China, Japan, India, the U.K. and the euro zone—the outlook remains mixed, reflecting varying exposure to the negative supply shock of the war in Ukraine.

The U.S. will grow below potential in 2023, slowing to 1.6% in contrast with a 2.1% gain last year. While the still-strong U.S. labor market will be supportive for household consumption, core inflation remains persistent in the U.S. and the lagged effects of the Fed's aggressive ratetightening policy increase downside risks for the outlook.

Growth in the euro zone and the U.K. will also decelerate this year, but Europe as a whole will avoid recession as the uncertainty surrounding the feared energy crunch last winter resolved to the upside. This has led to upgrades in forecast projections across the region relative to estimates made at the end of last year.

After a well-above trend increase of 3.5% in 2022, real GDP in the euro zone will advance 1% in 2023, bumped up from December's projection for a 0.4% gain. Within the euro zone's largest four economies, Spain will show the best performance with 2.1% growth, while France and Italy will bracket the currency union's average with 0.9% and 1.2% gains, respectively. Germany will fare the worst, contracting 0.2%.

The U.K. will face a tougher 2023 following a robust 4.1% increase in real GDP in 2022, as the nation's relatively small storage capacity for natural gas made it particularly exposed to surging energy costs last year. While the economy will grow by a modest 0.5%, the forecast for real GDP has been upgraded by more than 1.5 percentage points over the last six months, reversing earlier calls for a recession.

Japan will maintain its moderate growth pattern, as the retreat from pandemic-era restrictions, the presence of pandemic-era savings, and the fading of inflation pressures will lift domestic spending, while at the same time weaker growth abroad dampens the key external sector. We project a 1% gain, matching 2022's result. Consequently, we project Japan's real GDP will not return to pre-pandemic levels until mid-2024.

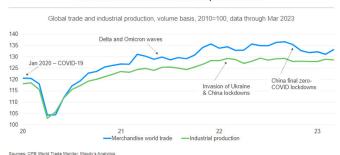
India will grow 5.5% in 2023, downshifting from its robust 6.8% showing last year. Although external demand has slowed, CPI inflation has been decelerating on a year-over-year basis in recent months, and despite rising interest rates, industrial production has been growing in year-on-year terms since late 2022. We therefore expect the economy to remain strong throughout the year.

China may disappoint

In light of expectations for weakness in U.S. growth this year, the forecast for global expansion, albeit strongly below trend, hinges on a rebounding Chinese economy that was hobbled by lockdowns related to the country's zero-COVID policy. Growth in first-quarter real GDP was constructive, with the Lunar New Year boosting the pace of activity to 4.5% year over year after 2022's dismal 2.9% gain. At the same time, data for industrial production, retail sales, and fixed-asset investment showed growth year over year, as both manufacturing and nonmanufacturing PMIs moved steadily above the 50 neutral mark, indicating rising expectations.

Nonetheless, China's recovery limped into the second quarter, with a broad set of backsliding indicators that raised doubts regarding the economy's post-lockdown momentum. One of the primary reasons for the recent weakness is the downturn in global trade that began in late 2022. With higher interest rates globally weighing on consumption, production and capital expenditures, external demand has deteriorated sharply and taken a toll on China's export-driven industries.

Downturn in Global Trade Since September 2022



And while pent-up demand and a backloading of household consumption drove China's solid growth in the first quarter, the pace is not sustainable through the year. Top-line retail sales in April and May were strong, but the upturn in year-over-year growth came from the comparison to a low base during China's long lockdown rather than strong current sales.

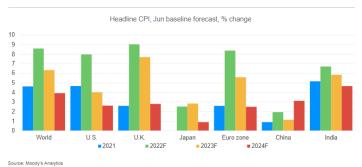
In addition, the employment component in the official manufacturing and nonmanufacturing PMIs fell further into contraction territory in May, suggesting firms are not looking to expand their workforces. This followed a jump in youth unemployment in China to a record high of 20.8% in May. If potential workers cannot find jobs, the planned consumer-led recovery sketched out in the "two sessions" meetings in March will struggle to materialize. The battered property market is also an important source of households' hesitation to revive consumption more meaningfully and will receive only modest support this year as authorities balance short-term domestic demand with longer-term financial stability.

In response to the slowdown, the government has implemented targeted fiscal support and trimmed interest rates, which will pick up the pace of domestic demand in the second quarter. We project that China's economy will grow 5.4% in 2023, thereby reaching the central government's growth target of "about 5%," but if momentum continues to stall, downside risks to global growth this year will be accentuated.

Optimism for core inflation outlook

Elevated consumer price inflation has been driven by the negative supply shocks generated by the pandemic and Russia-Ukraine war. We estimate that global CPI inflation peaked in the third quarter of 2022 at 9.3% year over year but will not reach central bank targets in most major economies until 2025.

Elevated Headline Inflation



In the U.S., top-line inflation in May was softer than expected thanks in large part to falling gasoline prices, as the headline CPI decelerated from 4.9% year over year in April to 4% in May. Despite the strong improvement in the headline, growth in the core CPI, which includes the prices of goods and services most sensitive to changes in financial conditions, decelerated only slightly from 5.5% to 5.3% as used-vehicle prices remained strong.

Yet there is optimism for a more substantial slowdown in the U.S. core CPI this year. Wholesale used-vehicle prices rolled over this spring while rents for new tenants are estimated to have registered no change on a year-ago basis in the first quarter. This will pull down the rent of shelter CPI, which accounts for more than 40% of the core CPI. In addition, price changes in nonenergy, non-shelter services, which are highly influenced by the pace of wage growth and closely watched by the Federal Reserve, are steadily decelerating and will slow further as the labor market continues to loosen this year. While the Fed paused rate hikes as expected at its June meeting, and we believe current policy is sufficiently restrictive to bring inflation to the Fed's target, June's CPI report will play a key role in Fed decision-making at July's meeting.

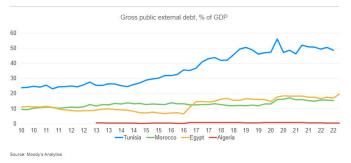
In the euro zone, May's CPI print has made us more certain that inflation is turning a corner and following the U.S. down. Headline inflation dropped to 6.1% from 7%, the lowest since Russia invaded Ukraine. More encouraging, the core CPI for goods recorded a third consecutive month of broad-based, relatively low month-on-month increases, and we can confidently conclude that this is part of a downward trend. While the core CPI for services also declined, we believe base effects will keep this category elevated during the summer, with a steadier drop by fall. The latest inflation data did not dissuade the European Central Bank from implementing another 25-basis point interest rate hike in June, but July is increasingly in play. We now put the odds of a July hike at just above 50%, from 60% in May, with a pause expected in September.

In China, inflation remains at a standstill, reflecting the underwhelming reopening rebound, and we expect it to decelerate to 1.1% in 2023 from 1.9% last year. In Japan, real GDP and inflation will remain muted due to the country's belated post-pandemic recovery; we expect the Bank of Japan to keep rates accommodative through 2023.

Emerging markets will downshift

Most emerging markets turned in a strong performance over the first quarter as China's initial rebound and the resilient U.S. economy supported external demand. However, as China's fiscal and monetary impulse fades in the second half of the year, weaker demand for commodities will weigh on EM growth amid still-elevated inflation and peak U.S. policy rates. While emerging Asia and the Middle East will outperform, Latin America and emerging Europe remain weak spots. The debt crisis in small emerging economies is no longer at cliff's edge, but this year's soft global economy will not make things easier, particularly in North Africa.

Beyond Algeria, Large External Debts



The outlook for the global economy hinges on an increasingly broad set of circumstances going right. The call for the global economy to skirt recession over 2023 rests on a muddle-through scenario in which the war in Ukraine does not intensify, disruptions to global supply chains continue to ease, oil prices hold the line, and financial markets stabilize. Risks that any one of these situations does not pan out in a positive manner are uncomfortably high.

The Week Ahead in the Global Economy

U.S.

The consumer price index will garner sharp attention in an otherwise light week for the U.S. economic calendar. While we expect headline inflation to continue moderating, core price growth will remain stronger than the Federal Reserve would like. The implications for monetary policy are not overly significant, since the Fed has already signaled, and the market has priced in, a likely 25-basis point rate hike when the Federal Open Market Committee meets later this month.

We will be keeping a close eye on jobless claims, which provide labor market insight with the shortest lag time. Initial claims are clearly on an uptrend over the last several months and remain close to the breakeven level—which we estimate to be around 265,000 per week. Given that, it will be important to note any sustained increase in the level of claims, which likely would signal a deceleration in monthly job gains.

Other key data next week will include the NFIB small business survey, producer price index, import prices, industrial production, and the University of Michigan consumer sentiment survey.

Asia-Pacific

China's price data for June will be in focus. We expect headline CPI growth to be flat after notching a subdued 0.2% year over year in May, while core inflation will stay south of 1%. Overall consumer prices are virtually at a standstill because of the underwhelming reopening rebound. We expect price pressures will build over the year. There have been positive signs. In particular, travel surged over the five-day Labour Day holiday. Traffic volume exceeded 2019 levels, and travel and entertainment prices rose from a year earlier.

On the policy front, the Reserve Bank of New Zealand will keep the official cash rate at 5.5% in July. After an aggressive tightening schedule, the RBNZ has indicated it will remain on the sidelines and wait for earlier rate hikes to filter through. Household budgets are coming under rising pressure, and the labour market looks to be loosening, alleviating heated underlying price pressures.

Latin America

Despite decelerating inflation rates in some Latin American countries, the region's industrial production has been underperforming with several countries experiencing significant declines. Brazil will become the first Latin American economy to bring inflation back to its target rate, after slowing to 3.48% in June. Even so, Brazil's retail sales will grow only 0.7% in May because of the softening domestic economy. In Colombia, inflation decelerated to 12.2% in June thanks to increasingly stable food prices, but this rate remains well above the long-term target of 3%. Peru's declining inflation will prompt the central bank to hold the policy rate constant in its July meeting. Inflation in Argentina, in contrast, continues to climb and reached 117.4% in June. Strong consumption and a depreciating currency are driving the increasing consumer price index.

Industrial production is underperforming in the region. Mexico's industrial production growth decelerated to 0.5% year over year in May as producers felt the squeeze of monetary policy. High interest rates and double-digit inflation will cause Colombia's manufacturing output to fall 5.8% year over year in May. Uruguay's industrial production likely declined 2.3% on an annual basis in May as interest rates drag on the automotive industry.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
13-Jul	Thailand	Upper and lower houses vote on next prime minister	Low	Low
23-Jul	Spain	General election	Medium	Medium
23-Jul	Cambodia	General election	Low	Low
27-Jul	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
4-Aug	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
13-Aug	Argentina	Presidential primary, PASO	Medum	Low
20-Aug	Ecuador	Presidential election, first round	Medium	Low
20-Aug	Guatemala	Presidential election, run-off	Medium	Low
1-Sep	France	Senatorial elections	Low	Low
9-10 Sep	G-20	India hosts G-20 summit	Low	Low
14-Sep	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
Sep	Singapore	Presidential election	Low	Low
Sep	U.N.	General Assembly, New York	Low	Low
22-Sep	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
1-Oct	United States	Potential government shutdown	Low	Low
14-Oct	New Zealand	General election	Low	Low
26-Oct	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
26-27-Oct	EU	European Council summit	Low	Low
29-Oct	Argentina	General election	Medium	Medium
29-Oct	Colombia	Regional elections	Low	Low
Oct/Nov	ASEAN	Indonesia to host ASEAN summit	Low	Low
Nov	Indonesia	Association of Southeast Asian Nations	Low	Low
Nov	APEC	Economic leaders' meeting, to be held in San Francisco, U.S.	Low	Low
3-Nov	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
6-17 Nov	U.N.	COP 28, to be held in Dubai, UAE	Low	Low
14-Dec	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
14-15-Dec	EU	European Council summit	Low	Low
15-Dec	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
13-Jan	Taiwan	Presidential election	Medium	Medium
Jan	Bangladesh	General election	Low	Low

THE LONG VIEW: U.S.

Market Participants Remain Confident

BY STEVEN SHIELDS

CREDIT SPREADS

Credit spreads remained stable through June and have not shown significant signs of widening or increased default risk. This indicates market participants are still confident in the creditworthiness of borrowers and that the overall economic environment remains favorable. This has been underpinned by healthy corporate balance sheets, persistent strength in consumer spending and relatively low level of corporate default this year.

At 144 basis points, the Moody's Investors Service long-term average corporate bond spread remains narrow and firmly below its 12-month high of 178 bps. Similarly, Moody's long-term average industrial bond spread sits at 123 bps after reaching as high as 136 bps in March.

Lower-grade credit spreads also remain relatively narrow and have tightened in recent weeks. The U.S. Bloomberg/Barclays high-yield option-adjusted spread is within arm's reach of a four-month low of 413 basis points. Similarly, the ICE BofA U.S. high-yield option-adjusted bond spread closed Wednesday at 401 bps, comfortably below its peak of 522 bps in March. In the past there has been a significant correlation between credit spreads and equity market volatility, as measured by the VIX. This relationship was disrupted in recent years, but the recent decline in the VIX is once again in sync with the level of high-yield spreads.

GLOBAL DEFAULTS

Moody's Investors Service reported 16 corporate debt issuers defaulted in May, up from the revised count of 12 in April. May's default count matched March's, which was the highest monthly tally since March 2022. May also marked the fourth consecutive period during which the monthly default count was in the double digits.

Of the 16 defaulted companies in May, six were repeat defaulters. They were U.S.-based Envision Healthcare Corp., Monitronics International Inc., CIBT Global Inc., and Checkers Holdings Inc.; Germany-based Takko Fashion S.a r.l.; and Jamaica-based Digicel Group Holdings Limited. All had restructured via distressed exchanges in prior years except Monitronics International and Digicel, whose prior defaults were bankruptcies.

Envision was the largest default in May. The company is a leading provider of emergency medical services in the U.S. It filed for Chapter 11 along with its subsidiary Amsurg LLC with more than \$7 billion of debt in total. Envision has

entered into a restructuring support agreement aimed at deleveraging approximately \$5.6 billion by equitizing or canceling all its debt except a revolving credit facility. The RSA was supported by more than 60% of the company's debt holders. Envision has operated with aggressive financial policies as reflected in very high debt levels. Although it had restructured its debt through distressed exchanges in 2020 and 2022, neither transaction reduced the company's debt materially, resulting in a capital structure that remained untenable.

Defaults last month pushed up the global speculative-grade default rate to 3.4% for the 12-month period ended in May, up from the 3.2% rate at the end of April. As central bank interest rates near their peaks for this cycle in most advanced and emerging market economies, higher borrowing costs and tighter lending are now permeating credit conditions and dampening investment, consumption and employment. This, together with still-elevated input costs, will set the stage for rising defaults among companies that struggle with weak earnings and heavy debt burdens, especially those that primarily borrow in the loan market.

Moody's Investors Service expects the global default rate to rise throughout the rest of this year and reach 4.6% by the end of 2023. If realized, the rate would be higher than the long-term average of 4.1%. In 2024, we predict the rate to rise to 5.0% by the end of April before easing to 4.9% by the end of May. Moody's Investors Service's baseline forecast assumes the U.S. high-yield spread will widen to 532 bps over the next four quarters from about 460 bps at the end of May, and that the U.S. unemployment rate will rise to 4.8% from 3.7% in the comparable period.

CORPORATE BOND ISSUANCE

First-quarter 2021's worldwide offerings of corporate bonds revealed an annual decline of -4% for investment-grade and an annual advance of 57% for high-yield, wherein U.S. dollar-denominated offerings sank by 9% for investment-grade and advanced by 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 yearago 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 U.S. dollar-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 as 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.

Corporate bond issuance weakened in the second quarter. Worldwide offerings of investment-grade corporate bonds totaled \$548 billion, down 21% on a year-ago basis. U.S. dollar-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. High-yield issuance is down 79% on a year-ago basis.

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

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

The first quarter of 2023 saw a decline in global offerings of corporate bonds, with investment-grade offerings falling by -7.9% and high-yield offerings dropping by 10.1% year over year. U.S. dollar-denominated investment-grade issuance, which accounts for half of activity globally, decreased by 15.04% on an annual basis. U.S. high-yield issuance also experienced a slow start at just \$31.5 billion, marking its slowest start to the year since 2008, and posting a 15% decline compared to the first quarter of 2022.

U.S. dollar-denominated investment-grade debt issuance topped \$16.9 billion in the most recent week. This year's

combined total of investment-grade debt increased to \$738.9 billion, which is 8.2% less compared with same period last year. Meanwhile, high-yield debt issuance totaled \$4.27 billion for the period, bringing the cumulative year-to-date figure to \$107.4 billion and reflecting a 9.4% increase year over year. Despite the increase in high-yield debt, total U.S. dollar-denominated corporate debt issuance shows an 7.4% decrease compared to the same period last year. Approximately one-quarter of the funds raised over the second quarter were allocated to debt refinancing and rollover.

U.S. ECONOMIC OUTLOOK

Our baseline assumptions for monetary policy have changed slightly from the last update. As in the previous outlook, we expect that the Federal Reserve's May rate hike was the last of the current tightening cycle and that the policy rate will remain at its terminal range of 5% to 5.25% until the end of 2023. However, we now anticipate that the Federal Open Market Committee will not start lowering rates in January 2024, but instead will postpone its first cut to March because inflation remains more persistent than previously anticipated. While the FOMC will make further policy action contingent on the ongoing impact of monetary tightening on economic and financial conditions, we anticipate that the policy stance is sufficiently restrictive to reduce inflation to target over time. Monetary policy will remain restrictive through the end of 2025. The fed funds rate will return to its neutral rate in early 2026.

The Fed continues to balance inflation and labor market tightness against financial conditions. April personal consumption expenditure inflation came in higher than expected, with monthly core accelerating to 0.4% from March. The Fed's preferred inflation measure ticked up slightly on a year-over-year basis as well, and core inflation has remained stuck near 4.7% since last December. U.S. labor markets also remain resilient. In May, the jobless rate rose only marginally to 3.7%. While incoming data has increased the probability of further tightening, Fed officials for now strongly signal a June pause to assess the lagged impact of credit tightening after the March banking turmoil.

Overall, inflation remains the key to our baseline. The June vintage has year-ago consumer price inflation at 3.1% by the end of 2023, compared with 2.9% in the May vintage. Since inflation will approach the Fed's target toward the end of the first quarter of 2024, later than in our previous baseline, we anticipate that the Fed will keep rates elevated longer. We continue to expect that remaining inflationary pressures from shelter and other U.S. service industries will soften. We also still believe a soft landing to be the most likely outcome for the U.S. economy, thanks to the resilience of consumers and labor markets

Financial conditions, meanwhile, will remain tight, reflecting ongoing monetary pressures. However, we expect near-term easing after the resolution of the debt-limit standoff. Stock prices already gained ground from early May to early June. While the 10-year Treasury yield rose to 3.7% during this period, the baseline outlook has the yield average 3.6% in the second quarter of this year, down by 15 basis points from the previous baseline. The yield will then peak in the second quarter of 2024 just shy of 4%, as in the previous baseline. We estimate the 10-year Treasury yield will then decline into 2025.

Foreign exchange markets also continue to relax as the Fed has approached the end of the current hiking cycle. On a real broad trade-weighted basis, the U.S. dollar is still up more than 5% from its pre-pandemic level, but in April had depreciated by more than 5% from its October peak.

Energy

Moody's Analytics has lowered its crude oil price forecast by \$4 per barrel in the second and third quarters of 2023. We now expect Brent to average \$83.02 in calendar year 2023 versus \$85.45 a month ago. It has become clear that Russia will be able to evade and bypass the massive oil sanctions levied upon them by Western powers for its invasion of Ukraine. Incredibly, Russia's oil exports are now higher than they were before the invasion of Ukraine. We had expected the bite from sanctions, especially the EU's oil import ban, to restrain Russia's exports and thus constrain supply to the global oil market. That has not happened, however—and if it hasn't happened yet, it might not happen at all. We have revised our expectation for Russian oil exports higher by 500,000 barrels per day, and risks are weighted to the upside. We had expected Russian oil exports to fall by 1,000,000 bpd when the West imposed 4.7 million bpd of oil sanctions.

The surprising strength of Russian oil exports has left the oil market oversupplied. OPEC announced production cuts—which took effect in May—to bring the market into balance, but that wasn't enough, so Saudi Arabia voluntarily cut output by an additional 1 million bpd. That is expected to take effect in July. Saudi Arabia will determine whether the cuts will be extended beyond July based on the market price of oil. Excess capacity excluding Russia and Iraq now stands at 4.1 million bpd, which is historically high. This could rise to as high as 5 million bpd once Saudi Arabia implements production cuts in July. Such a high level of oversupply provides a substantial buffer against rapid oil price appreciation, in a further nod to our forecast revision.

Moody's Analytics has also reduced its natural gas price forecast. Henry Hub natural gas prices are now expected to average \$3.15, down from the \$3.34 average we expected a

month ago. The reopening of all three trains at the Freeport liquefied natural gas terminal has failed to arrest the decline in U.S. natural gas prices. Significant arbitrage opportunities remain for U.S. firms to process natural gas and export it to Europe. This will lower European gas prices over time and raise gas prices in the U.S. However, it will take longer for firms to arbitrage than we had previously expected.

GDP

U.S. GDP rose a weak 1.3% in the first quarter, according to the Bureau of Economic Analysis' second estimate, the third consecutive quarter of growth but confirmation that the weakening in growth will persist through the year. Growth was broad with consumer spending leading powerfully, supported by exports, government spending, and nonresidential business investment. Inventories were a major drag with imports and residential investment also weighing on growth. The baseline outlook remains that the Fed will accomplish its goal of slowing inflation without precipitating a recession.

Consumer spending remained a source of growth and its contribution grew to the largest in nearly two years as cost-of-living adjustments boosted after-tax income. It added 2.5 percentage points to growth. Nonresidential fixed investment, government, and trade were modest supports to growth in the quarter, with state and local spending leading the government gain. Prospects for trade will remain positive if the dollar weakens as expected.

Inventories were a huge drag on growth, reducing growth by 2.1 percentage points, its largest drag in two years. Fixed investment fell slightly, subtracting 0.03 percentage point from growth, with residential investment pulling growth down by 0.2 percentage point and structures and IP investment the strongest performers.

The change in the composition of growth in the first quarter was one of the factors affecting the outlook. The larger-than-previously reported inventory build in the first quarter is a negative for the near-term outlook because inventory accumulation will slow more rapidly than previously thought. By contrast, the faster consumer spending growth provides more momentum for the second quarter, before becoming a drag as growth slows more than previously expected. The net effect is little change to growth projected for this year, but a bit more slowing next year as the impact of debt-ceiling legislation takes its toll. On an annual average basis, growth is projected to be 1.6% in 2023 and 1.4% in 2024, compared with projections of 1.6% and 1.7%, respectively, in the May outlook. Growth still accelerates to around trend levels in 2025.

Labor market

Despite the Fed's best efforts, the U.S. job market remains hot. One must squint to see signs of a slowdown, though they are there. In May, nonfarm payroll employment yet again surprised to the upside, though the very strong job gains were accompanied by a sharp rise in the unemployment rate from 3.4% to 3.7% as millions of selfemployed workers entered the market for other work. Claims for unemployment insurance have been stable over the past few weeks and have even moved a bit lower compared to where they were at the end of the first guarter. Job openings have come down, though there are still about 1.5 open jobs for every unemployed person. Quits have fallen, a sign that workers are perhaps less optimistic about their job market prospects than they once were. Wages, one of the more important indicators from the Fed's perspective, are also cooling off, albeit very slowly.

The strong jobs report in May means that the forecast for nonfarm payrolls over the next few years is a bit stronger than it was last month, given the higher jumping-off point. The forecast now does not expect a sub-100,000 per month increase in payrolls until the final quarter of this year. Not until 2024 will monthly job gains be very weak at fewer than 50,000 per month on average. The unemployment rate will rise to 3.8% by the end of the year as monthly job growth is enough to keep it from rising further. The rate will peak at 4.3% at the start of 2025 before slowly trending lower thereafter. Wage growth will continue to decelerate and by this time next year will be approaching 3.5% as measured by the Employment Cost Index, which is right around where it should be to reach the Fed's inflation target.

Fiscal policy

Over the Memorial Day weekend, President Biden and House Speaker McCarthy reached an agreement to limit federal spending over the next two years and suspend the debt limit until January 2025, which will effectively remove the debt limit as an issue until after the 2024 presidential election. The agreement, officially known as the Fiscal Responsibility Act, was signed into law in early June and is incorporated into the June vintage of the baseline forecast. The most important element of the FRA is the caps it imposes on federal defense and nondefense discretionary spending in fiscal 2024 and 2025.

As the law is written, the nondefense budget will shrink by 8% next year, and in the following year, growth in nondefense appropriations would be limited to just 1%. On the other hand, the defense budget will be allowed to grow by 3% next year, but in fiscal 2025, its growth would also be limited to 1%. The caps on discretionary spending will reduce federal budget deficits by \$170 billion over the next two years. From fiscal 2026 onward, there are no

enforceable caps on discretionary spending, and discretionary spending will grow in line with inflation. However, because discretionary spending in fiscal 2026 will start from a lower base than would have otherwise been the case without the debt-ceiling agreement, the Congressional Budget Office estimates that the budgetary savings tied to the FRA over the next decade will balloon to \$1.5 trillion.

Nevertheless, these savings are unlikely to occur to the same extent as estimated by the CBO. There were a series of side deals that were made by negotiators and that are not written into the legislative text of the FRA. These side agreements effectively shift money around and will allow appropriators to maintain nominal nondefense spending roughly flat compared to current levels. The baseline forecast assumes that these side deals limit the cumulative deficit reduction in fiscal 2024 and 2025 to around \$90 billion, as opposed to the \$170 billion that would occur if the letter of the law was followed. Consequently, the macroeconomic consequences from the FRA are not as great. We anticipate that the FRA will lead to a 0.19% reduction in real GDP, a one-tenth of a percent increase in the unemployment rate, and a reduction to nonfarm employment of about 130,000 jobs. The peak of the drag from the FRA will occur in late 2024.

Business investment and housing

The second release of the Bureau of Economic Analysis' first-quarter 2023 National Income and Product Accounts data essentially confirmed the initial reading on real investment spending. The small upward revision for the total from 0.7% annualized to 1.4% resulted from bigger gains in intellectual property, most of which is software. Yet that did not change the fundamental story of substantial deceleration overall compared to a gain of approximately 4% on average in 2022. Equipment led the weakness, falling 7% annualized, with declines in transportation, mining and construction equipment. Although structures rose, the gains were not in the commercial segment, where office fell once again. Instead, the increases were in new factories and mining structures.

High-frequency data do not yet suggest a turnaround. Although inflation-adjusted shipments for nondefense, non-aircraft capital goods rose modestly in April, they have trended down since October. So have new orders. Further, business capital plans are diminishing. According to the May Empire State Manufacturing Survey, the net percentage of companies expecting to invest more in six months shrunk to near 0.

Tight credit remains the driver of the weak performance, but conditions have not changed enough to revise the forecast materially. The June outlook is that real business investment

will rise 1.9% on an annual average basis in 2023 compared to 1.8% in May. The bulk of the weakness will be in equipment spending.

Moody's Analytics updated its baseline forecast for single-family existing and new home sales considering recent performance data. Existing sales in the first quarter proved to be more robust than many analysts had expected, as overall buyer demand and the strong labor market offset the effect of rising mortgage rates and weakening affordability.

Nonetheless, sales are expected to remain relatively low throughout the rest of 2023 due to "lock-in" effects. High interest rates and a lack of inventory available for sale is causing homeowners to remain in their homes rather than selling and moving. With more than 90% of mortgage borrowers estimated to have an interest rate lower than 6%, selling and buying another home would result in a significant payment shock. Even for homeowners who may be willing to move, the lack of inventory of homes for sale has exacerbated the situation as frustrated buyers decide to make do with their current living situation.

Low inventories of existing single-family homes have provided support to homebuilders as new homes do not face the same coordination problem. Moody's Analytics upgraded its forecast for new housing permits and starts for 2023 modestly as a result. The longer-term trajectory for single-family construction through the end of the decade remains favorable due to underlying demographic demand. Now in their mid- to late-thirties, millennials are the largest living generation today and are delaying life events such as marriage and starting families. As they eventually move through these stages, new household formations will continue to support the need for new-home construction.

House prices are being whipsawed by large crosscurrents. Low affordability and high overvaluation are reducing demand, putting downward pressure on prices. The restricted supply of homes available for sale is having the opposite effect, pushing prices upward. This tug-of-war is likely to continue throughout the year and will ultimately be decided by the labor market. If unemployment remains low as Moody's Analytics projects, then buyer competition will keep prices from falling significantly.

If unemployment should rise, then not only will demand drop off as buyers retreat, but a rise in foreclosures would put downward pressure on prices. Consistent with the baseline economic forecast calling for economic weakness that narrowly avoids recession, Moody's Analytics forecasts national house prices to decline by 5% to 10% over the next 12 to 18 months. Trends will vary regionally, with some areas experiencing sharp price declines while other areas continue to appreciate due to shifting demographics and preferences.

Moody's Analytics forecasts for commercial real estate prices were revised slightly this month, driven by small movements in recent performance data and interest rates, but continue to show double-digit peak-to-trough price declines through 2024. Property prices in some sectors such as industrial and hotels are expected to hold up better, given a focus on reshoring and a recovery in demand for travel services. Office buildings will see their values fall by 25% or more in some markets as businesses shift to hybrid work arrangements. Tightening lending standards on commercial real estate mortgages as well as higher interest rates will further pressure the finances of property owners. In addition, the additional supply of apartment buildings expected to come online in 2023 and 2024 will be a further drag on prices.

THE LONG VIEW: EUROPE

The U.K. Mortgage 'Timebomb'

BY DAVID MUIR

The Bank of England has raised interest rates by almost 500 basis points over the past 18 months, but demand in the U.K. economy has exceeded expectations, and domestic inflationary pressures have proved persistent. Developments around household debt are likely to be part of the reason; the share of households with a mortgage is lower than in the past, and variable-rate mortgages have become much less common. It is therefore taking longer for increases in interest rates to be transmitted and they are impacting a narrower section of the economy. This suggests a need for the BoE to keep rates high for a prolonged period. In our updated baseline, the policy rate falls only from the second half of next year, after peaking at 5.75% in September.

Around 5% of households with a fixed-rate mortgage face an abrupt increase in mortgage payments over the next 12 months. Most will be refinancing from the low interest rates that prevailed two or five years ago. A further 5% of households have variable-rate mortgages.

But for the household sector as a whole, the impact of higher rates on mortgage payments will not necessarily be as severe as in the past. At an aggregate level, households have become less indebted: if the effective interest rate on the stock of mortgage debt reached 6%, mortgage payments by the household sector would still comprise a smaller share of disposable income than in 2008.

That said, indebtedness has fallen in part because more households rent. Rental payments already account for a larger share of income than over the last 15 years and are likely to rise further as landlords pass on higher mortgage costs. The deterioration in mortgage payment affordability will also keep more households renting for longer, contributing to upward pressure on rents.

If rents continue to grow at the same pace as the last year, and the effective rate on the stock reached 6%, mortgage and rental payments combined would be close to the level reached in 2008. Differences in macroeconomic conditions mean this would not necessarily represent a comparable degree of stress. But it would present a significant headwind to economic growth.

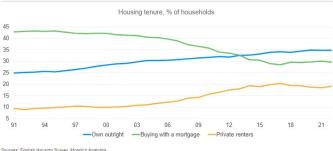
Nevertheless, repossessions are unlikely to rise as high as in the 1990s or after the financial crisis. Lenders are now expected to provide greater support to those struggling, and

unemployment is projected to remain low. This will mitigate the incidence of forced selling and the extent of downward pressure on house prices that would otherwise result.

Changes in housing tenure

Housing tenure has shifted in ways that make households less directly exposed to higher interest rates. A larger proportion of households now own their homes with no mortgage—mortgages are held by 30% of households, compared with 40% from 1990 to 2007. But more households now rent: and since most landlords have mortgages, they are indirectly exposed to higher rates. And conditions in the lettings market are tight. Demand is strong, since higher interest rates are putting homeownership further out of reach, and the supply of rental properties has been falling.

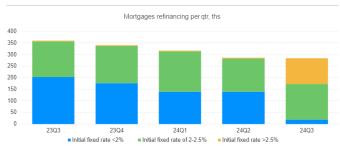
The Share of Households With a Mortgage Has Fallen



Interest rate rises are also taking longer to impact household finances. Variable-rate mortgages are held by just 5% of households, down from almost 20% in 2008. Of those that are fixed, which comprise the vast majority of the stock, most are fixed for two or five years.

The impact on household budgets will be most severe for those refinancing mortgages that were originally taken out two years ago. In the second half of 2021 the interest rate on a two-year fixed-rate mortgage with a 75% loan-tovalue ratio averaged 1.4%. For someone who purchased an average-priced house during that period, refinancing to a rate of 6% would raise monthly payments from around £660 to around £1,130. As a share of average incomes, this represents a larger increase than in those periods of the past when interest rates rose.

1.3 Million Mortgages Will Refinance in the Next 12 Months



Sources: ONS, Moody's Analytic

Individual borrowers have become more vulnerable to rate increases because loan-to-income multiples have expanded. However, at an aggregate level, the household sector has less direct exposure. Household indebtedness has fallen notably over the past 15 years. In the first quarter of 2023, total mortgage debt was equivalent to 125% of disposable income, down from the peak of 155% in 2008.

If the effective interest rate on the stock of mortgage debt rose to 6%, comparable to the rate reached in 2008, total mortgage payments, as a share of disposable income, would remain below the peak reached 15 years ago. Even so, the burden on individual mortgagors may be greater. Indeed, for monetary policy to exert sufficient disinflationary pressure, that's likely to be necessary, given that mortgage debt is now more narrowly held.

And the counterpoint to lower mortgage indebtedness is that a higher number of households are renters. Rents have been rising strongly. Conditions in the lettings market are tight, with poor mortgage payment affordability raising demand. Meanwhile, a more burdensome regulatory environment is reducing supply.

In the first quarter, average rents were 10% higher than a year earlier. Total private residential rents now account for a larger share of disposable income than in 2008.

If the effective rate on the stock of mortgage debt reached 6%, and rents continue to grow at the average pace of the last 12 months, the combined total of mortgage and rental payments would reach a level close to that of 2008.

Differences in the macroeconomic environment mean this would not necessarily represent the same degree of stress for the economy as in 2008. But if households need to allocate a historically large share of income to housing costs, it will present a significant headwind to consumer spending. In our updated baseline we now expect GDP growth to be only marginally positive next year.

Even so, repossessions are unlikely to reach the levels seen in the financial crisis and in the 1990s, mitigating the extent of downside risk for house prices.

Lenders are now expected to provide greater support, such as extending the term of the mortgage or switching to an interest-only mortgage. They have also agreed to a 12-month grace period before repossession proceedings start. And the more conservative macroprudential regime has lessened the degree of risk; since 2014, mortgage lenders have been required to assess whether a borrower could afford to pay their mortgage if rates rose by 3 percentage points.

The distribution of mortgage debt is also relatively favourable. The top four income deciles hold 80% of total mortgage debt. These households spend a relatively low share of income on essentials and save a high share, suggesting some buffer to offset the impact of rising rates. Most important is that unemployment is expected to remain low. And growth in nominal incomes, which is stronger than usual, provides some offset to higher debt payments.

Japan's Business Sentiment Improves

BY STEFAN ANGRICK and HARRY MURPHY CRUISE

Japanese business sentiment rose notably in June, surpassing our and consensus expectations for a more moderate improvement. Overall business sentiment rose to 8 in June from 5 in March, according to the Bank of Japan's Tankan survey. Nonmanufacturing sentiment improved to 14 from 12, thanks to a rebound in tourism and Japan's domestic recovery continuing to gain traction. This was particularly clear in the hospitality sector, which recorded double-digit gains across large, mid-size and small entities. The number of foreign visitors is now more than two-thirds of prepandemic levels—a drastic improvement considering inbound travel was scant until the end of 2022.

Conditions in manufacturing appear to be improving as well, with the manufacturing index improving to -1 from -3. Where nonmanufacturing sentiment was expected to rise, our forecast was for manufacturing sentiment to tread water given the various crosscurrents hitting Japanese producers. Global demand for Japanese exports, particularly from China and other Asian economies, remains weak. Production costs are still high. This has constrained shipments and output in recent months. Despite these headwinds, manufacturing sentiment was helped by expectations of lower commodity prices and improved supply conditions. Part of the change likely also reflects timing—March's Tankan survey was conducted shortly after the failure of Silicon Valley Bank in the U.S. and the capitulation of Credit Suisse. An aggressive response from policymakers worldwide has helped contain the fallout since.

We expect the Japanese economy to eke out some moderate growth this year, but the headwinds facing the outlook are significant. Although the rebound in domestic consumption and tourism has further to run, nonmanufacturing forecasts point to moderation in the

month ahead, suggesting a loss of momentum. Soft global demand and some lingering weakness in supply conditions will keep manufacturers under pressure. But slowing inflation and better-than-expected growth in the U.S. and parts of Europe are a silver lining. Indeed, manufacturing forecasts point to improvements in the months ahead.

Australia's central bank takes a breather

With clear signs that previous interest rate hikes are working to bring down inflation, the Reserve Bank of Australia pressed pause at its July meeting, keeping the cash rate steady at 4.1%. Since this tightening cycle began in May 2022, the Reserve Bank Board has announced 400 basis points of interest rate hikes. It will now take a breather to assess how those hikes are impacting Aussie households and businesses.

In announcing the pause, the board said, "higher interest rates are working". The monthly CPI indicator showed inflation tumbled to 5.6% year on year in May from 6.8% in April. On top of that, household spending has slowed considerably, and the labour market is finally showing signs of easing.

So where to from here? It's too early to wave the checkered flag on this tightening cycle. The board will keep future hikes in its back pocket if inflation doesn't retreat as expected. Indeed, Tuesday's statement signed off with its familiar catchphrase that "some further tightening of monetary policy may be required to ensure that inflation returns to target in a reasonable timeframe".

We expect a rate hike in September will put the final nail in the coffin of inflation. That should drive inflation to 4% by the end of the year and 2.5% by December 2024.

Mexico's Economy in Overexpansion

By ALFREDO COUTINO

Mexico's economy continued to advance in the first four months of the year, growing at rates above potential. However, this heightened performance has caused the development of a positive output gap, which could make inflation resilient. Moreover, the economy suffers excess demand that requires keeping the monetary brake applied to abate demand pressures on prices.

The economy surprised in the first quarter with production reaccelerating even in an environment of monetary tightening. Domestic demand did not reflect a significant impact from high interest rates, mainly because monetary liquidity was not restrictive enough. While the cost of financing has become more expensive, household consumption continued to expand because of money transfers to families provided by the government and increasing remittances from abroad. Investment also advanced, despite higher financing costs, stimulated by the arrival of foreign investment due to the relocation of international production plants to Mexico's northern border from other places. Despite the rebound in exports of automotive products going to the U.S. market, the rest of Mexico's exports started to suffer the negative impact of the peso's revaluation, which was expressed in an increasing deterioration of the trade balance. First-quarter GDP advanced 1% from the previous quarter when growth fell to 0.6%. The economy's dynamism extended to April, when activity reported monthly growth of 0.8% but started to show signs of an incipient deceleration.

Moody's Analytics expects the economy to moderate in the rest of the year, particularly in the second quarter when the monetary brake will have a more significant impact. Since policymakers put monetary conditions in restrictive territory during the fourth quarter of 2022, the degree of the restriction progressed further in the first half of the year. The Bank of Mexico, however, has stopped the rate hike cycle by leaving the policy rate at a peak of 11.25% reached in March and has expressed intentions to keep the rate where it is for a "prolonged time," which could be interpreted as unchanged rates for the rest of the year. This move will impose a major constraint on domestic demand, especially household consumption—which is not necessarily bad because the economy is experiencing excess demand. Thus, we expect Mexico's economy to report a second-year deceleration with average growth around 2.4% in 2023 after advancing 3% in 2022 and 4.9% in 2021.

Mexico's economy recovered its pre-pandemic level of output in the third quarter of 2022 and has continued to overexpand since then. Our statistical estimate of the potential output indicates that the economy was running with a positive output gap of around 1% in the first quarter, twice the gap at the end of 2022. As a result, extending the policy restriction is necessary to reduce the excess demand. Otherwise, the persistence of the positive output gap could prevent inflation from approaching the target by the end of 2024 as the central bank expects.

RATINGS ROUNDUP

Corporate Credit Quality Weakens

BY STEVEN SHIELDS

U.S.

U.S. corporate credit downgrades outnumbered upgrades 6 to 3 in the latest week. Of the changes, Epic Y-Grade Services LP was upgraded from Caa3 to Caa1, reflecting the firm's high but improving financial leverage. According to the ratings action, Epic Y-Grade Services' vast majority of debt does not mature until 2027 which provides it with runway to address nearer term debt maturities while still executing on its operating strategies.

Meanwhile, Moody's Investors Service downgraded Matrix Parent Inc.'s corporate family rating to Caa1 from B3. The downgrade actions reflect the significant challenges the firm faces in reducing its leverage and improving free cash flow.

Another key downgrade in the period was issued to Yellow Corporation. The downgrade on its senior secured rating to Caa1 from B1 reflects Moody's Investors Service' view that Yellow faces significant liquidity challenges as weaker operating performance and stalled union negotiations eroded the company's cash position. Moody's believes Yellow's default risk has materially increased as the company moves to preserve liquidity and address upcoming maturities.

Over the course of June, nearly two-thirds of all rating changes issued by Moody's Investors Service were downgrades but upgrades still accounted for the bulk of affected debt in the month.

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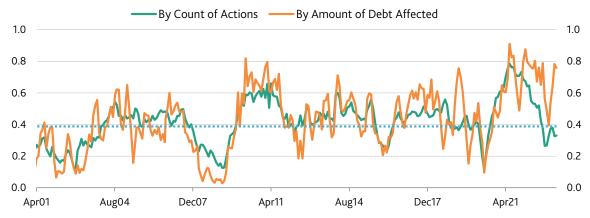
Corporate credit quality also weakened across Western Europe in the period. Downgrades comprised the bulk of debt affected at 62% and outstripped upgrades 5 to 3.

The largest upgrade in the period was issued to Principality Building Society with Moody's Investors Service upgrading Principality's long-term domestic and foreign currency deposit ratings to Baa1 from Baa2. The firm was also assigned a Baa3 rating to its proposed senior non-preferred debt issuance as well as a (P)Baa3 for its senior non-preferred program rating.

The largest downgrade in terms of affected debt was issued to RESA S.A. The downgrade of RESA's ratings to A3 from A2 reflects that RESA's cash-flow based metrics will fall below levels consistent with an A2 rating over the next regulatory period. The final tariff methodology for the next regulatory period beginning in 2025 implies lower earnings for RESA and higher investments to support the energy transition and those induced by the autonomation of the company.

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	LTD Rating	New LTD Rating	G G
6/28/2023	CASA SYSTEMS, INC.	Industrial	SrSec/BCF		D	Caa2	Caa3	SG
6/28/2023	EPIC Y-GRADE, LP-EPIC Y-GRADE SERVICES, LP	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa3	Caa1	SG
6/28/2023	WIN WASTE INNOVATIONS HOLDINGS INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG
6/29/2023	YELLOW CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	Caa1	SG
6/29/2023	MANNINGTON MILLS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	В3	SG
6/29/2023	GMP BORROWER LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	В3	SG
6/30/2023	ENERGY SOLUTIONS, INCENERGYSOLUTIONS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		U	В3	B2	SG
6/30/2023	MATRIX PARENT, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	В3	Caa1	SG
6/30/2023	FH MD PARENT, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	В3	Caa1	SG

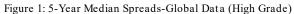
Source: Moody's

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
6/28/2023	COMET BIDCO LIMITED	Industrial	LTCFR/PDR		U	Caa1	В3	SG	UNITED KINGDOM
6/28/2023	STAN HOLDING S.A.S.	Industrial	LTCFR/PDR		D	B2	В3	SG	FRANCE
6/28/2023	CIRCET HOLDING SAS-CIRCET EUROPE SAS	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG	FRANCE
6/30/2023	ENODIA SCRL-RESA S.A.	Utility	SrUnsec/LTIR	545.5002	D	A2	A3	IG	BELGIUM
6/30/2023	AFE S.A. SICAV-RAIF	Financial	SrSec/LTCFR	335.4826	D	Caa1	Caa3	SG	LUXEMBOURG
6/30/2023	PATAGONIA BIDCO LIMITED	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG	UNITED KINGDOM
7/3/2023	PRINCIPALITY BUILDING SOCIETY	Financial	SrUnsec/LTD/MTN	381.4028	U	Baa2	Baa1	IG	UNITED KINGDOM
7/3/2023	KLEOPATRA HOLDINGS 1 S.C.AKLEOPATRA FINCO S.A R.L.	Industrial	SrSec/SrSec/BCF	436.4001	D	B2	В3	SG	LUXEMBOURG

Source: Moody's

MARKET DATA



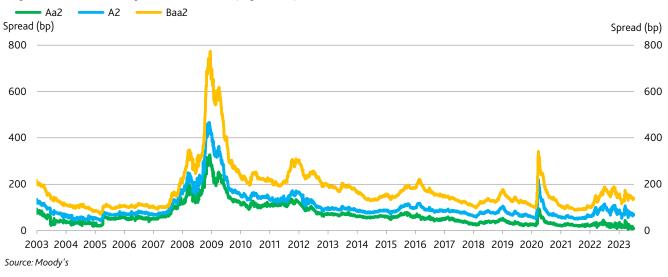
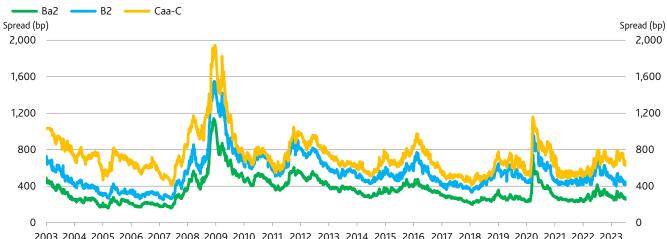


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 Source: Moody's

CDS Movers

Figure 3. CDS Movers - US (June 28, 2023 – July 5, 2023)

CDS Implied Rating Rises	CDS Impl	CDS Implied Ratings		
Issuer	Jul. 5	Jun. 28	Senior Ratings	
Philip Morris International Inc.	Aa2	A2	A2	
Agilent Technologies, Inc.	A2	Baa2	Baa1	
Air Products and Chemicals, Inc.	Aa2	A1	A2	
Continental Resources, Inc.	Baa2	Ba1	Baa3	
Southern Copper Corporation	Baa1	Baa3	Baa1	
AT&T Inc.	Baa2	Baa3	Baa2	
Verizon Communications Inc.	Baa2	Baa3	Baa1	
Oracle Corporation	A3	Baa1	Baa2	
CVS Health Corporation	A2	A3	Baa2	
Exxon Mobil Corporation	Aa2	Aa3	Aa2	

CDS Implied Rating Declines	CDS Impli	ied Ratings	_
Issuer	Jul. 5	Jun. 28	Senior Ratings
American Honda Finance Corporation	A2	A1	A3
Ford Motor Company	Ba3	Ba2	Ba2
Capital One Financial Corporation	Ba2	Ba1	Baa1
Bank of New York Mellon Corporation (The)	Baa1	A3	A1
Southern California Edison Company	Baa1	A3	Baa1
Thermo Fisher Scientific Inc.	Aa3	Aa2	A3
Fidelity National Information Services, Inc.	Baa1	A3	Baa2
Waste Management, Inc.	A2	A1	Baa1
FirstEnergy Corp.	Baa2	Baa1	Ba1
Alexandria Real Estate Equities, Inc.	Baa3	Baa2	Baa1

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff
iHeartCommunications, Inc.	Caa1	1,771	1,725	47
Domtar Corporation	Ba3	766	740	26
Freedom Mortgage Corporation	B2	682	667	15
Scripps (E.W.) Company (The)	B3	300	287	14
Crown Castle Inc.	Baa3	115	105	10
Juniper Networks, Inc.	Baa2	133	123	10
Elme Communities	Baa2	305	296	9
ERAC USA Finance LLC	Baa1	90	82	8
Carrier Global Corporation	Baa3	126	118	8
U.S. Bancorp	A3	110	104	7

CDS Spread Decreases		CDS Spreads				
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff		
Rite Aid Corporation	Ca	7,818	9,489	-1,671		
Dish Network Corporation	В3	2,037	2,162	-126		
Dish DBS Corporation	В3	2,350	2,475	-125		
Anywhere Real Estate Group LLC	B2	850	934	-84		
Staples, Inc.	Caa2	2,579	2,655	-76		
Pitney Bowes Inc.	В3	1,325	1,395	-70		
Glatfelter Corporation	Caa1	828	897	-69		
Continental Resources, Inc.	Baa3	93	158	-65		
Southern Copper Corporation	Baa1	73	130	-58		
Macy's Retail Holdings, LLC	Ba2	372	429	-57		

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (June 28, 2023 – July 5, 2023)

CDS Implied Rating Rises	CDS Impl	CDS Implied Ratings		
Issuer	Jul. 5	Jun. 28	Senior Ratings	
BNP Paribas	A2	A3	Aa3	
Banque Federative du Credit Mutuel	Baa1	Baa2	Aa3	
Societe Generale	A3	Baa1	A1	
Credit Agricole S.A.	A1	A2	Aa3	
Credit Agricole Corporate and Investment Bank	A1	A2	Aa3	
Erste Group Bank AG	Baa2	Baa3	A2	
ENGIE SA	Aa3	A1	Baa1	
Deutsche Telekom AG	Aa3	A1	Baa1	
Siemens Aktiengesellschaft	Aa1	Aa2	Aa3	
Equinor ASA	Aa1	Aa2	Aa2	

CDS Implied Rating Declines	CDS Impl	CDS Implied Ratings		
Issuer	Jul. 5	Jun. 28	Senior Ratings	
Landesbank Baden-Wuerttemberg	A2	Aa3	Aa3	
Nordea Bank Abp	A3	A2	Aa3	
Nederlandse Waterschapsbank N.V.	Aa1	Aaa	Aaa	
Dexia Credit Local	A3	A2	Baa3	
Bayerische Landesbank	A1	Aa3	Aa3	
Landesbank Hessen-Thueringen Girozentrale	Aa3	Aa2	Aa3	
Nationwide Building Society	A3	A2	A1	
Piraeus Financial Holdings S.A.	Ba3	Ba2	B2	
Telecom Italia S.p.A.	B2	B1	B1	
Alpha Services and Holdings S.A.	Ba3	Ba2	B1	

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff
Garfunkelux Holdco 3 S.A.	Caa2	1,630	1,562	68
Trinseo Materials Operating S.C.A.	В3	1,510	1,443	67
Novafives S.A.S.	Caa2	569	559	10
Stagecoach Group Limited	Baa3	217	209	8
Landesbank Hessen-Thueringen Girozentrale	Aa3	45	38	7
Landesbank Baden-Wuerttemberg	Aa3	54	47	7
Virgin Money UK PLC	Baa1	219	213	7
Stena AB	B1	451	444	7
Nationwide Building Society	A1	68	61	6
de Volksbank N.V.	A2	111	105	6

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff
Casino Guichard-Perrachon SA	Ca	38,121	38,941	-820
Boparan Finance plc	Caa3	2,257	2,424	-167
Iceland Bondco plc	Caa2	738	822	-83
Jaguar Land Rover Automotive Plc	B1	574	619	-44
Carnival plc	В3	470	514	-44
Picard Bondco S.A.	Caa1	520	562	-43
Nidda Healthcare Holding GMBH	Caa3	577	614	-37
Stonegate Pub Company Financing 2019 plc	Caa2	584	618	-34
Wienerberger AG	Baa3	91	124	-33
INEOS Quattro Finance 2 Plc	B2	536	568	-32

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (June 28, 2023 – July 5, 2023)

CDS Implied Rating Rises	CDS Impl	CDS Implied Ratings		
Issuer	Jul. 5	Jun. 28	Senior Ratings	
United Overseas Bank Limited	Aa1	Aa2	Aa1	
Transurban Finance Company Pty Ltd	Baa1	Baa2	Baa2	
Korea Electric Power Corporation	Aa1	Aa2	Aa2	
Reliance Industries Limited	A3	Baa1	Baa2	
LG Chem, Ltd.	Baa1	Baa2	A3	
Daiichi Sankyo Company, Limited	Aa1	Aa2	A2	
Tenaga Nasional Berhad	Aa3	A1	A3	
Petroliam Nasional Berhad	A2	A3	A2	
Telekom Malaysia Berhad	Aa3	A1	A3	
Samsung Electronics Co., Ltd.	Aa1	Aa2	Aa2	

DS Implied Rating Declines CDS Im		ied Ratings	_
Issuer	Jul. 5	Jun. 28	Senior Ratings
Aurizon Network Pty Ltd	Baa1	A2	Baa1
Telstra Corporation Limited	A1	Aa3	A2
Indian Railway Finance Corporation Limited	Baa2	Baa1	Baa3
SGSP (Australia) Assets Pty Ltd	Baa1	A3	A3
Sydney Airport Finance Company Pty Ltd	Baa3	Baa2	Baa1
Bendigo and Adelaide Bank Limited	Baa3	Baa2	A3
Woolworths Group Limited	A3	A2	Baa2
Chorus Limited	Baa2	Baa1	Baa2
ICICI Bank Limited	A3	A2	Baa3
GPT RE Limited	A1	Aa3	A2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff
Indian Railway Finance Corporation Limited	Baa3	86	75	11
Aurizon Network Pty Ltd	Baa1	72	63	10
Vanke Real Estate (Hong Kong) Company Limited	Baa2	417	408	9
Toyota Industries Corporation	A2	111	104	7
Sydney Airport Finance Company Pty Ltd	Baa1	99	92	6
Lenovo Group Limited	Baa2	132	128	5
ICICI Bank Limited	Baa3	67	62	5
Amcor Pty Ltd	Baa2	120	115	5
SGSP (Australia) Assets Pty Ltd	A3	74	70	4
Electric Power Development Co., Ltd.	A2	42	38	3

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Jul. 5	Jun. 28	Spread Diff
Pakistan, Government of	Caa3	3,162	4,559	-1,397
Flex Ltd.	Baa3	110	122	-12
LG Chem, Ltd.	A3	74	86	-12
Adani Green Energy Limited	B2	778	789	-10
SK Innovation Co. Ltd.	Baa3	228	237	-10
United Overseas Bank Limited	Aa1	29	37	-8
SK Hynix Inc.	Baa2	163	171	-8
Reliance Industries Limited	Baa2	66	72	-7
JSC Halyk Savings Bank of Kazakhstan	Ba2	432	438	-6
National Australia Bank Limited	Aa3	51	55	-5

Source: Moody's, CMA

ISSUANCE

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

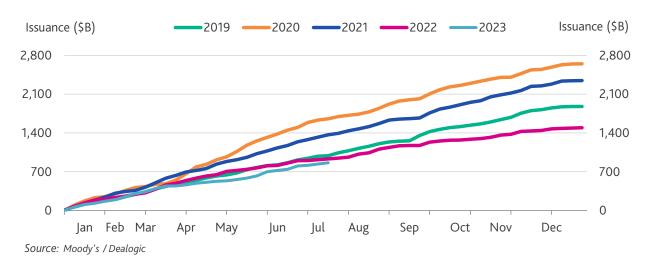


Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated

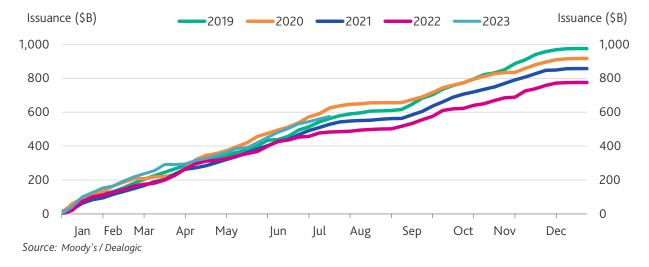


Figure 8. Issuance: Corporate & Financial Institutions

	USD Denominated			
	Investment-Grade	Investment-Grade High-Yield		
	Amount \$B	Amount \$B	Amount \$B	
Weekly	16.900	4.270	22.306	
Year-to-Date	738.948	107.378	861.983	

	Euro Denominated			
	Investment-Grade	High-Yield	Total*	
	Amount \$B	Amount \$B	Amount \$B	
Weekly	10.771	1.692	14.812	
Year-to-Date	513.326	38.883	574.345	

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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