

**WEEKLY MARKET  
OUTLOOK**

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# Signs of Life in U.S. Homebuilding

U.S. homebuilding has found a floor following an almost year-long slide in building activity. Total housing starts ticked higher in April, climbing 2.2% to 1.4 million annualized units. Multifamily starts increased by 3.2%, and single-family starts increased by 1.6%. As expected, March's construction data were revised lower. An unseasonably warm winter complicated the seasonal adjustment process and can overstate the number of new housing units started. Permits ticked lower, falling 1.5% below last month's reading. U.S. homebuilders are feeling optimistic for the first time in 10 months. May brought the fifth consecutive month of improvement in the NAHB Housing Market Index and was the first reading above the 50-point threshold marking good building conditions since July. High mortgage rates and poor affordability continue to keep potential buyer traffic suppressed, but current and expected home sales are rising. Improvement is widespread, with all four regional scores increasing on a three-month moving average.

Weak housing demand remains the biggest hurdle for the new-home market. Buyer traffic is the only subcomponent below the 50-point threshold. Constrictive monetary policy is keeping costs associated with buying a home high. The 30-year fixed mortgage rate continues to hover in the mid-6% range. But our forecast expects mortgage rates to slowly decline in the second half of 2023 and throughout 2024. Mortgage applications seem to have bottomed and are headed in the right direction. Also, house prices are in the midst of a modest correction. House prices are forecast to fall 10% from peak to trough, which is a much smaller correction than in the previous housing bubble collapse in the 2000s. Lower house prices will be a plus for housing demand

**Little hope on the U.S. factory front**

U.S. manufacturing activity has been on a downward trajectory for more than a year now. While manufacturing payrolls had managed to continue growing in the face of obvious signs of weakness, the March employment report showed the first contraction of factory employment since April 2021. Over the last three months, job gains have

**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
  - Latin America ..... 13
- Ratings Roundup** ..... 14
- Market Data**..... 17
- CDS Movers** ..... 18
- Issuance**..... 21

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averaged just 2,000, compared with a 19,000 average at the end of 2022 and a 49,000 average at the end of 2021. The ISM manufacturing index has signaled an ongoing contraction in manufacturing activity—moving below the neutral threshold of 50 back in November—and the early data for May from regional Fed manufacturing surveys paints a bleak picture.

Data from the Empire State Manufacturing Survey and the Philly Fed's Manufacturing Business Outlook Survey released this week point to manufacturing activity remaining in recessionary territory. Any good feelings associated with April's better-than-expected Empire State survey results have given way to renewed concern. Not only did the topline general business conditions index revert to contractionary territory for the fifth time in six months, but it fell spectacularly. The decline from 10.8 to -31.8 marks the second-largest monthly drop in the survey's approximately 22-year history. Demand indicators drove the weakness, experiencing precipitous falls of their own. The six-months-ahead general business conditions index, which climbed slightly to a three-month high of 9.8, suggests there remains some optimism about the second half of this year.

The Philly Fed survey surprised to the upside in May but remains firmly negative. The headline diffusion index rose from April's reading of -31.3, its lowest in three years, to -10.4 in May. Current business conditions improved. The new orders diffusion index rose from -22.7 to -8.9, on net. The shipments index ticked up from -7.3 in April to -4.7 in May. Price pressures continue to moderate. Employment indexes were downbeat. Around 7% of respondents reported adding staff in May, down from 16% the month before.

Given this, early signs point to the ISM manufacturing index falling further into contractionary territory in May after a slightly improvement in April. The national index of manufacturing activity has closely tracked the trend of a composite index of the New York and Philly Fed surveys over the last year, which is signaling that manufacturing activity is near its weakest level since April 2020.

We do not assume a sharp contraction in manufacturing activity is looming, as our baseline forecast has the U.S. economy skirting a recession this year. However, after adding nearly 400,000 manufacturing jobs in 2022, factory payrolls will backtrack slightly this year as the weakness in goods spending persists.

#### **Outlook for growth improves, modestly**

Second-quarter output growth, according to the Moody's Analytics high-frequency GDP model, rose from an

annualized 0.5% to 0.8%. A swath of April data released this week is behind the brightened outlook, though a further deceleration from the first quarter's 1.1% annualized gain to 0.8% should hardly inspire optimism.

Retail sales rose in April for only the second time in the last six months. January was the other gain. Increases in core goods prices likely contributed to the gain, so it does not suggest much of a pickup in the amount of merchandise retailers are selling. There were several factors weighing on sales. Spending is continuing to shift back from goods to services. We expect services consumption contributed 1.4 percentage points to growth in the second quarter while goods consumption delivers a modest drag.

As 2023 continues, the trend is likely to be one of modest growth in retail sales. Most of the gain will come from prices as there will be little, if any, real growth in spending at retail. The contribution from rising prices will be modest compared with the last two years, but sizable compared with pre-pandemic norms. Consumers continue to draw down the excess saving done during the pandemic, although support from this source is fading, as evidenced by the rising saving rate. High interest rates are making payments on purchases financed with credit more expensive than consumers are accustomed to. House prices are falling, undermining household wealth. Job growth is slowing.

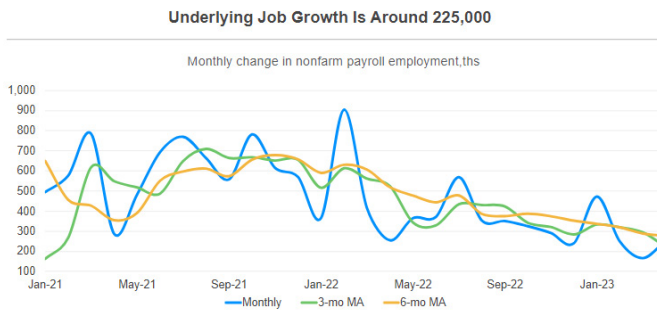
U.S. industrial production surprised to the upside in April, though downward revisions to previous months rained on the parade. April's 0.5% gain surpassed expectations. However, March's growth was revised down from 0.4% to 0%. February's figure was adjusted negatively as well from a 0.2% expansion to 0%. Rising borrowing costs and a pervasive uncertainty about the U.S. economy's near-term trajectory will weigh on business investment. We expect nonresidential investment is a 0.3-percentage point drag on second-quarter GDP growth.

Similar dynamics are weighing on inventories, which will lead to a negative contribution to output growth. Growth is turning to depletion after two years of firms playing catch-up with supply-chain issues. Wholesalers will likely see the biggest inventory losses as they are holding on to the largest number of excess inventories out of any segment. With heightened macroeconomic risks, wholesalers are fearful of being caught with overstocked warehouses if a recession does materialize. Business inventories fell 0.1% from February to March. This month's pickup in sales for wholesalers will help further deplete inventories next month and better position businesses in case of a downturn.

# U.S. Employment: Changing Expectations

BY Dante DeAntonio

April [employment](#) was a mixed bag. Payroll employment rose by 253,000, higher than our above-consensus forecast for 200,000 added jobs. However, the February and March figures were revised lower by a combined 149,000. Job growth has averaged 222,000 over the last three months—the weakest since January 2021.



Job growth continued across most major industry groups, with wholesale trade posting the only decline. Goods-producing industries rebounded to add 33,000 jobs after dropping by 17,000 in March. Temporary help services continue to send a warning; payrolls have declined in five of the last six months—often a signal of broader weakness to come. Despite the decline in temp help, the broader professional/business services industry was among the strongest performers. Healthcare and leisure/hospitality remain stalwarts of job growth, combining to add nearly 100,000 jobs. The breadth of job creation has been narrower recently as the diffusion index came in below 60 for the third straight month—the last time that threshold was breached was January 2021.

Results of the household survey were also mixed in April. While the unemployment rate ticked lower to 3.4%, it did so because the labor force posted a modest contraction—though the participation rate held steady at 62.6%. Employment as measured by the household survey was up by just 139,000.

The still-low unemployment rate and modest drawdown of the labor force will give the Federal Reserve pause. While the slowing of the labor market is not really in question, more important to the Fed is the trajectory of wage gains. Both the employment cost index and average hourly earnings came in stronger than expected last week. Average hourly earnings growth was just below 0.5% over the month and year-over-year growth ticked higher to 4.4%, while the employment cost index still puts growth closer to 5%. Wage growth likely needs to ease below 3.5% to be

sustainable and consistent with target inflation of 2%, especially given still-weak productivity growth.

## Up, but not away

While the health of the U.S. labor market has underpinned the economy of late, the recent trend in claims for unemployment insurance benefits warrants watching. There has been a clear upward trajectory in initial UI claims since early February, with the four-week moving average of claims rising from 200,000 to about 240,000 over that period. The new, elevated path of UI claims more closely aligns with other available data on actual layoffs and job cut announcements. The Challenger report for April showed job cut announcements down slightly, but over the first four months of 2023 they remain the highest since 2009.

A softening labor market will be key to slowing wage growth and taking some pressure off core services inflation. However, while fighting inflation remains the top priority, the Fed also wants to avoid pushing the economy into an unnecessary recession. The break-even level of UI claims—that consistent with no monthly job growth—has trended lower in recent months and stands at about 265,000.

This means initial claims are quickly trending toward that break-even level. With the spate of high-profile layoffs ongoing, it is likely that job cut announcements and UI claims will remain elevated in the near term. Still, this is not yet cause for alarm. The Moody's Analytics baseline forecast calls for job growth to nearly flatline later this year; however, this is unlikely unless UI claims are roughly in line with the break-even level for an extended period.

## It's a regional thing

So far in 2023, employers have pulled down 1.6 million open job postings, while the labor force has expanded by roughly the same number. As a result, the gap between labor demand and supply—the sum of employment and job openings less the labor force—is shrinking.

Labor demand is well in excess of supply across all U.S. census regions. By our calculation, excess labor demand amounts to 2.2 million in the South, 1.1 million in the Midwest, 700,000 in the Northeast, and 600,000 in the West. While regional excess labor demand is down from 2022 levels, it is still much higher than during the past two economic expansions.

It is important to emphasize that the South has by far the largest population. Yet even when we normalize our measure of excess labor demand across all regions, the

South still faces the largest demand-supply gap of any regional labor market. As a share of the civilian noninstitutional population, excess labor demand is 2.2% in the South, 2.1% in the Midwest, 1.3% in the Northeast, and 1.2% in the West.

### Wage growth

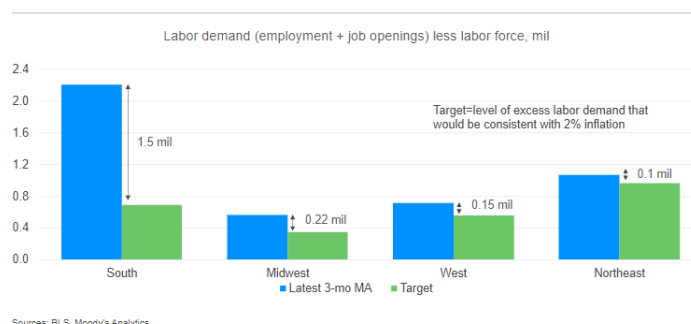
The extraordinary amount of excess labor demand has contributed to the torrid pace of wage growth across all regions. Our preferred measure of wage growth is the Employment Cost Index, because it controls for industry mix and accounts for both hourly and salaried workers. Year-over-year growth in the ECI has topped 5% in three of the four census regions. More important, wage growth is running well above the pace that would be consistent with 2% inflation in every region.

In the long run, wage growth trends toward the sum of inflation and productivity growth; workers need to be made whole on account of inflation and rewarded for their productivity gains. Trend productivity growth is around 1.5%, meaning wage growth needs to be near 3.5% to be consistent with the Fed's 2% inflation target.

To estimate the pace of wage growth that is consistent with 2% inflation at the regional level, we assume that trend productivity growth in each region is equal to the five-year moving average of the year-ago percent change in real output per worker. Using our regional calculations of trend productivity growth, we estimate that wage growth would need to fall 2.2 percentage points in the South, 1.8 percentage points in the Midwest, 1.7 percentage points in the West, and 1.4 percentage points in the Northeast to be consistent with 2% inflation.

For regional wage growth to hit these targets, excess labor demand needs to shrink further, and the extent to which supply-demand imbalances need to lessen varies across regional labor markets. We estimate that excess labor demand must shrink by 1.5 million in the South, 220,000 in the Midwest, 150,000 in the West, and 100,000 in the Northeast.

### Reduction in Labor Demand Must Overwhelmingly Come From the South



These results at the regional level suggest that the U.S. labor market needs to whittle down excess demand by nearly 2 million, of which three-quarters must come from the South. In such a way, the South is largely responsible for the extraordinarily tight labor market we are observing nationally and hence presents the greatest challenge to the Fed in its fight against inflation.

### Outlook

The weakening of the labor market is underway and will pick up through the end of the year. Monthly job gains will average about 175,000 in the second quarter, before slowing to below 100,000 per month during the final two quarters of 2023. Growth will pick up only modestly in 2024 as the risk of a recession remains high.

The unemployment rate forecast has shifted slightly given the decrease in April, with the rate now expected to reach 3.8% by the fourth quarter. The unemployment rate will soften further next year and peak at 4.2%. Over the next year, the increase in the unemployment rate will be right on the border of the 50-basis point increase that historically has been a reliable indicator that the economy is in a recession.

Risks remain tilted to the downside. A descent into recession is the greatest threat facing the labor market over the next year. The key for the Fed is that labor demand weakens without leading to significantly higher unemployment. But elevated interest rates amid still-high inflation could weigh on consumer behavior and the labor market more than expected. Odds of a recession over the next four quarters remain around 50%. Turmoil in the banking sector makes the Fed's job even more difficult but may bring the tightening cycle to an end sooner than previously thought.

# The Week Ahead in the Global Economy

## U.S.

The U.S. economic calendar will deliver a few key insights. The housing market will remain in focus next week, and both new-home sales and pending home sales are likely to support the idea that the U.S. housing market has found a bottom but is unlikely to materially improve this year.

The Federal Reserve will be keeping a close eye on its preferred measure of inflation—the personal consumption expenditure deflator—though it is expected to tell largely the same story as the previously released CPI data for April. Year-over-year measures of inflation continue to improve, even as the monthly data has plateaued somewhat.

New data on jobless claims will continue to be important, though some of the pressure has come off following a substantial decline in initial claims in the most recent report. While still short of the breakeven level—which we currently estimate to be around 265,000—claims are clearly elevated, and any further increase would likely signal a rapid deceleration in monthly job gains.

Other key data due next week include the second estimate for GDP in the first quarter, international trade, durable goods, personal income, and personal spending.

## Europe

CPI inflation in the U.K. likely decelerated to 8.4% year over year in April, down from 10.1% in March. The lower inflation rate will likely reflect easing pressures on food and goods prices. But mostly it will come down to a strong base effect in the energy segment. In April 2022, the country's electricity and gas price cap was adjusted higher; this year the price cap is being held stable until June. To that point, electricity and gas prices will likely be set lower thanks to considerably lower wholesale natural gas prices compared with a year earlier. With core inflation so sticky and given the centrality of base effects to the lower headline rate, pressure will remain on the Bank of England to hold a tightening monetary policy.

Retail sales in the U.K. likely slid 0.4% monthly in April, deepening a 0.9% decrease in March. Higher borrowing costs and falling real earnings will suppress consumer demand. Goods will be particularly hurt as households use their disposable incomes to consume services such as travel, demand for which has still not been fully vented since the pandemic period.

Germany's GDP will likely be confirmed for the first quarter with zero growth since the preceding stanza, when it declined 0.5% from the third quarter of 2022. Details will likely show that private consumption was the weak spot and that fixed investments saved the day. Zero growth is better than what we had feared some months back, but it still is a dark signal for the euro zone's largest economy. Downside risks persist, even if the first half of the year has shown resilience in the context of such significant headwinds.

Finally, we expect the number of job seekers in France to remain unchanged at 2.8 million between April and March. The labour market will remain tight and supportive of households in France as activity in the services sector keeps demand for labour high.

## Asia-Pacific

The week will feature a suite of monetary policy meetings. We expect Bank Indonesia and the Bank of Korea to keep their respective policy rates on hold because cooling inflation in recent months has negated the need for tighter monetary policy.

Singing its own turn, the Reserve Bank of New Zealand likely will lift its official cash rate another 25 basis points, taking it to 5.5%. The RBNZ has been one of the Asia-Pacific region's most aggressive central banks, tightening by a cumulative 525 basis points (including the expected May hike) on its quest to sustainably tame inflation.

## Latin America

It's a mixed bag for Latin America next week. Peru's economy likely contracted 1.7% year over year in the first quarter due to weakened consumer and business spending, high inflation, high interest rates, and protests pushing the country into a technical recession. Yet the reversal will be temporary given the fading of demonstrations and a gradual decline in inflation, paving the way for economic growth this year.

In contrast, Mexico likely posted a solid 3.8% gain in GDP in annual terms in March. This means GDP will have rebounded in quarterly and yearly terms, driven by the service and industry sectors. We expect that Mexico's trade balance returned to a deficit in April.

# Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
May	New Zealand	2023 budget	Low	Low
May	Thailand	General election	Low	Low
14-May	Turkiye	Presidential and parliamentary elections	Low	Low
14-May	Thailand	General election	Low	Low
15-May	EU	Eurogroup	Low	Low
19-21-May	G-7	Summit-Japan	Low	Low
30-Apr	Paraguay	General election	Low	Low
8-Jun	U.S.	U.S. Treasury X-date	High	High
15-Jun	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
15-Jun	EU	Eurogroup	Low	Low
16-Jun	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
25-Jun	Guatemala	General election	Low	Low
29-30-Jun	European Union	European Council summit	Low	Low
By Jul	Greece	General election	Medium	Low
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
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	U.N.	General Assembly, New York	Low	Low
22-Sep	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
By 12-Oct	Spain	General elections	Medium	Medium
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

# CDS Rates Reflect Debt Ceiling Impasse

BY STEVEN SHIELDS

## CREDIT SPREADS

The Moody's Investors Service long-term average corporate bond spread is 126 basis points, 5 bps wider than at this time last week and higher than the April average of 112 bps. The long-term average industrial corporate bond spread also widened in the period, increasing from 101 to 107 bps. It averaged 94 bps in April.

At 475 bps, the recent ICE BofA U.S. high-yield option adjusted bond spread is off its recent peak of 522 bps on March 24. The Bloomberg Barclays high-yield option adjusted spread has bounced around recently and is currently 484 bps compared with the 471 bps at this time last week. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread but is higher than implied by a VIX of 16.5.

The debt ceiling impasse is being reflected in credit default swap rates. Closing last week at 134 basis points, CDS spreads on one-year Treasury securities are already substantially more than in 2011—when that debt limit drama was so unnerving it caused rating agency Standard & Poor's to strip the U.S. of its AAA rating—and are hovering around historically high levels. CDS spreads on six-month Treasury securities are even higher, briefly eclipsing 200 basis points late last week. These levels suggest investors are also bracing for heightened default risk in early June, corroborating the Congressional Budget Office and Treasury Department's X-date falling in early June.

## GLOBAL DEFAULTS

Moody's Investors Service reported 11 corporate debt issuers defaulted in April, down from the upwardly revised count of 16 in March. However, the trailing 12-month global speculative-grade default rate ticked up to 3.1% at the end of April from 3.0% at the end of March as the number of speculative-grade defaulters entering the 12-month window outpaced the number exiting.

The largest April default came from the corporate family of Light SA, a Brazil-based electricity generator and distributor. Other notable defaulters in the month were Bed Bath & Beyond Inc., CareerBuilder LLC, Rodan & Fields LLC, Skillz Inc., and Wahoo Fitness Acquisition LLC. North America is driving defaults with 29, more than doubling the count of 13 in the comparable period a year earlier. Across industries,

three sectors stood at the top with four defaults each: business services; retail; and hotel, gaming and leisure.

Moody's Investors Service predicts high interest rates, slowing economic growth, sticky inflation, and tighter financing conditions will uncover pockets of financial vulnerability, making it more difficult for low-rated companies to refinance and leading to rising defaults. Default risk will be particularly high among private equity-backed issuers that borrow heavily in the loan market, most of which have weak credit quality.

Moody's Investors Service's baseline forecast predicts the global default rate will end this year at 4.5% before rising to 4.9% by the end of April 2024, both higher than the long-term average of 4.1%. These predictions are based on assumptions such as a widening U.S. high-yield spread, rising unemployment, and a significant slowdown in global GDP growth this year. The baseline assumes that U.S. lawmakers will ultimately raise or suspend the debt limit and financial regulators and policymakers will be largely successful in containing ripple effects from banking-sector stress.

However, stresses could spread beyond the banking sector, unleashing greater financial and economic damage than the baseline scenario anticipates, especially in an uncertain economic environment with fragile investor confidence.

## CORPORATE BOND ISSUANCE

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 by 9% for IG and advanced by 64% for high yield.

In the second quarter of 2021, issuance weakened as worldwide offerings of corporate bonds revealed a year-over-year decline of 35% for investment grade. High-yield issuance. High-yield issuance fared noticeably better in the second quarter.

In the third quarter of 2021, issuance softened 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 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.

In 2022's 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. High-yield issuance is down 79% on a year-ago basis.

In 2022's 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 second quarter. High-yield issuance has declined approximately 84% on a year-ago basis.

In the fourth quarter of 2022, corporate debt issuance remained suppressed. US\$-denominated high-yield issuance ended the year at \$2.47 billion, reflecting a drastic 77% decline from 2021. Meanwhile investment-grade bond issuance totaled \$1.29 trillion in 2022, corresponding to a 20.8% decline from 2021. Over the past twelve months total US\$-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 7.9% and high-yield offerings dropping 10.1% year over year. US\$-denominated IG issuance, which accounts for half of activity globally, decreased 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 a year since 2008 and posting a 15.0% decline compared to the first quarter of 2022.

The latest weekly data show US\$-denominated corporate debt issuance this year 18.6% lower than the same period in 2022 and 32.5% below its five-year average. Investment-grade debt issuance in U.S. dollars amounted to \$36 billion over the latest week, bringing the year-to-date total to \$548.1 billion and reflecting a 19.6% decrease from a year earlier.

Weekly US\$-denominated high-yield issuance totaled \$3.74 billion, raising the year-to-date total to \$74.5B. High-yield issuance has remained light through the first months of 2023 and is currently tracking 74.7% lower relative to 2021's banner year.

## U.S. ECONOMIC OUTLOOK

Despite the ongoing banking crisis, the economy is showing significant resilience, consistent with our expectations. We made slight adjustments to the U.S. baseline forecast in May based on new data, the fallout from the banking crisis, the expectation of when the federal government will make payments because of the debt ceiling, and actions by the Federal Reserve. Fundamentally, the outlook remains essentially the same, and the pace of annual GDP growth is only modestly changed.

Changes to assumptions this month were small. Consistent with last month, we still assume the same terminal federal funds rate has already been achieved. The actions of OPEC+ had little impact on the outlook for oil prices, but prices continue to drop, altering the near-term outlook. The outlook for natural gas prices shifted downward again. The outlook for real business investment spending shifted lower. Fiscal policy assumptions remained unchanged pending a resolution of the debt limit debate, while the outlook for the 10-year Treasury is only changed slightly.

### Monetary policy

Our baseline assumptions for monetary policy remain unchanged from the last update. We expect that the Fed's 25-basis point rate hike in May was the last of the current tightening cycle and that the fed funds rate will remain at its terminal range of 5% to 5.25% until the end of 2023. The updated Federal Open Market Committee statement expresses this sentiment. The FOMC no longer anticipates rate hikes but will make further policy action contingent on the impact of the Fed's tightening on economic and financial developments over the past year. We anticipate that the Fed will begin cutting rates at the first FOMC meeting in 2024. Monetary policy will remain restrictive through the end of 2025. The fed funds rate will return to its neutral rate in early 2026. The FOMC is signaling that incoming data may allow for a pause in hikes.

The Fed is now balancing high inflation and labor market tightness against financial conditions. As expected, recent inflation figures have been slowing, but overall, 5% year-over-year consumer price inflation remains well above the Fed's 2% target. However, the U.S. labor market remains more resilient than expected and needs to cool more. In April, the jobless rate fell to 3.4%, and the employment cost index for wages and salaries rose more than expected in the first quarter. The Fed's Senior Loan Officer Survey in May suggests a moderate tightening of credit. Overall, inflation



remains the key to the baseline outlook. The May vintage has the CPI in 2023 down by a rounding difference from the prior baseline.

The baseline reflects our expectation that remaining inflationary pressures stemming from shelter and other U.S. service industries will continue to soften. We also expect that the banking troubles are contained, even though lenders will keep credit tight, weighing on aggregate demand. We still expect a soft landing to be the most likely outcome, thanks to the resilience of consumers and labor markets. Underpinning this baseline is the assumption that Congress will find a resolution to the debt ceiling standoff.

Financial conditions remain tight, and concerns about the U.S. and its debt limit are weighing on financial assets, especially the Treasury market. The 10-year Treasury yield stabilized above 3.5% in early May, slightly up from April. Assuming that the situation will be resolved, the baseline outlook has the 10-year Treasury yield average at 3.74% in the second quarter of this year, down by about 10 basis points from the previous baseline, reflecting the cautiousness of financial investors. The yield will peak in the second quarter of 2024, just shy of 4%. Compared with the prior baseline, this marks a decline in 2023 and an increase in 2024 for each quarter. We estimate the 10-year Treasury yield will then decline into 2025.

### Energy

Moody's Analytics has lowered its crude oil price forecast by \$4 per barrel in the second quarter of 2023. We now expect Brent to average \$85.45 in 2023 versus \$87.95 a month ago. The big development over the past month was the strong recovery in Russian oil exports in March after they declined substantially in February. Allied countries have embargoed Russian oil. The embargo of 4 million barrels per day accounts for roughly half of Russia's total oil and product exports sent in 2021. Breathtakingly, Russia has almost completely offset the loss of its Western customers, and its oil exports in March were roughly equal to its pre-war levels. Our oil price forecast now assumes more sanctions evasion that will reduce the loss of Russian oil supply to the global market from 1 million bpd to 500,000 bpd.

Oil prices have slipped even though OPEC unexpectedly reduced output last month. The oil market has been in surplus for roughly a year, and with Russian exports recovering, investors are losing confidence that it will return to balance soon. Oil demand is recovering in China but remains weak in the OECD. Still, the OPEC cut and growth in emerging markets are expected to bring the market into balance in the second half of the year.

Moody's Analytics has again materially reduced its natural gas price forecast. Henry Hub natural gas prices are now expected to average \$3.34, down from the \$3.85 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. But it will take longer for firms to arbitrage than we previously expected.

### GDP

U.S. GDP rose a disappointing 1.1% in the first quarter, according to the Bureau of Economic Analysis' preliminary estimate, the third consecutive quarter of growth, but confirming the weak growth that will continue until late in the year. The economy will surely have a difficult 2023 as it struggles under the weight of elevated interest rates and tightening credit conditions. But the baseline outlook remains that the Fed will accomplish its goal of slowing inflation without precipitating a recession.

With the first quarter coming in so weak, growth is forecast to pick up somewhat in the second quarter, although all four quarters of the year will feature below-potential growth. Because of recent bank failures, credit-sensitive spending will struggle for much of the year amid elevated interest rates and reduced sentiment. On an annual average basis, growth is projected to be 1.6% in 2023 and 1.7% in 2024, compared with projections of 1.7% for both years in the April outlook.

### Labor market

The April employment report was a mixed bag. Payroll employment rose by 253,000, higher than our above-consensus forecast for 200,000 jobs to be added. However, the impact of revisions to prior months was significant, with the February and March figures revised lower by a combined 149,000. Job growth has averaged 222,000 over the last three months—the weakest reading since January 2021. Surprisingly, the unemployment rate ticked lower to match its cycle low at 3.4% against a consensus expectation for a small increase.

The weakening of the labor market is underway and will continue through the end of the year. However, monthly job gains will hold up better in the second quarter than in the April forecast, averaging about 175,000 before slowing to less than 100,000 per month during the final two quarters of 2023. Growth will pick up only modestly in 2024 as the risk of a recession remains high. The unemployment rate forecast has shifted slightly, given the decrease in April, with the rate now expected to reach 3.8% by the fourth quarter. The unemployment rate will soften further next year and

peak at 4.2%. Over the next year, the increase in the unemployment rate will be right on the border of the 50-basis point increase that historically has been a reliable indicator that the economy is in a recession.

### Fiscal policy

The Treasury budget deficit will amount to 5.6% of GDP in fiscal 2023, a touch higher than the 5.5% deficit-to-GDP ratio that the April vintage called for. We anticipated non-withheld income tax receipts in April would underperform their year-ago performance. Last year's sharp decline in the value of corporate equities and mutual fund shares owned by households long presaged a hit to tax owed at filing, as these are asset classes that make up most of the capital gains and other asset income that households report upon filing. Moreover, the postponement of the IRS filing deadline for disaster-area taxpayers in California, Alabama and Georgia to October 16 was expected to weigh on April tax receipts. Most Californians are eligible for the delayed filing deadline, and California accounts for nearly a fifth of all tax due at filing. Nevertheless, April tax receipts were still weaker than we anticipated, and the IRS will have finished processing tax returns more quickly than it did a year ago, meaning fewer extra tax receipts will get processed in May compared with last year.

Our forecast of the X-date, or the date at which the Treasury will run out of cash and be unable to pay the federal government's bills on time and in full, is June 8, compared with our prior-month estimate of August 18. That the X-date is much sooner than previously thought has not upended our baseline assumptions around the debt limit. The debt limit impasse will come down to the wire, but lawmakers will agree to raise or suspend the Treasury's legal borrowing limit before the X-date is hit. We are still agnostic as to what compromises will have to be made for an agreement to be reached, but permitting reform, a recession of unspent federal pandemic relief funds, and small reductions to future budgeted discretionary government outlays could form the basis of a compromise. Any meaningful fiscal changes agreed to in an eventual debt limit compromise will be incorporated into future vintages of the U.S. baseline forecast.

### Business investment and housing

According to the Bureau of Economic Analysis' advance estimate, business capital spending decelerated significantly in the first quarter of 2023. Total real fixed investment rose

just 0.7% annualized compared to a gain of approximately 4% on an annual average basis in 2022. Equipment was the main source of the weakness, declining about 7% annualized. All four major segments—IT, core industrial, transportation and other—were down. Supporting the modest growth in the total, structures rose 11% annualized. Strong increases in the building of factories and mining structures led the way. But the large commercial segment, in particular office, declined. Office is now more than 30% below its peak at the end of 2019 because of the trend toward remote working.

Recent data are negative. Inflation-adjusted new orders for nondefense, non-aircraft capital goods dropped nearly a full percentage point in February and March and are cumulatively down by more than 5% since the beginning of 2022. Further, anticipated business investment has been down in recent months. Four of the five regional Federal Reserve banks that surveyed planned capital expenditures reported in April that the net percentage of companies expected to spend more in six months was less than in January.

The key remains the elevated cost of borrowing along with expectations of slow growth and therefore reduced profit opportunities in the near term. Although the May forecast for 2023 real GDP growth is only a little lower than in April, real business investment will be a percentage point lower than in April, rising only 1.7% on an annual average basis. The reasons include the weak first-quarter data and the elevated uncertainty surrounding the debt ceiling and the banking crisis. Equipment spending will be weakest, declining 1.8% on an annual average basis in 2023.

Moody's Analytics made minimal changes to the outlook for home sales, construction and house prices in May. While there are signs of a bottom forming in the housing sector, the high interest rate environment and lack of available inventory will limit the prospects for a sharp turnaround. Given affordability constraints and expected labor market weakness, national house prices are expected to decline modestly over the next 12 to 18 months. Trends will vary regionally, with some areas experiencing sharp price declines while others continue to appreciate due to shifting demographics and preferences. Forecasts for commercial real estate prices experienced minor changes this month, driven by small movements in recent performance data and interest rates.

# EZ Industry Heads for an Unsteady Rebound

BY ROSS CIOFFI

The March [industrial production](#) release for the [euro zone](#) came as a shock, with a 4.1% drop in headline figures. But the details from the month are worth a grain of salt. The depth of the loss can be attributed in large part to the computers and peripherals subindex, which plummeted 91.8% month over month. We expect manufacturing in the sector to rebound in the coming months as supply lines smooth out.

However, details from the rest of the survey cannot be as easily brushed off. Even if the March release is not as bad for the outlook as the headline number suggests, it shows that the manufacturing sector remains a source of downside risk in the euro zone economy for this year and next.

Manufacturing in the computer and peripherals sector is historically volatile, though double-digit swings in output have become significantly more common since the start of the pandemic as demand and supply conditions changed. The pandemic stoked a wave of spending on digital goods thanks to the en masse shift to work from home and a jump in demand for entertainment systems and other home goods—all fuelled by rapidly increasing savings. And because of the huge disruption to global supplies, European governments and producers began investing in production capacity at home. We've seen similar effects on other related electronic goods such as electrical boards and components, and batteries and accumulators. Pharmaceuticals have grown tremendously and are pumping up output in the consumer nondurables segment.

The wave of demand has run up against supply constraints that intensified during the pandemic. The effects of the global shortage of semiconductors on automotive production are well known, but microchips are also essential in the production of computers and peripheral equipment; this has increased volatility in production lines.

The March release is not flashing a warning about the fundamental demand for computers and peripheral equipment. Rather, it reflects a supply disruption that will have unwound in April or will do so over the second quarter. As such, we are confident that industrial output will partially rebound in the coming months.

However, we cannot be too sanguine about euro zone manufacturing considering the weaknesses seen throughout the rest of the survey. Machinery and equipment as well as

motor vehicle production also fell sharply, by 2% month over month and 3.8%, respectively. We presume this is also due to tight semiconductor supply.

Month-over-month output pulled back in the intermediate- and consumer-goods sectors by 1.8% and 0.9%, respectively. For these sectors, the problem of demand is more relevant now. High interest rates and inflation have suppressed consumer and business demand for spending and investments and have kept production and operating costs for factories high.

Mining and quarrying and energy goods output, such as refined oil and coke, also took a hit with France leading losses because of strikes and protests over the country's pension reform.

We expect industrial output to recover in the second quarter, but the outlook for the year remains grim. Regarding supply conditions, the March release is a reminder that these have not been fully reliable. It will take a long time to build up global semiconductor production capacity and supply to a point where it can become an afterthought.

Meanwhile, the view is grim on the demand front. Manufacturing PMI surveys continue to report steep declines in new orders as well as rising inventories that keep pushing the score farther below the break-even 50 reading. As of the April vintage, the manufacturing PMI fell to 45.8 from 47.3 in March. The latest figure is the lowest it has been since May 2020, when it was at 39.4.

The April PMI indicates that factories still have wide backlogs to work through, and first-quarter GDP growth was likely supported by catch-up investments in transport equipment. Factories were able to fulfill backlogged orders from last year despite persistent volatility because supply conditions have tangibly improved since then. Sizeable backlogs may keep industrial production outperforming the grim PMI scores and confidence readings for much of the year. But if orders do not pick up as backlogs slim down, we could see industrial output decline more consistently.

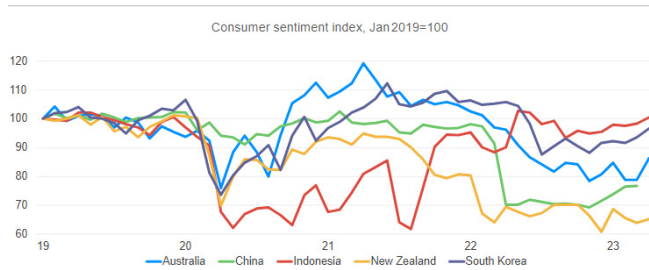
If the manufacturing sector falls into recession, the rest of the economy could soon follow. We see recession risks stretching into the later part of the year and 2024, though our baseline forecast is that the euro zone will continue to recover and keep its head above water.

# A Vote of Confidence

BY SARAH TAN and HARRY MURPHY CRUISE

Households have a lot on their plates. From the scourge of high inflation and rising borrowing costs to a multitude of pandemic problems, consumers have faced a barrage of troubles in recent years. Consumer confidence has understandably suffered. In fact, in many parts of the Asia-Pacific region, consumer confidence is lower today than it was at the peak of the pandemic in 2020.

**Cautious Consumers**



Sources: Westpac, Japan Economic and Social Research Institute, Bank Indonesia, Bank of Korea, China National Statistics Bureau, Moody's Analytics

But easing price pressures in recent months are beginning to turn the tide. Inflation is past its peak in most countries, giving households a reprieve. In response, central banks have backed off the accelerator, some slowing the pace of rate rises and others pausing altogether.

China's reopening in December also gave domestic and regional consumer confidence a shot in the arm. China is the powerhouse of the region and a key driver of demand for Asia-Pacific nations. The scrapping of COVID-19 restrictions allowed the country to get out of first gear, improving the 2023 outlook for global growth and personal finances.

In many countries, a tight labour market is another protective barrier. Unemployment in Australia, South Korea, Taiwan, New Zealand and Singapore is lower than it was before the pandemic. Although the slowing global economy will add to unemployment through 2023, we anticipate only a slow rise in joblessness as employment growth weakens.

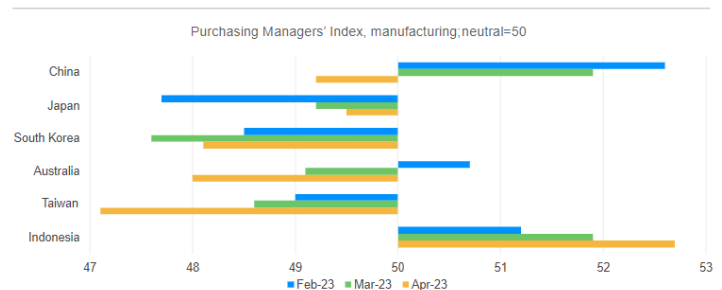
But not all economies are getting a confidence boost from tight labour markets. Unemployment in China, Hong Kong and Malaysia is above pre-pandemic levels. Notably, youth unemployment in China reached 19.6% in March. That is almost as bad as mid-2022, when lockdowns upended businesses and sent households into hiding. With such a large section of the population unable to find work, China's economic reopening has failed to revive consumer confidence; indeed, the metric is only marginally above the record lows seen in 2022.

Where labour markets are tight, nominal wages are pushing higher. In Australia, wages are rising at the fastest pace since 2012, while wage growth in New Zealand is the strongest since 1992. In Singapore and South Korea, wages are edging higher. Still, price rises are generally outpacing wage increases, meaning real incomes have taken a hit. That is kryptonite for consumer confidence.

Despite improvement in consumer confidence, cost-of-living pressures are way beyond normal levels and will put a brake on household spending through 2023. This keeps new business orders to a minimum and explains why manufacturers are suffering a collapse in demand for discretionary goods. A preference for spending on services—reversing the trend of spending on goods early in the pandemic—only adds to the pain for manufacturers.

In China, the burst in manufacturing activity that followed the reopening has run out of steam. The manufacturing PMI reading in April was the weakest since China dropped its zero-COVID policy in December. Manufacturers in Japan, South Korea, Taiwan and China have another reason to be gloomy—the global tech cycle downturn is capping demand for semiconductors and high-tech products.

**Manufacturers Struggling As Global Demand Wanes**



Sources: Various statistical agencies, Moody's Analytics

Overall, consumer confidence in the Asia-Pacific region is coming off its disastrous low, but we're talking baby steps. The easing of inflation pressures and the slowing of rate hikes are giving households extra breathing room. Meanwhile, tight labour markets and rising nominal wages will nudge consumer confidence higher in coming months.

Still, there is a long way to go before consumers find the proverbial spring in their step; confidence metrics for many countries remain in pessimistic territory. Until that changes, the region's manufacturers have reason to worry.

# Good Start for 2023

By JUAN PABLO FUENTES

Recent economic indicators reflect a better-than-anticipated performance by most Latin American economies in the first quarter of the year. Growth has been surprisingly robust in the region's two largest economies, [Mexico](#) and [Brazil](#). In Mexico, the economic activity index grew 4.2% year on year in the first two months of 2023, implying a solid expansion for the first quarter—full first-quarter figures will be released later this month. Services continue to be the main driver of growth in Mexico, supported by the significant increase in the minimum wage that took place at the beginning of the year. Meanwhile, the Brazilian economy expanded a solid 2.9% year on year in the first two months of the year. The economy surprised in February when it posted growth of 3.3% with respect to January (seasonally adjusted figures). As with Mexico, the service sector has been the main driver of growth in Brazil in recent months.

With Mexico and Brazil performing better than anticipated in the first quarter, Moody's Analytics has revised up 2023 growth projections for Latin America. We now see the region expanding 1.2% in 2023, compared with our April forecast of 1%.

[Colombia](#)'s economy also performed better than anticipated in the first three months of 2023, supported by private

consumption and exports. The economy grew 3% year on year in the first quarter after 2.1% in the previous stanza. Seasonally adjusted, GDP expanded 1.4% from the previous quarter. Meanwhile, [Argentina](#), [Chile](#) and [Peru](#) performed as expected or worse in early 2023. The Argentine economy grew 1.6% year on year in the first two months thanks to a solid performance in January. The Chilean and Peruvian economies contracted 0.9% and 0.4% year on year, respectively, in the first quarter. Chile continues to adjust down after the consumption boom of 2021 and early 2022. Peru has been hurt by recent social and political unrest.

We still see growth in the region decelerating in upcoming months amid tight monetary conditions, still-high inflation, and an adverse external environment. The risk of recession in the region has diminished somewhat since the start of the year but remains uncomfortably high. The outlook has improved for Mexico, Brazil and Colombia in recent months thanks in part to a more optimistic projection for the global economy. Chile's outlook has also improved somewhat, though we still see a small economic contraction in 2023. On the negative side, the outlook for Argentina and Peru has deteriorated recently. Social and political unrest will continue to hinder the Peruvian economy. In Argentina, soaring inflation and lack of sound policymaking will sink the economy into recession in the coming months.

# Downgrades Dominate the Latest Period

BY OLGA BYCHKOVA

## U.S.

U.S. credit downgrades outnumbered upgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade bonds and industrial and financial companies. Downgrades comprised 10 of 15 rating changes but only 15% of affected debt.

The largest downgrade, accounting for only 6% of debt affected in the period, was issued to Broadridge Financial Solutions Inc. with its senior unsecured debt rating lowered to Baa2 from Baa1. The outlook is stable. Broadridge is a New York-based market leader in proxy distribution and processing services in the U.S. as well as a technology solutions provider for financial services firms. The rating downgrade reflects Moody's Investors Service's expectation that Broadridge will operate with a moderately higher appetite for financial leverage—a key governance consideration for this rating action. Larger than anticipated investment in the company's wealth management technology platform has reduced cash flow available for debt repayment since the Itiviti acquisition in 2021. Broadridge increased its financial leverage following the acquisition, indicating a moderately higher appetite for long-term leverage and the potential for future debt-funded transactions and/or share repurchases, the rating agency added. The stable outlook reflects Moody's expectation for mid-single digit growth over the next 12 months and declining debt-to-EBITDA leverage.

Upgrades were headlined by a global pharmaceutical leader Eli Lilly and Co., which saw its senior unsecured long-term ratings raised to A1 from A2 and the commercial paper rating affirmed at Prime-1, impacting 52% of debt affected in the period. The outlook was changed to stable from positive. The upgrade reflects Moody's Investors Service's expectation for a substantial increase in Eli Lilly's revenue, earnings and cash flow stemming from recent and upcoming product launches. Rapid uptake of new products, improved revenue diversity, and continuation of disciplined financial policies could lead to a further rating upgrade. At the same time, slow growth in new products, major pipeline setbacks, or large debt-financed acquisitions could prompt a downgrade, the rating agency added.

Through the first four months of the year U.S. rating changes were predominantly negative with downgrades exceeding upgrades 187:108.

## EUROPE

In Western Europe, downgrades also outstripped upgrades, 6-to-4, but comprised only 15% of affected debt. The changes issued by Moody's Investors Service spanned a

diverse set of speculative- and investment-grade industrial, financial and utility firms.

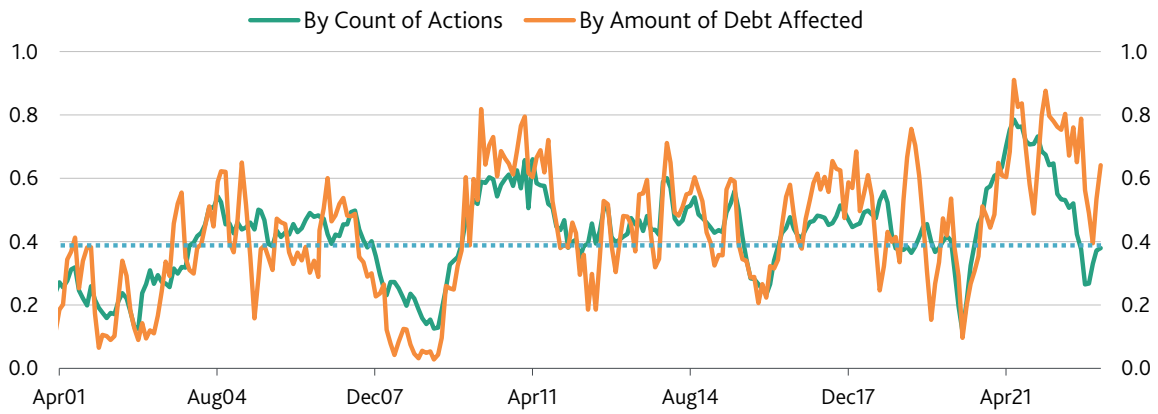
The largest downgrade last week, accounting for 18% of affected debt, was made to French industrial company Alstom, one of the global leaders in rail transport equipment, rolling stock, systems, services and signalling for urban, suburban, regional and main-line passenger transportation. Moody's Investors Service lowered Alstom's long-term issuer and senior unsecured notes ratings to Baa3 from Baa2, cut the short-term commercial paper ratings to P-3 from P-2, and changed the outlook to stable from negative. The downgrades reflect the company's weak credit metrics, with limited capacity for any potential underperformance, and the uncertain pace of recovery.

The largest upgrade last week was issued to Portuguese utility company EDP - Energias de Portugal, S.A., which saw its long-term issuer and senior unsecured ratings raised to Baa2 from Baa3. Concurrently, Moody's Investors Service increased EDP's senior unsecured MTN program rating to (P)Baa2 from (P)Baa3, the junior subordinate MTN program rating to (P)Ba1 from (P)Ba2, the junior subordinate debt ratings to Ba1 from Ba2, and the commercial paper rating to Prime-2 from Prime-3. Moody's also upgraded the senior unsecured ratings of EDP Finance B.V. to Baa2 from Baa3, the senior unsecured rating of the finance subsidiary's MTN program to (P)Baa2 from (P)Baa3, and the commercial paper rating to Prime-2 from Prime-3. The change impacted 71% of debt affected in the period. The outlook was changed to stable from positive. According to the rating agency, upgrades reflect EDP's realised progress in strengthening its financial profile, with a substantial increase of the group's funds from operations to net debt in 2022 compared with the average over 2019-2021, and Moody's expectation that this strength will be sustained with continued investment in renewables and networks supporting a sound business risk profile. EDP's ratings could be upgraded further if the company makes progress on its strategy and investments while reducing leverage. At the same time, negative pressures on EDP's ratings would develop if its financial profile were to weaken whether because of a downturn in the company's operating or regulatory environment and performance, or because cashflow generation was not to keep pace with debt-funded investment, or credit negative changes occur in EDP's corporate structure such as a material increase in minority shareholdings, which could prompt a tightening of guidance, or if subordination were to increase and weaken the position of parent company senior unsecured creditors.

Like the U.S., from January to April this year Western Europe rating changes were mostly negative with downgrades exceeding upgrades 64:43.

## 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 & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG
5/10/2023	PSSI HOLDINGS, LLC.-PACKERS HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG
5/10/2023	MINOTAUR INVESTMENT HOLDINGS, L.P.-MINOTAUR ACQUISITION, INC.	Financial	SrSec/BCF/LTCFR		U	Caa2	Caa1	SG
5/11/2023	ELI LILLY AND COMPANY	Industrial	SrUnsec/LTIR/MTN	19157.18	U	A2	A1	IG
5/11/2023	EATON US HOLDINGS INC.-EATON CORPORATION	Industrial	SrUnsec	8287.933	U	Baa1	A3	IG
5/11/2023	PRIME HEALTHCARE HOLDINGS INC.-PRIME HEALTHCARE SERVICES, INC.	Industrial	LTCFR/PDR		D	B2	B3	SG
5/11/2023	SABRE CORPORATION-SABRE GBL INC.	Industrial	SrSec/SrSec/BCF/LTCFR/PDR	2180	D	Ba3	B2	SG
5/15/2023	BROADRIDGE FINANCIAL SOLUTIONS INC.	Industrial	SrUnsec	2250	D	Baa1	Baa2	IG
5/15/2023	CAREERBUILDER, LLC	Industrial	PDR		U	D	Ca	SG
5/15/2023	MONITRONICS INTERNATIONAL, INC.	Industrial	PDR		D	C	D	SG
5/15/2023	FRANCHISE GROUP, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG
5/16/2023	PUBLICIS GROUPE S.A.-MMS USA HOLDINGS, INC.	Industrial	SrUnsec/LTIR/MTN	3638.931	U	Baa2	Baa1	IG
5/16/2023	VENATOR MATERIALS PLC-VENATOR MATERIALS LLC	Industrial	SrSec/SrUnsec/SrSec/BCF/LTCFR/PDR	600	D	Caa1	Ca	SG
5/16/2023	ENVISION HEALTHCARE CORPORATION	Industrial	PDR		D	C	D	SG
5/16/2023	FFP HOLDINGS GROUP AND SUBSIDIARIES-FLORIDA FOOD PRODUCTS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	Caa1	SG
5/16/2023	INVITED, INC.-CLUBCORP HOLDINGS, INC.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	425	D	Caa2	Caa3	SG

Source: Moody's

FIGURE 4  
Rating Changes: Corporate & Financial Institutions - Europe

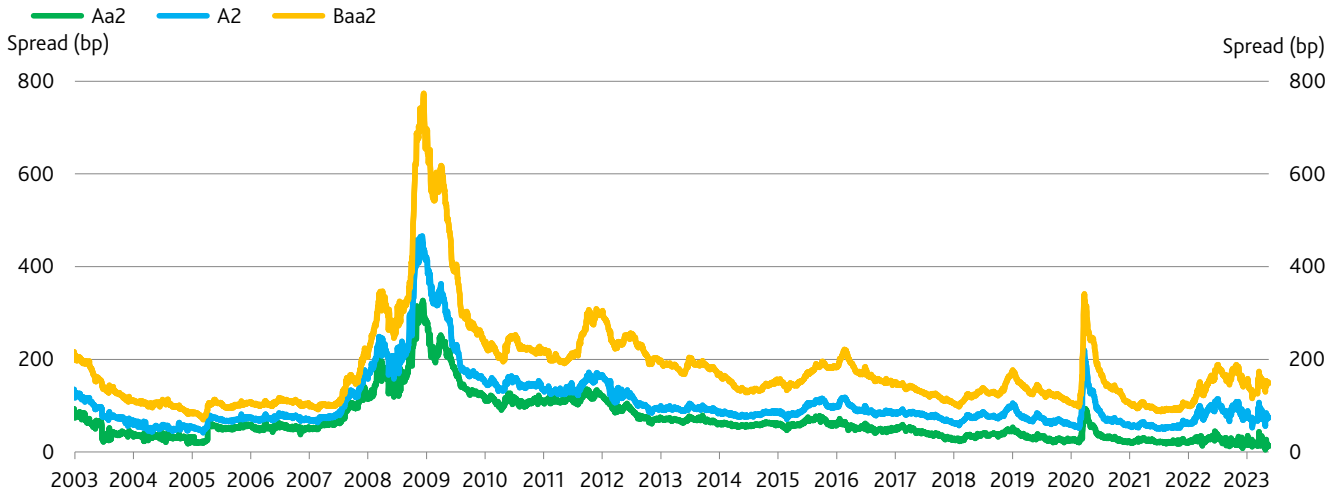
Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
5/10/2023	ALSTOM	Industrial	SrUnsec/LTIR/CP	2878.557	D	Baa2	Baa3	IG	FRANCE
5/11/2023	EDP - ENERGIAS DE PORTUGAL, S.A.	Utility	SrUnsec/LTIR/JrSub/MTN/CP	16381.21	U	Baa3	Baa2	IG	PORTUGAL
5/11/2023	SOLOCAL GROUP S.A.	Industrial	SrSec/LTCFR/PDR	202.2941	D	Caa2	Ca	SG	FRANCE
5/12/2023	ENTRA ASA	Industrial	LTIR		D	Baa1	Baa2	IG	NORWAY
5/15/2023	HELLENIC BANK PUBLIC COMPANY LTD	Financial	SrUnsec/LTD/Sub/MTN	318.0845	U	B1	Ba3	SG	CYPRUS
5/15/2023	VERISURE MIDHOLDING AB	Industrial	SrUnsec/LTCFR/PDR	1420.892	U	Caa1	B3	SG	SWEDEN
5/15/2023	SPRINT BIDCO B.V.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	NETHERLANDS
5/15/2023	LOTTOMATICA GROUP S.P.A.-LOTTOMATICA S.P.A.	Industrial	SrSec	1591.415	U	B1	Ba3	SG	ITALY
5/16/2023	CERBERUS CAPITAL MANAGEMENT L.P.-HAYA HOLDCO 2 PLC	Industrial	SrSec/LTCFR/PDR	400.1738	D	Caa2	Ca	SG	UNITED KINGDOM
5/16/2023	VEDICI PARTICIPATIONS-ELSAN SAS	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	FRANCE

Source: Moody's



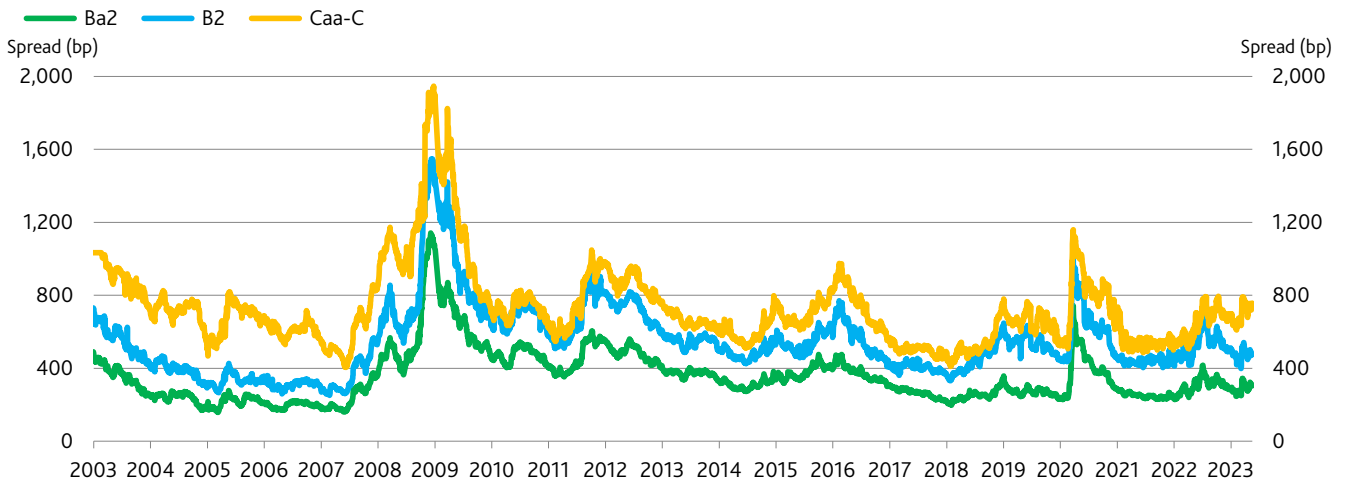
MARKET DATA

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 (May 10, 2023 – May 17, 2023)

Issuer	CDS Implied Ratings		Senior Ratings
	May. 17	May. 10	
Alliant Energy Corporation	A2	Baa1	Baa2
United States of America, Government of	A1	A2	Aaa
JPMorgan Chase & Co.	A3	Baa1	A1
Bank of America Corporation	Baa2	Baa3	A1
JPMorgan Chase Bank, N.A.	A2	A3	Aa2
Wells Fargo & Company	Baa2	Baa3	A1
International Business Machines Corporation	A1	A2	A3
Philip Morris International Inc.	A1	A2	A2
Cox Communications, Inc.	A1	A2	Baa2
Kraft Heinz Foods Company	A1	A2	Baa2

Issuer	CDS Implied Ratings		Senior Ratings
	May. 17	May. 10	
Southern California Edison Company	Baa1	A2	Baa1
Archer-Daniels-Midland Company	Baa2	A3	A2
United States Cellular Corporation	B2	Ba3	Ba2
Ford Motor Credit Company LLC	B1	Ba3	Ba2
Ford Motor Company	B1	Ba3	Ba2
Bank of New York Mellon Corporation (The)	Baa2	Baa1	A1
Raytheon Technologies Corporation	Aa3	Aa2	Baa1
Thermo Fisher Scientific Inc.	Aa3	Aa2	A3
Gilead Sciences, Inc.	A1	Aa3	A3
CCO Holdings, LLC	B1	Ba3	B1

Issuer	Senior Ratings	CDS Spreads		
		May. 17	May. 10	Spread Diff
Rite Aid Corporation	Ca	6,076	5,755	321
iHeartCommunications, Inc.	Caa1	2,000	1,771	229
Deluxe Corporation	B3	972	748	224
Brandywine Operating Partnership, L.P.	Baa3	674	527	147
Lumen Technologies, Inc.	Caa1	2,410	2,301	109
United States Cellular Corporation	Ba2	421	315	106
Frontier Communications Holdings, LLC	Caa2	814	711	104
Embarq Corporation	Caa2	2,174	2,073	101
Staples, Inc.	Caa2	2,371	2,279	92
Pitney Bowes Inc.	B3	1,602	1,536	66

Issuer	Senior Ratings	CDS Spreads		
		May. 17	May. 10	Spread Diff
Dish DBS Corporation	B3	2,700	2,964	-264
Dish Network Corporation	B3	2,401	2,635	-234
Freedom Mortgage Corporation	B2	840	926	-86
Anywhere Real Estate Group LLC	B2	1,031	1,113	-83
Unisys Corporation	B3	1,151	1,219	-67
Goodyear Tire & Rubber Company (The)	B2	351	408	-57
K. Hovnanian Enterprises, Inc.	Caa2	953	995	-42
Credit Suisse (USA), Inc.	A3	178	207	-29
CSC Holdings, LLC	B1	2,085	2,111	-26
CNX Resources Corporation	B1	336	361	-24

Source: Moody's, CMA

## CDS Movers

Figure 4. CDS Movers - Europe (May 10, 2023 – May 17, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
	May. 17	May. 10	Senior Ratings
Issuer			
Credito Emiliano S.p.A.	Baa1	Baa3	Baa3
Spain, Government of	Aa3	A1	Baa1
BPCE	A3	Baa1	A1
Societe Generale	Baa1	Baa2	A1
Banco Santander S.A. (Spain)	A2	A3	A2
CaixaBank, S.A.	A3	Baa1	Baa1
Credit Agricole S.A.	A1	A2	Aa3
Greece, Government of	Baa2	Baa3	Ba3
DZ BANK AG	Aa3	A1	Aa2
NATIXIS S.A.	A3	Baa1	A1

CDS Implied Rating Declines	CDS Implied Ratings		
	May. 17	May. 10	Senior Ratings
Issuer			
Trinseo Materials Operating S.C.A.	Ca	Caa2	B3
EWE AG	A3	A1	Baa1
Electricite de France	Baa3	Baa2	Baa1
SEB AB	Baa2	Baa1	Aa3
AstraZeneca PLC	Aa3	Aa2	A3
Telecom Italia S.p.A.	B1	Ba3	B1
Bayer AG	Baa1	A3	Baa2
Novo Banco, S.A.	Ba1	Baa3	Ba3
Renault S.A.	Ba3	Ba2	Ba2
Tyco Electronics Group S.A.	A1	Aa3	A3

CDS Spread Increases	CDS Spreads			
	Senior Ratings	May. 17	May. 10	Spread Diff
Issuer				
Trinseo Materials Operating S.C.A.	B3	1,341	984	358
Casino Guichard-Perrachon SA	Caa2	8,834	8,580	254
Garfunkelux Holdco 3 S.A.	Caa2	1,630	1,581	50
Ziggo Bond Company B.V.	B3	459	434	25
CPI Property Group	Baa3	696	673	24
Yara International ASA	Baa2	180	158	22
Virgin Media Finance PLC	B2	456	436	20
UPC Holding B.V.	B3	383	364	20
Boparan Finance plc	Caa3	2,200	2,182	18
Stonegate Pub Company Financing 2019 plc	Caa2	637	620	17

CDS Spread Decreases	CDS Spreads			
	Senior Ratings	May. 17	May. 10	Spread Diff
Issuer				
Vedanta Resources Limited	Caa2	2,455	2,626	-170
PPF Telecom Group B.V.	Ba1	276	319	-44
Grifols S.A.	Caa1	534	573	-40
Jaguar Land Rover Automotive Plc	B1	698	735	-38
Ardagh Packaging Finance plc	Caa1	713	748	-35
Credito Emiliano S.p.A.	Baa3	80	114	-34
Nexi S.p.A.	Ba2	273	298	-25
Credit Suisse Group AG	Baa2	157	181	-24
Alstom	Baa3	146	168	-22
Credit Suisse AG	A3	121	141	-20

Source: Moody's, CMA

## CDS Movers

Figure 5. CDS Movers - APAC (May 10, 2023 – May 17, 2023)

Issuer	CDS Implied Ratings		Senior Ratings
	May. 17	May. 10	
Tokyo Electric Power Company Holdings, Inc.	A3	Baa2	Ba1
Tenaga Nasional Berhad	A1	A3	A3
China, Government of	A2	A3	A1
China Development Bank	A3	Baa1	A1
Export-Import Bank of Korea (The)	Aa2	Aa3	Aa2
Mitsubishi UFJ Financial Group, Inc.	A1	A2	A1
Westpac Banking Corporation	A2	A3	Aa3
Sumitomo Mitsui Trust Bank, Limited	A3	Baa1	A1
Australia and New Zealand Banking Grp. Ltd.	A1	A2	Aa3
Export-Import Bank of China (The)	A3	Baa1	A1

Issuer	CDS Implied Ratings		Senior Ratings
	May. 17	May. 10	
NBN Co Limited	Baa1	A3	Aa3
Suncorp-Metway Limited	Baa2	Baa1	A1
Vanke Real Estate (Hong Kong) Company Limited	B2	B1	Baa2
Korea Gas Corporation	A2	A1	Aa2
Sydney Airport Finance Company Pty Ltd	Baa3	Baa2	Baa1
Aurizon Network Pty Ltd	A2	A1	Baa1
SGSP (Australia) Assets Pty Ltd	Baa1	A3	A3
LG Chem, Ltd.	Baa2	Baa1	A3
GMR Hyderabad International Airport Limited	Ba3	Ba2	Ba3
JSC Halyk Savings Bank of Kazakhstan	B3	B2	Ba2

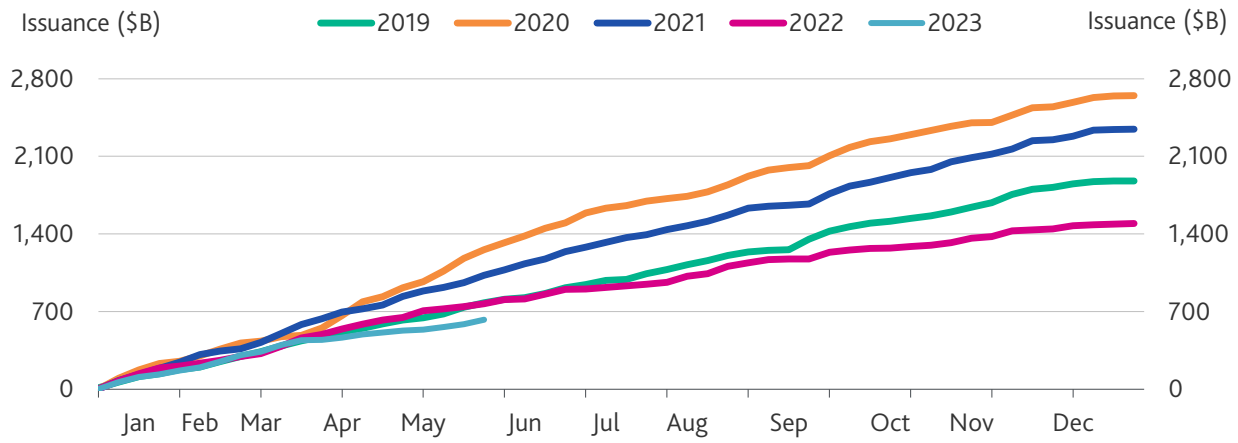
Issuer	Senior Ratings	CDS Spreads		
		May. 17	May. 10	Spread Diff
RHB Bank Berhad	A3	140	117	23
Sydney Airport Finance Company Pty Ltd	Baa1	119	98	20
SK Hynix Inc.	Baa2	209	191	18
LG Chem, Ltd.	A3	96	79	17
Amcor Pty Ltd	Baa2	109	94	14
Flex Ltd.	Baa3	153	140	13
Boral Limited	Baa2	155	142	13
Transurban Finance Company Pty Ltd	Baa2	101	89	12
Suncorp-Metway Limited	A1	89	81	8
Aurizon Network Pty Ltd	Baa1	65	59	6

Issuer	Senior Ratings	CDS Spreads		
		May. 17	May. 10	Spread Diff
Tata Motors Limited	B1	259	311	-51
Adani Green Energy Limited	B2	899	947	-48
SoftBank Group Corp.	Ba3	308	326	-19
Tenaga Nasional Berhad	A3	58	73	-15
Tokyo Electric Power Company Holdings, Inc.	Ba1	73	86	-13
Nissan Motor Co., Ltd.	Baa3	160	171	-11
Development Bank of Kazakhstan	Baa2	239	250	-10
NIPPON STEEL CORPORATION	Baa2	46	54	-8
JFE Holdings, Inc.	Baa3	49	56	-7
LG Electronics Inc.	Baa2	80	86	-6

Source: Moody's, CMA

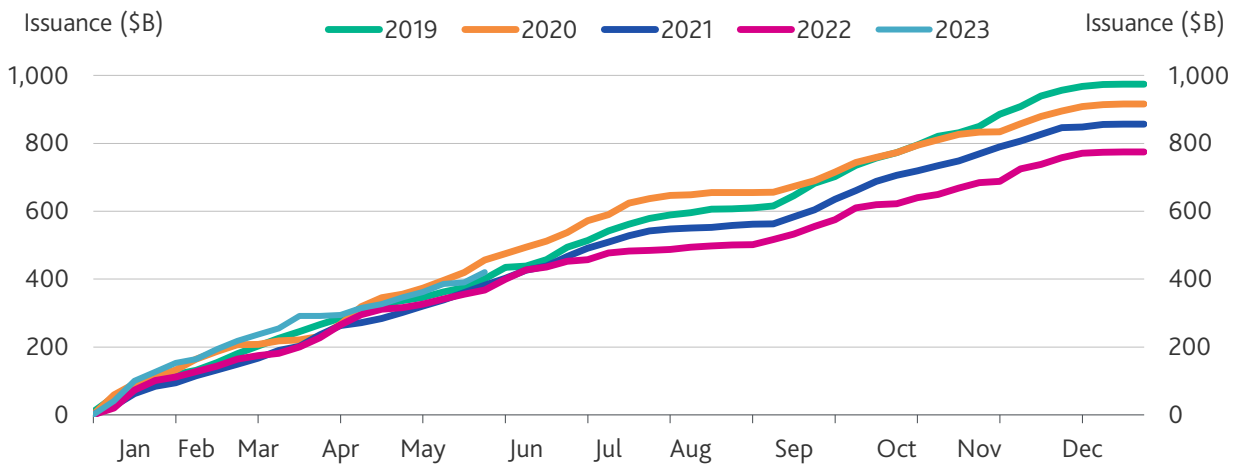
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

## ISSUANCE

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

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	36.000	3.740	39.831
Year-to-Date	538.072	75.483	626.303

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	26.552	2.529	30.469
Year-to-Date	375.814	27.202	420.351

\* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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