MOODY'S ANALYTICS

WEEKLY MARKET OUTLOOK

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Fed Minutes Reinforce Softened Stance

The Federal Open Market Committee softened its tone in May's post-meeting statement, a sentiment reinforced within the meeting minutes released Wednesday. Additional rate changes will depend on the lagged effects of monetary tightening on financial and economic conditions.

In the post-meeting press conference, Federal Reserve Chair Jerome Powell detailed those conditions and signaled that the central bank will balance inflation risks and a resilient U.S. labor market against fallout from the banking crisis and the potential of a U.S. debt limit breach. Slowing, albeit stubbornly, inflation and stronger economic headwinds make the May hike the Fed's last for now, though policymakers have left the door open for future adjustments if needed.

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May's minutes again stressed the committee's confidence in the soundness of U.S. banks. The liquidity crisis that began with the abrupt failure of Silicon Valley Bank and ultimately took down First Republic Bank has eased meaningfully. Lending from the Fed's emergency facilities has stabilized in recent weeks as deposit outflows from smaller banks have subsided.

This is crucial for the Fed. The central bank's "separation principle" means the Fed's lender-of-last-resort activities can be done in isolation from more traditional monetary policy maneuvering. Despite the theoretical commitment to this principle, lending at favorable rates to banks while also working tirelessly to tighten financial conditions was an incongruity that the central bank is happy to see abate. It is difficult to accurately estimate the tightening that banks are undergoing in response to the banking turmoil, but the waning crisis will better allow the Fed to pause and evaluate the economy's reaction to its restrictive policy and the heightening lending standards at banks.

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The Fed is now more likely to overtighten than to do too little, especially as liquidity problems in the banking system could reignite. On the fiscal side, Congress' failure to raise the debt limit would cause economic fallout beyond the Fed's ability to contain. Moody's Analytics expects the fed funds rate has reached its terminal level for this cycle. Our latest outlook calls for the Fed to start cutting rates in early 2024. Monetary policy will be restrictive through the end of 2025, when the policy rate will return to its neutral rate. We predict that credit conditions will remain tight with the 10-year Treasury yield averaging 3.7% in the second quarter and peaking in the second quarter of 2024 at 4%. We estimate that yields will then decline.

Reasons for cautious optimism in U.S. housing market

The U.S. market for new homes is improving slowly and April's sales exceeded expectations. Sales increased 4.1% from March to 683,000 annualized units. This is almost 12% above the number of new sales in April 2022. The regional sales data are mixed, with the most expensive housing markets—the West and the Northeast—performing worst. Sales of new homes declined 58% in April in the Northeast. Meanwhile, sales in the South and Midwest, where homes are typically more affordable, posted a strong increase in April.

April's reading is further evidence that housing activity is improving. The modest improvement is consistent with recent NAHB Housing Market Index readings, which show that builders are becoming cautiously optimistic. May's Housing Market Index was above the 50-point threshold marking good building conditions for the first time since July 2022, pointing to further improvement next month.

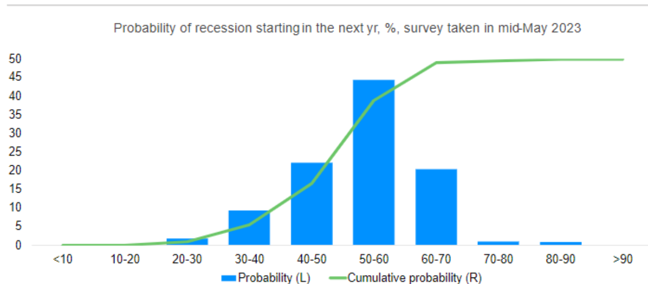
Nevertheless, the price of a new home continues to decline, as builders offer steep discounts to keep buyers interested amid higher mortgage rates and buyers shift their search to more affordable homes. The median price of a new home fell 8% from a year ago, and more affordable homes have become an increasing share of the total number of new homes sold. In April, more than 50% of homes sold cost less than $400,000, compared with one-third last year.

TOP OF MIND

U.S. Economic Outlook: Resilience

BY MARK ZANDI

Pessimism about the economy's prospects remains widespread. A strong consensus of economists, including the Federal Reserve's staff economists, long-term Treasury bond investors, and a vocal group of CEOs, hold that a recession is dead ahead. In a survey of economists done by Moody's Analytics in early May, more than three-fourths of respondents thought that there were greater than even odds that a recession would begin sometime in the coming year. There are few believers that the economy will navigate through the next year or so and skirt recession.



The pessimism is based on historical experience. In times past, when the economy was struggling with high inflation and the Federal Reserve was aggressively tightening monetary policy in response, recessions typically followed—although not always. In the mid-1990s, the economy threatened to overheat, but the Fed was able to cool it off with interest rate hikes without precipitating a downturn. Of course, the inflation of that period was tame compared with what we are suffering today.

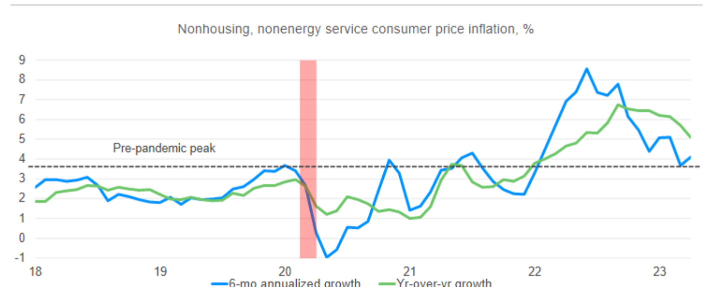
Moreover, many of the leading indicators that economists rely on to gauge recession risks are flashing red. The deeply inverted Treasury yield curve—short-term interest rates are much higher than long-term rates—is sending a resounding signal that a recession is likely by this time next year. The Conference Board's trusty leading economic indicators, a compilation of various economic series that historically have presaged downturns, are also unambiguous in forecasting a coming recession.

Inflation abates

However, the unprecedented pessimism regarding the economy's prospects appears increasingly overdone. Inflation is still too hot to be sure, but it is cooling and appears to be headed back to the Fed's inflation target by this time next year. Most fundamentally, this is because the supply-side fallout from the COVID-19 pandemic and Russian war, the principal causes of the high inflation, is quickly fading.

Most encouraging is that prices for staples, including gas, food and rent, have been flat to down in recent months. This is critical for low-income households without savings and no choice but to borrow more to maintain their spending. It was also good to see new-vehicle prices fall in April, the first decline since pandemic-induced supply-chain problems caused global production to collapse and prices to soar. With vehicle production finally picking up in Japan and Germany as global supply chains normalize, there is more inventory on dealer lots, and more price declines are in train. Last month's jump in used-vehicle prices also will not last long, given the improving supplies.

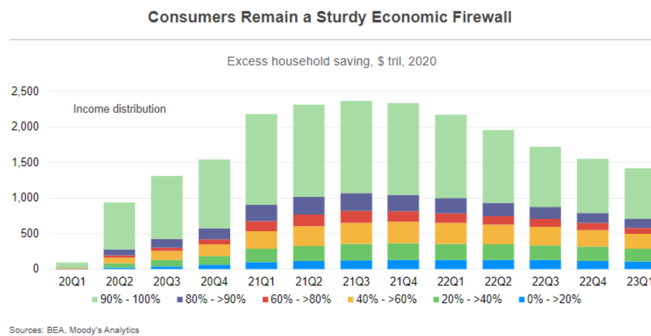
The cost of housing services, which is more than one-third of the CPI, will grow much more slowly in the coming months. Market rents, which drive housing CPI with a long lag, are flat to down as there is plenty of new rental supply as pandemic-disrupted supply chains and labor markets normalize, and demand remains soft, given the previous surge in rents, which are now unaffordable. Even so-called supercore inflation—service prices excluding prices for housing and energy service—has rolled over. These services are labor-intensive and thus will be pressured to raise prices more quickly until wage pressures abate. While this will not fully happen quickly, it is in motion.



This sanguine and increasingly certain inflation outlook means that the Fed's rate hikes are likely over. The current federal funds rate of just over 5% will be the terminal rate, the highest the rate will go this cycle. And there are other good reasons for the Fed to end its rate hikes, including the fragile banking system and resulting tighter bank underwriting standards and the economy's now consistent below-potential growth and the cooling job market.

Excess savings

Optimism that the economy is resilient enough to avoid a near-term recession is also rooted in factors unique to this period. Most important is the considerable amount of excess household savings. Households sheltering in place during the pandemic and unable to spend accumulated savings greater than they would have if not for the pandemic. Low- and middle-income households also benefited from substantial government support during the pandemic, some of which they saved. At the peak of the excess savings in fall 2021, households had amassed an estimated $2.5 trillion in excess savings, equal to about 10% of GDP.

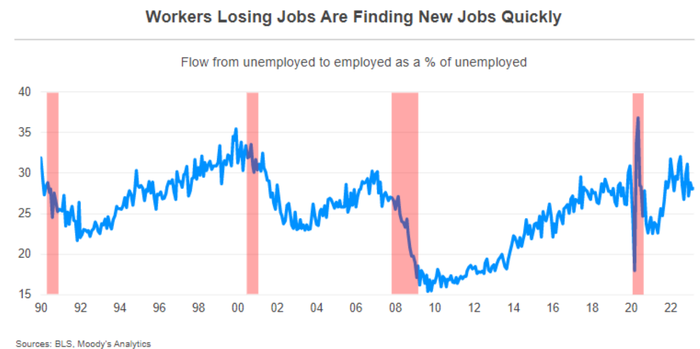


Since then, households have drawn down their excess savings to supplement their real incomes, which were hit hard when inflation took off. We estimate their excess savings have fallen to near $1.5 trillion. Low-income households have largely spent their excess savings and have turned to credit cards and unsecured personal loans to maintain their spending, but middle-income, and especially high-income, households have plenty of savings left. Particularly since their need to draw down excess savings is ebbing with the moderating inflation and resumption of real income growth. It is uncanny how households are calibrating their drawn-down excess savings to simply maintain their typical amount of spending, no more and no less.

Labor hoarding

Businesses are also atypically reluctant to lay off workers. They have been struggling with finding and retaining qualified workers since well before the pandemic and rightly feel this will continue as the large baby boomer generation retires and the nation grapples with its vexed foreign immigration policy. They also cannot forget how the pandemic shutdown and sudden restart severely complicated their staffing efforts, and they do not want to be whipsawed again. They are ignoring any weakness in their sales and recession fears and are maintaining their payrolls. By so doing, a recession is less likely, as large layoffs spook households to curtail their spending, igniting a self-reinforcing vicious downturn.

Layoffs have picked up since the banking crisis hit in March, but only close to something consistent with a well-functioning job market. At the start of the year, initial claims for unemployment insurance—an accurate and timely measure of layoffs—had been hovering at an extraordinarily low, nearly 200,000 per week. While they are almost 250,000 per week, they need to rise to more than 300,000 weekly claims to be consistent with a recession. It is encouraging that those losing their jobs are finding new ones extraordinarily quickly, given the still outsize number of open positions.



Household and corporate debt burdens are remarkably light. Households have managed their finances admirably well since the financial crisis, at least in aggregate. Their debt-service burden, or the percentage of their income that goes toward interest and principal payments for them to remain current on their debts, is about as low as it has been.

They have also done well in locking in the previously record-low interest rates through several massive mortgage refinancing waves. Only about 15% of household debts have rates that adjust within one year of a change in market interest rates, which is about half the share at the peak in the early 1980s.

The same largely goes for corporations. Their debt payments as a percentage of their cash flow are about as low as they have ever been. They have also been good about locking in their previously low borrowing costs.

There are some problems brewing. Low-income and younger households have borrowed aggressively since the pandemic, and lenders effectively lowered their underwriting standards due to the credit score inflation prompted by the government's pandemic bailout packages, which required lenders not to report credit problems to the credit bureaus. Delinquencies on credit cards, unsecured personal loans, and auto loans are above pre-pandemic levels and rising quickly. With student loan payments likely to resume in September, as the Supreme Court seems set to rule against the president's debt-forgiveness plan, financial pressures will intensify.

The banking crisis also means higher borrowing costs for households and businesses, and with capital markets on

edge, those companies that have levered up, largely by private-equity firms, may have difficulty with the financing they need to roll over their maturing debt. However, these critically stressed households and businesses are more the exception than the rule.

Underbuilt and pent-up

Typically, prior to recessions, real estate markets are overbuilt and household demand is spent-up. There is no sign of that currently. Indeed, if anything, it is the opposite. Housing is significantly underbuilt, with the homeowner vacancy rate at a record low, and while the rental vacancy rate is on the rise, it is still well below its historical norms. Single-family homebuilding has fallen sharply over the past year, and the banking crisis will ultimately take a bite out of multifamily building, as multifamily developers rely on banks for credit. But overall, homebuilding is near a bottom and will not be a significant economic drag.

Many crosscurrents are impacting the rest of construction, but strong public infrastructure spending fueled by the Bipartisan Infrastructure Law and Inflation Reduction Act passed last year will more than offset the further weakness in office, hotel and warehouse construction. The construction industry is arguably the most interest-rate-sensitive part of the economy and contributes significantly to downturns. That will not happen now.

In the lead-up to recessions, households generally have spent with abandon, well beyond what is implied by their demography, income and wealth. Vehicle demand is the poster child for this, as manufacturers and dealers offer significant price discounts and financing incentives to pull forward sales that would have otherwise happened in another year or two. This spent-up demand presages a significant pullback in spending when the economy turns down and layoffs pick up, exacerbating the downturn. Vehicle manufacturers have, until recently, been jacking up prices given their lack of inventory due to the pandemic, and many households that would have normally purchased a vehicle in the past several years cannot find or afford one.

This pent-up vehicle demand is arguably unprecedented and strongly argues that as production continues to improve and prices decline, demand will also improve. A struggling vehicle industry is a feature of past recessions, but it is more likely to boost the economy going forward.

Household demand for other durable and nondurable goods is arguably spent-up given all the buying during the pandemic when households were sheltering in place, but demand for travel, entertainment and other services is still pent-up. The net of all this on near-term spending is more or less a wash.

Flush S&L governments

Uncharacteristically, state and local governments will not be the drag on the economy they typically are when the economy falters. In times past, when the economy began to struggle, state and local governments quickly faced fiscal difficulties as tax and other revenues faltered and spending on income support programs increased. Given their balanced budget requirements and other budgetary constraints, they have little choice but to tighten their purse strings, weakening the economy.

In contrast, most state and local governments are currently in strong financial positions. Given the significant financial support they received from the federal government via the American Rescue Plan and increased infrastructure spending, their rainy-day funds are full. Most state and local governments have also been prudent and have not used their windfall from the feds to establish programs that require funding in perpetuity. So, while state and local governments will not be a plus for the economy, at least they will not be the negative that they have been in past downturns.

Resilience over pessimism

It is important not to be Pollyannish about the economy's near-term prospects. Under almost any scenario, they will be difficult. GDP growth will halt, employment gains will come to a standstill, and unemployment will push higher. However, while history suggests that high inflation and an aggressive Fed mean recession is a serious threat, this time is different enough for the economy that a recession is avoidable. In my more than 30 years as a professional economist, I have never seen such recession pessimism. But I have also never seen such a resilient economy. Something has to give. I suspect it will be the pessimists.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar will heat up next week. The highlight will be the release of the May employment report week's end. We expect payroll gains will continue their steady moderation. The unemployment rate is likely to edge slightly higher after returning to its cycle low in April.

Given the ongoing string of downbeat readings from regional Fed manufacturing surveys, the ISM manufacturing index will show that the factory sector continues to contract.

Jobless claims will remain in focus, since they provide labor market insight with the shortest lag time. While still short of the break-even level—which we 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 Conference Board consumer confidence, productivity, construction spending, and vehicle sales.

Europe

The main release next week will be the preliminary estimate of the euro zone's harmonised index of consumer prices. The HICP inflation rate likely fell to 6.2% year over year for May from 7% in April. Oil and gasoline prices will exert considerable downward pressure, as will base effects on electricity and gas prices. There should also be a slight negative effect from the food segment as cost pressures gradually ease. However, we expect annual core inflation to be unchanged at 5.6% as an increase in services inflation balances out a decline in core goods inflation.

Lower business confidence in Germany and France leads us to believe that the euro zone aggregate of business and consumer confidence will decline in May as well. The Economic Sentiment Indicator likely slid to 99 from April's 99.3. Uncertain demand conditions likely suppressed morale, though we expect that the services sector is performing better than other sectors in the runup to a busy summer for travel.

We expect the euro zone's unemployment rate was unchanged at 6.5% in April. A resilient services sector will keep demand for workers high as factories keep hold of their workers. We expect Germany's and Italy's unemployment rates to be unchanged at 5.6% and 7.8%, respectively.

Final estimates of French and Italian first-quarter GDP are likely to agree with preliminary estimates that said France's GDP was up 0.2% quarter on quarter after the prior zero growth, while Italy's gained 0.5% after a 0.1% contraction.

Spending on Goods in France and Spain will each likely report small April increases. Household consumption of goods in France should partially recover by 0.5% month on month after a 1.3% drop previously. Spanish households will continue to spend cautiously with a meagre 0.2% monthly increase on top of March's 0.5% rise. In contrast, April retail sales in Germany will have slumped 0.2%.

Asia-Pacific

China's manufacturing PMI for May, a highlight on the economic calendar, will likely break into expansion territory to land at 50.1. In April it was 49.2. The country's reopening has generated a lopsided recovery that has left production lagging the rebound in consumption. Production should lift as retailers replenish their inventories. However, weak markets abroad will cap the uptick.

In other data, Australia's headline CPI growth likely cooled to 5.9% year on year in April from 6.3% in March. With headline and underlying price pressures losing steam, pressure is coming off the Reserve Bank of Australia to keep hiking the policy rate. We believe the RBA has done enough to bring down inflation; it's simply a waiting game for past hikes to do their work. Accordingly, the cash rate will likely hold at 3.85% for the rest of 2023 before a series of rate cuts push it a full percentage point lower to 2.85% by the middle of 2024. We expect inflation to return to the RBA's 2%-3% target band by the second half of next year.

Latin America

Chile and Brazil will release a new batch of economic indicators providing further insight into the status of their business cycles. Chile's key indicators will show an economy still in contraction. The economic activity index likely fell 1.5% year on year in April after a fall of 2.1% in March. Retail and wholesale sales in Chile likely contracted again on a year-ago basis, with elevated interest rates and still-high inflation taking a toll on consumers. Finally, Chile's unemployment rate likely averaged 8.7% in the rolling quarter ending in April, up from 7.8% a year earlier. In seasonally adjusted figures, unemployment likely averaged 8.5%, unchanged from March.

Brazil unemployment likely declined in April as the economy advanced further. We estimate the unemployment rate averaged 8.6% in the rolling quarter ending in April, down from 8.8% in the previous three-month period. Brazil's index of industrial production likely increased 0.6% year on year in April after growth of 0.4% in March.

We look for inflation in Peru to have moved lower in May as supply shocks fade from March rains and protests earlier in the year. In Mexico, the unemployment rate likely increased to 2.7% in April from 2.4% in the previous month.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
28-May	Turkiye	Runoff presidential elections	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 Franciso, 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

Bond Spreads Holding Stable

BY STEVEN SHIELDS

CREDIT SPREADS

Investment-grade corporate bond spreads have not changed appreciably since last week. As measured by the Moody's Investors Service long-term average corporate bond yield, the recent investment-grade corporate bond yield spread decreased 3 basis points over the past week to 170 bps. This is approaching its high over the past 12 months of 178 bps and is well above its low of 139 bps.

For the past few weeks, the U.S. Bloomberg/Barclays high-yield option-adjusted spread has remained relatively stable within a narrow range and is currently positioned at 464 basis points. Meanwhile, at 468 bps, the ICE BofA U.S. high-yield option adjusted bond spread is firmly off its March 2023 peak of 522 bps. The high-yield option-adjusted bond spreads align closely with the corresponding long-term Baa industrial company bond yield spread. However, they are wider than what would be expected based on the VIX reading of 19.4.

Credit default swap rates are showing the impact of the deadlock on the debt ceiling. After reaching as high as 156 basis points last Thursday, CDS spreads have narrowed slightly but remain extremely elevated. The one-year Treasury securities are substantially higher 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. The 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 faired 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 faired noticeably better in the third quarter.

Fourth-quarter 2021's worldwide offerings of corporate bonds fell 9.4% for investment grade. High-yield US$ denominated high-yield corporate bond issuance fell from $133 billion in the third quarter to $92 billion in the final three months of 2021. December was a disappointment for high-yield corporate bond issuance 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.

In the latest weekly period, US$-denominated investment-grade debt issuance totaled $65.63 billion, bringing the year-to-date total to $603.7 billion. This represents a 14.4% decrease when compared with last year.

In contrast, high-yield debt issuance amounted to $8.33 billion during the same period. At $83.81 billion year-to-date, low-grade debt issuance is now 3.7% higher year-over-year. Total US$-denominated corporate debt issuance is tracking 13.3% below where it stood at this time in 2022, but the gap has narrowed considerably over the past month.

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 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.

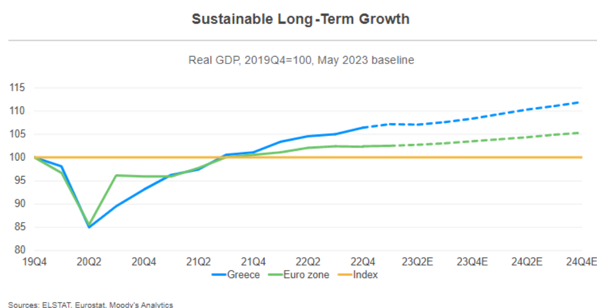
Moody's Analytics made minimal changes to the outlook for home sales, construction and house prices in May. While there are signs of a bottom forming in the housing sector, the high interest rate environment and lack of available inventory will limit the prospects for a sharp turnaround. Given affordability 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.

Greek Elections Headed for Second Round

BY MICHAEL GRAMMATIKOPOULOS and ROSS CIOFFI

The recent elections in Greece marked a clear victory for the ruling New Democracy party and Prime Minister Kyriakos Mitsotakis, who recorded an unprecedented 20-percentage point difference from the main opposition. Nevertheless, the first round of elections disallowed him from securing a majority of seats due to a change in the electoral law. At this stage, the political landscape has little to no support for a coalition government, which would lead to a second round by the end of June. Mitsotakis will have the first take of the first-quarter GDP numbers by then, which could be another ace up his sleeve in case our projection of 3.7% growth compared to the first quarter of 2022 is confirmed.

Our baseline projections in the past year assumed no snap elections and that a third round was a tail risk, as Greeks would want to avoid perpetual elections. Not only was our forecast confirmed, but a positive tail risk of long-term government stability has now emerged. In case the next elections paint a similar picture of votes, a very robust government could be formed with a very low probability of destabilization in the four-year term.



An ambitious goal of Mitsotakis' will be to try and secure not only a large majority but specifically 180 seats in the parliament, which would allow for future revisions in the constitution.

Under this scenario, there are odds that Article 16 of the Greek constitution, which currently bans the operation of private universities in the country, will be revoked. That would mark a huge step towards the openness of the Greek education system and the Greek economy. Provided that the government incentivises and creates an environment that will welcome international students while continuing to develop public education with structural reforms that will aid their rankings, the result would be a net positive.

Political stability, the recognition of new structural reforms from the international community, and an outstanding first quarter in the tourist season will have positive spillovers for growth in 2023 and will likely cause an upward revision of our third-quarter and fourth-quarter baseline projections.

In this environment, the yield curve will ease, and the debt-to-GDP ratio will fall, creating the necessary fiscal space for further tax reductions and potential increases in the minimum wage. With additional foreign investments and the removal of bureaucratic red tape, it would greatly aid employment and allow Greece to record above-potential growth in the medium run.

Germany in technical recession

Final estimates revised Germany's first-quarter GDP figures lower. Instead of zero growth, as had been reported in the preliminary release, GDP pulled back by 0.3% quarter over quarter in the first quarter, deepening a 0.5% decline in the preceding fourth quarter of 2022. Moreover, this left GDP 0.2% below its year-ago level during the first stanza.

The largest drag on GDP was government consumption, which dropped 4.9% quarter over quarter and detracted 1.1 percentage points from the GDP growth rate. Next was private consumption, which was down by 1.2% quarter over quarter and subtracted 0.6 percentage point from growth. By contrast, investments and net exports each contributed to GDP by 0.7 percentage point. Net exports were boosted by weak energy imports. Investments were supported by rebounds in machinery and construction investments.

Two quarters of no growth match the common definition of a technical recession. The exact picture in Germany is a little more complicated than the headline GDP figures suggest, though it is by no means upbeat. Households have taken a significant hit over the past two quarters. However, unemployment, which would normally rise during a recession, fell further during the first quarter. Fixed investments contributed to GDP growth in the first quarter, but we should regard it as a rebound after the energy situation improved at the end of the fourth quarter. There is still high uncertainty about manufacturing, though our forecast is for further gains in the second quarter.

Indeed, our baseline forecast sees a return to growth in the second quarter, thanks to greater activity in the service sector and continued manufacturing growth.

THE LONG VIEW: ASIA-PACIFIC

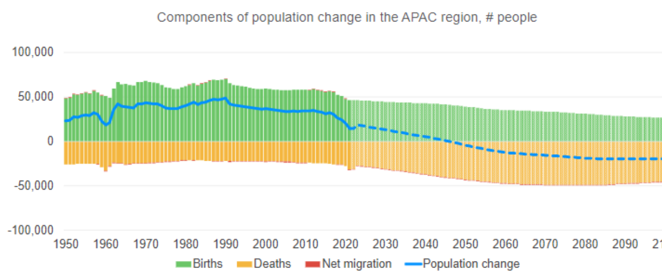
Population Versus Productivity

BY HARRY MURPHY CRUISE and SARAH TAN

The Asia-Pacific region's development since 1990 has coincided with a period of rapid population growth. Over the last 30 years, the region's population has jumped almost 50%. Only Africa and Latin America boast larger gains. Today, more than 60% of the world's population calls the Asia-Pacific region home.

But population growth is slowing. The region's population is getting older and birth rates are getting lower. By 2045, the region's annual deaths are projected to overtake births, pushing the population backwards.

APAC's Demographic Dilemma: Falling Birth Rates and Ageing Population



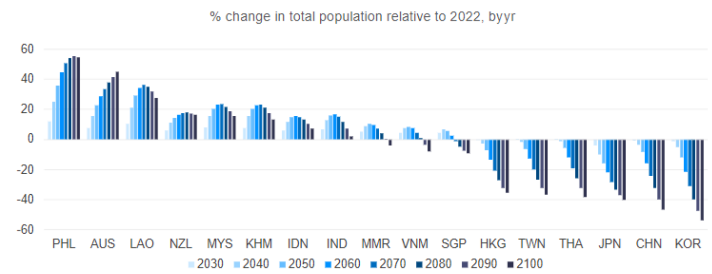
Sources: United Nations, Moody's Analytics

The demographic challenge is starker for some countries than others. Held back by a very low birth rate, an ageing population, and negligible migration, China's population fell last year for the first time since the Great Chinese Famine in 1961. And there's no turning back. By 2050, its population is projected to be almost 10% smaller than it is today. South Korea, Japan, Taiwan, Hong Kong and Thailand face similar challenges.

By contrast, Laos, Malaysia, Cambodia, India, Indonesia, Myanmar, Vietnam and Singapore should all experience solid population growth through the middle of the century before those gains reverse. Countries earlier on in their development paths tend to have younger populations and higher birth rates, which gives them extra breathing room before population growth peters out.

Australia and the Philippines are the neighbourhood outliers. Aussies have been able to outrun the challenges of an ageing population through incredibly successful migration programs targeting skilled workers. This has filled emerging skills gaps with workers who are—on average—younger and more educated than the local population. These workers add to the labour pool and perpetually lower the median age. Meanwhile, the Philippines has a median age of just 24, which keeps birth rates elevated and the population growing. By comparison, Japan's median age is 48. In Hong Kong, it is 45, and in South Korea it is 43.

Growers and Slowers



Source: Moody's Analytics

As population growth slows, the region's age structure will shift. Increasingly, the working-age share of the population (those aged 15-64) will fall, while those above age 65 will make up a larger proportion. Economists and demographers tend to look at this in terms of the dependency ratio: the proportion of the population considered to be actively contributing to the economy (those of working age) relative to those who have aged out of the workforce or are too young to enter it.

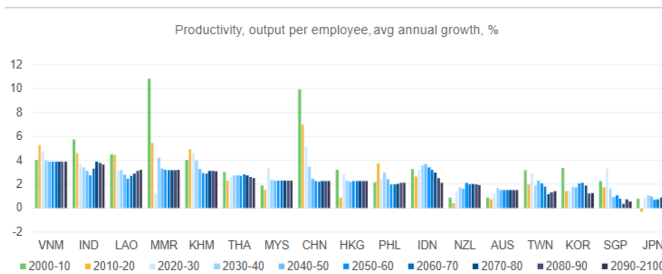
A rising ratio suggests a smaller proportion of the population has the potential to actively contribute to the economy. In essence, those of working age must support a growing number of people outside of the labour force. South Korea, China, Hong Kong and Taiwan are all on track to see their dependency ratios reach 100 by the turn of the century, up from around 40 today. That is, half of the population will be either too old or too young to actively contribute to the economy. Japan, which already has the highest dependency ratio in the region at close to 70, will also come under increasing pressure in coming decades.

With the region getting older, economic growth will be harder to come by. One potential remedy in such a situation is to increase the rate of participation. That is, get a larger share of the population working. This can be achieved through breaking down barriers for marginalised groups, including women and people with disabilities, or increasing the retirement age to force people to work longer before they can access social security supports.

These strategies can help, particularly in the short term, but it is difficult to outrun demographics. Without a Benjamin Button-esque miracle, the share of the population actively involved in the labour force will fall in most countries in the region over the coming decades.

That leaves productivity gains as the final hope to drive the region's future economic prosperity. For countries at the forefront of the global economy, including Japan, South Korea, Australia, Singapore and Taiwan, this is harder. These economies have already reaped many of the benefits from global technological advancements, so innovation from here tends to offer only marginal gains. By contrast, technological improvements in lesser developed countries pay greater productivity dividends. This will keep productivity growth strong in Vietnam, India, Indonesia, Laos, Myanmar and Cambodia as they play catch-up.

Productivity Gains Needed to Drive Growth

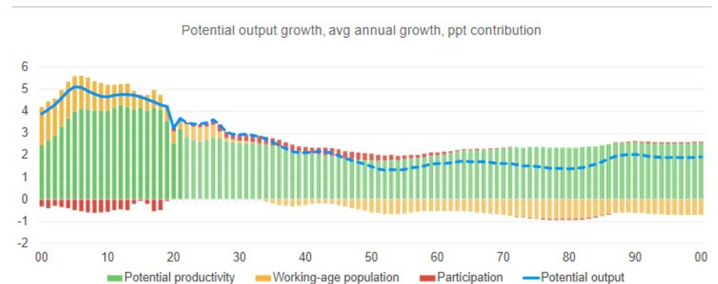


Source: Moody's Analytics

But strong productivity growth isn't a fait accompli. Foreign direct investment is a crucial driver of productivity gains, bringing not only new funds but also new technology, knowledge, and research and development capabilities. This investment can be a differentiator when it comes to development outcomes. Governments play a crucial role here, as they have the power to break down investment barriers and woo new investors with favourable conditions. It's here that Vietnam has been a standout. By improving regulatory conditions, tackling corruption, and cutting red tape, the country has become a large destination for FDI. For many investors looking to diversify away from China, Vietnam has become an attractive alternative. That's a key reason the country is set to experience above-average productivity gains over coming decades.

Economic growth in the Asia-Pacific region will be a tussle between people and productivity. The ageing population will pull growth backwards, while productivity improvements will do their best to counter that retreat. Ultimately, the lack of people power will win, and growth will slow. We forecast annual growth to average 3.4% across the 2020s, slowing from 4.7% across the 2010s and 4.75% across the 2000s. Through the 2030s, it's set to average 2.6%, then 2% across the 2040s and 1.7% through the second half of the century.

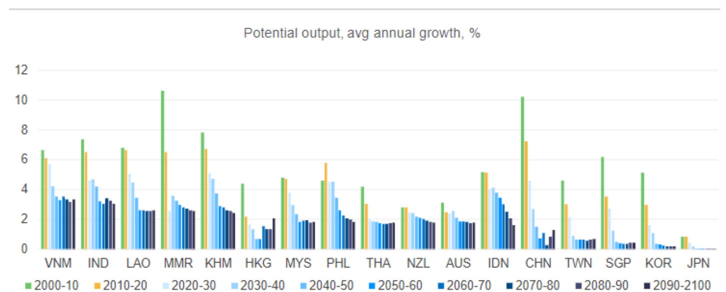
Falling Population vs Productivity Gains



Source: Moody's Analytics

Across the region, productivity gains in Vietnam, India, Laos, Myanmar and Cambodia will keep economic growth in those countries strong, while above-average population growth will support Australia and the Philippines. The double whammy of falling population and weaker productivity growth will hit Japan, South Korea, Singapore, Taiwan and China.

APAC Set to Slow



Source: Moody's Analytics

All in all, the next few decades in this region will look very different from the last: Rapid population growth will be replaced by shrinkage, a young population will age quickly, and productivity gains will be harder to come by.

Region at Risk in U.S. Debt Limit Impasse

By JUAN PABLO FUENTES

Negotiations between House Speaker Kevin McCarthy and President Joe Biden to raise the U.S. government debt limit continue this week, with no signs of an imminent agreement. According to Moody's Analytics estimates, the Treasury will run out of money and will not be able to cover its bills if no agreement is reached by June 8, or as early as June 1. This is consistent with Treasury Secretary Janet Yellen's "best estimate." Our baseline projections assume that an agreement will be reached before June 8, thus avoiding major repercussions in financial markets. However, odds have recently increased that lawmakers will not act before the debt limit is breached. This could prove costly for the U.S. economy—and for Latin America.

In an alternative risk scenario, the debt limit is breached by June 8, prompting turmoil in global financial markets. The timing could not be worse for the global economy; even without the specter of a debt limit breach, many CEOs and economists believe a recession is dead ahead. With the OECD's central banks ramping up interest rates to quell wage and price pressures, avoiding a recession would be difficult even if nothing else went wrong.

Although the debt limit breach is short in our alternative scenario—likely about a week—it is enough to undermine the already-fragile global economy, which suffers a mild recession in the second half of this year. As commodity prices collapse, emerging markets see massive capital flight as investors flee. Latin American governments and businesses face elevated financial costs. As regional currencies depreciate against the dollar, import prices increase sharply, reigniting inflation. Policymakers in Latin America have little room to implement fiscal or monetary stimulus measures. The financial and economic fallout would grow exponentially if the debt limit breach extends for more than a week, an unlikely scenario.

Even if the debt limit breach is averted, as we assume in our baseline forecast, the uncertainty created by the current debate in Washington has already hurt financial and commodity markets. The prices of copper and oil have weakened in recent weeks on growing recession fears. Similarly, short-term interest rates in the U.S. have also moved higher, with serious repercussions for global financial markets. Yet the impact on Latin American economies has been limited. The region's two largest economies, Mexico and Brazil, have performed surprisingly well in early 2023, supported by falling inflation and relatively strong labor markets.

Despite the uneasiness created by the debt limit debate, the effect on Latin American economies will be negligible if Biden and McCarthy reach an agreement before June 8. Moreover, the region might enjoy a mini-windfall in upcoming months once the debt limit threat passes. Stronger demand from China and lagging supply will boost most commodity prices in the second half of the year and benefit Latin American economies. Physical oil markets are already showing signs of stress as OPEC supply continues to decline. Prices are poised to respond once recession fears recede.

RATINGS ROUNDUP

Downgrades for Four of Six U.S. Changes

BY STEVEN SHIELDS

U.S.

U.S. corporate rating activity was light in the latest week. For the period ended May 23, downgrades comprised four of the six rating changes issued by Moody's Investors Service. The largest change in terms of terms of debt affected was made to Zimmer Biomet Holdings Inc. Moody's Investors Service raised Zimmer's senior unsecured ratings to Baa2 from Baa3. The upgrade reflects ongoing deleveraging, improved operating performance, and solid organic growth resulting from strong demand and operational improvements, which have contributed to Zimmer's increased free cash flow generation.

System Energy Resources Inc. saw its Backed Senior Secured and First Mortgage Bond ratings lowered to Baa2 from Baa1. The downgrade stems from ongoing disputes with several state regulatory commissions regarding SERI's rates and potential refunds related to these rates, which will reduce the company's cash flow going forward.

Other firms that were downgraded in the week include H-Food Holdings LLC, Curo Group Holdings Corp., and QBS Parent Inc.

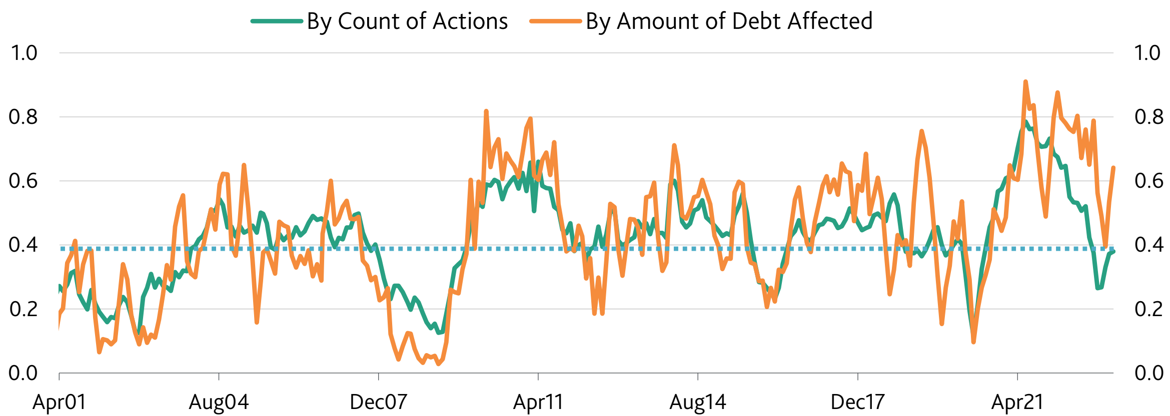
Since September, U.S. corporate credit downgrades have consistently outnumbered upgrades, with this trend persisting in April, when downgrades accounted for nearly two-thirds of all ratings actions.

EUROPE

Moody's Investors Service issued three rating changes across Western Europe in the period. Of the changes, Deutsche Lufthansa Aktiengesellschaft's senior unsecured ratings were lifted to Ba1 from Ba2 The upgrade reflects the German airline's swift deleveraging path over the last 12 months, bolstered by strong traffic recovery, a strong yield environment, and an adjusted debt reduction.

Moody's also issued a one-notch upgrade to Outokumpu Oyj's ratings, supported by the firm's solid business profile and strong operational, geographical and product diversification. The lone European downgrade was made to Elsan SAS's corporate family rating and senior secured notes, which were lowered to B2 from B1.

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



* Trailing 3-month average

Source: Moody's

FIGURE 2
Rating Key

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

FIGURE 3

Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG
5/17/2023	ZIMMER BIOMET HOLDINGS, INC.	Industrial	SrUnsec	6008.28	U	Baa3	Baa2	IG
5/18/2023	H-FOOD HOLDINGS, LLC	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	350	D	Caa2	Caa3	SG
5/19/2023	CURO GROUP HOLDINGS CORP.	Financial	LTCFR		D	Caa1	Caa2	SG
5/22/2023	ENTERGY CORPORATION-SYSTEM ENERGY RESOURCES, INC.	Utility	SrSec	525	D	Baa1	Baa2	IG
5/22/2023	QBS PARENT, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	Caa1	SG
5/23/2023	AMG CRITICAL MATERIALS N.V.	Industrial	SrSec/BCF/LTCFR/PDR		U	Ba3	Ba2	SG

Source: Moody's

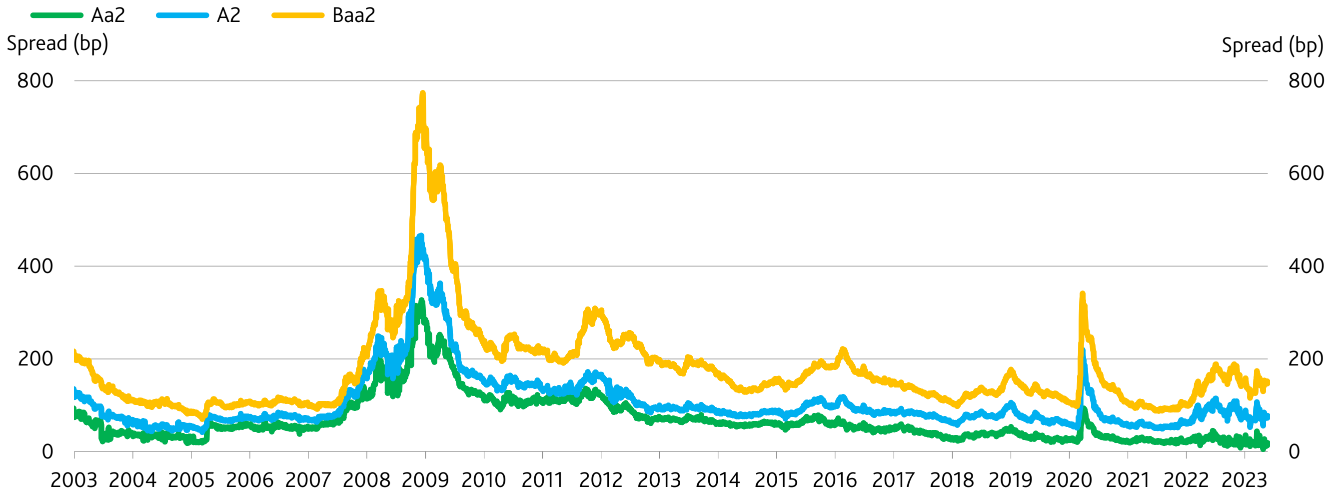
FIGURE 4

Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
5/19/2023	OUTOKUMPU OYJ	Industrial	LTCFR/PDR		U	Ba3	Ba2	SG	FINLAND
5/22/2023	DEUTSCHE LUFTHANSA AKTIENGESELLSCHAFT	Industrial	SrUnsec/LTCFR/PDR/MTN	6040.732	U	Ba2	Ba1	SG	GERMANY
5/27/2023	VEDICI PARTICIPATIONS-ELSAN SAS	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	FRANCE

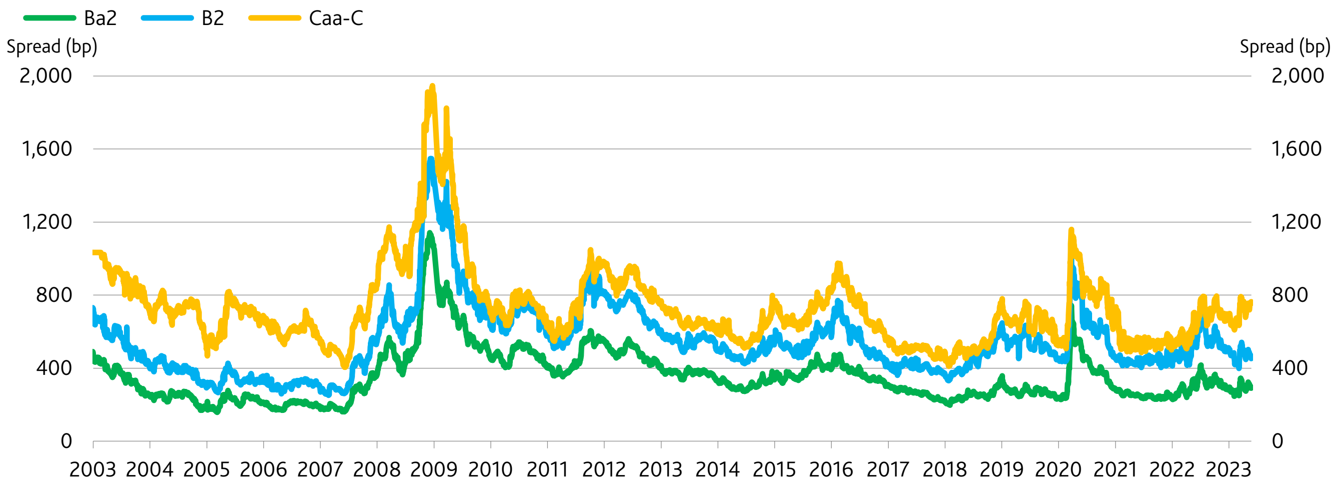
Source: Moody's

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 17, 2023 – May 24, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
Bath & Body Works, Inc.	Ba3	B2	Ba2
Comcast Corporation	A1	A2	A3
Ford Motor Credit Company LLC	Ba3	B1	Ba2
Ford Motor Company	Ba3	B1	Ba2
Bank of New York Mellon Corporation (The)	Baa1	Baa2	A1
Capital One Financial Corporation	Ba1	Ba2	Baa1
Gilead Sciences, Inc.	Aa3	A1	A3
CCO Holdings, LLC	Ba3	B1	B1
Consolidated Edison Company of New York, Inc.	Baa2	Baa3	Baa1
Bank of America, N.A.	Baa2	Baa3	Aa1

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
Thermo Fisher Scientific Inc.	A2	Aa3	A3
Fidelity National Information Services, Inc.	Baa2	A3	Baa2
JPMorgan Chase & Co.	Baa1	A3	A1
JPMorgan Chase Bank, N.A.	A3	A2	Aa2
Oracle Corporation	Baa1	A3	Baa2
Amazon.com, Inc.	A1	Aa3	A1
CVS Health Corporation	A3	A2	Baa2
Amgen Inc.	A1	Aa3	Baa1
International Business Machines Corporation	A2	A1	A3
Walmart Inc.	Aa2	Aa1	Aa2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
CSC Holdings, LLC	B1	2,538	2,085	453
iHeartCommunications, Inc.	Caa1	2,179	2,000	180
Dish DBS Corporation	B3	2,797	2,700	97
Dish Network Corporation	B3	2,486	2,401	86
Lumen Technologies, Inc.	Caa1	2,487	2,410	77
Western Union Company (The)	Baa2	176	134	42
Staples, Inc.	Caa2	2,412	2,371	41
Qwest Corporation	B1	1,045	1,012	32
RPM International Inc.	Baa3	156	129	26
Gap, Inc. (The)	B1	730	705	24

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
Rite Aid Corporation	Ca	5,841	6,076	-235
Liberty Interactive LLC	Caa2	3,159	3,296	-137
Deluxe Corporation	B3	879	972	-93
Anywhere Real Estate Group LLC	B2	947	1,031	-84
Bath & Body Works, Inc.	Ba2	339	416	-77
Unisys Corporation	B3	1,079	1,151	-72
Domtar Corporation	Ba3	812	879	-67
KeyCorp	Baa1	406	472	-66
Kohl's Corporation	Ba3	710	764	-54
Freedom Mortgage Corporation	B2	787	840	-52

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (May 17, 2023 – May 24, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
Piraeus Financial Holdings S.A.	Ba2	B1	B2
Banque Federative du Credit Mutuel	A3	Baa1	Aa3
Commerzbank AG	Baa1	Baa2	A2
SEB AB	Baa1	Baa2	Aa3
UBS Group AG	Baa2	Baa3	A3
Bankinter, S.A.	Baa1	Baa2	Baa1
Alpha Services and Holdings S.A.	Ba2	Ba3	B1
UBS AG	Baa1	Baa2	Aa3
BAWAG P.S.K. AG	A3	Baa1	A2
Vivendi SE	Baa2	Baa3	Baa2

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
Dexia Credit Local	A3	A1	Baa3
Spain, Government of	A1	Aa3	Baa1
Banco Santander S.A. (Spain)	A3	A2	A2
CaixaBank, S.A.	Baa1	A3	Baa1
Credit Agricole S.A.	A2	A1	Aa3
Norddeutsche Landesbank Girozentrale	Baa2	Baa1	A3
Orange	Aa3	Aa2	Baa1
Landesbank Hessen-Thueringen Girozentrale	A2	A1	Aa3
Vodafone Group Plc	Baa2	Baa1	Baa2
Mercedes-Benz Group AG	Baa1	A3	A2

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
Casino Guichard-Perrachon SA	Caa2	18,498	8,834	9,664
Boparan Finance plc	Caa3	2,263	2,200	63
Vedanta Resources Limited	Caa2	2,474	2,455	19
Stagecoach Group Limited	Baa3	246	229	16
ZF Europe Finance B.V.	Ba1	398	385	13
Nexi S.p.A.	Ba2	285	273	12
INEOS Quattro Finance 2 Plc	B2	586	574	12
Schaeffler AG	Baa3	214	204	9
British Telecommunications Plc	Baa2	112	104	7
Hera S.p.A.	Baa2	76	70	7

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
Novafives S.A.S.	Caa2	741	1,095	-354
Trinseo Materials Operating S.C.A.	B3	1,175	1,341	-166
Piraeus Financial Holdings S.A.	B2	302	368	-66
Alpha Services and Holdings S.A.	B1	275	335	-60
National Bank of Greece S.A.	Ba3	203	247	-44
PPF Telecom Group B.V.	Ba1	233	276	-42
Eurobank Ergasias Services and Holdings S.A.	B2	231	270	-38
Garfunkelux Holdco 3 S.A.	Caa2	1,593	1,630	-37
Marks & Spencer p.l.c.	Ba1	216	250	-34
Carnival plc	B3	824	857	-33

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (May 17, 2023 – May 24, 2023)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
Mizuho Financial Group, Inc.	A2	A3	A1
Development Bank of Japan Inc.	A1	A2	A1
Bank of East Asia, Limited	Baa2	Baa3	A3
Nomura Holdings, Inc.	Baa2	Baa3	Baa1
SoftBank Group Corp.	Ba2	Ba3	Ba3
Korea Gas Corporation	A1	A2	Aa2
NIPPON STEEL CORPORATION	Aa2	Aa3	Baa2
Sydney Airport Finance Company Pty Ltd	Baa2	Baa3	Baa1
Aurizon Network Pty Ltd	A1	A2	Baa1
GMR Hyderabad International Airport Limited	Ba2	Ba3	Ba3

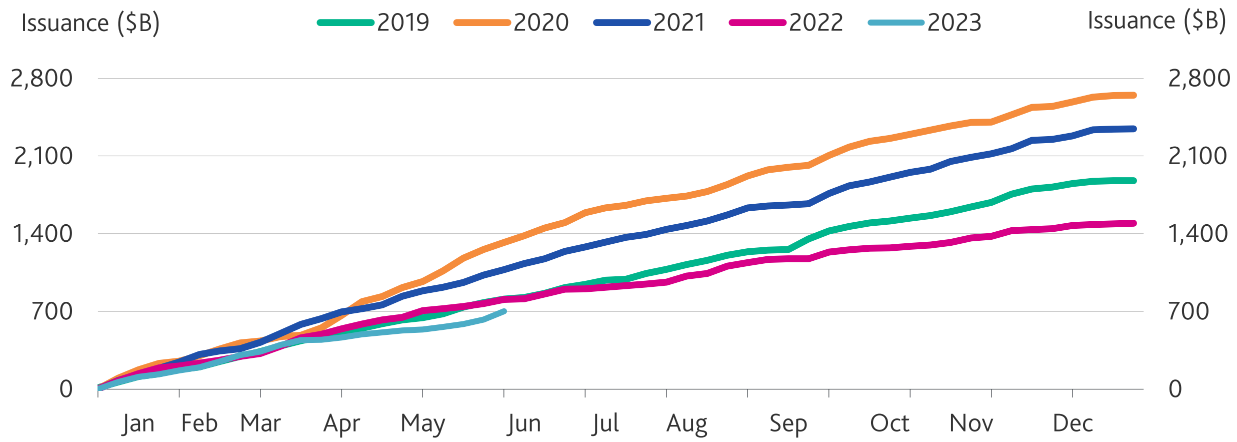
CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	May. 24	May. 17	Senior Ratings
China, Government of	A3	A2	A1
Mitsubishi UFJ Financial Group, Inc.	A2	A1	A1
Westpac Banking Corporation	A3	A2	Aa3
Sumitomo Mitsui Trust Bank, Limited	Baa1	A3	A1
Australia and New Zealand Banking Grp. Ltd.	A2	A1	Aa3
NBN Co Limited	Baa2	Baa1	Aa3
Thailand, Government of	A1	Aa3	Baa1
DBS Bank Ltd.	Aa2	Aa1	Aa1
Hong Kong SAR, China, Government of	Aa3	Aa2	Aa3
Kansai Electric Power Company, Incorporated	Aa2	Aa1	A3

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
Vanke Real Estate (Hong Kong) Company Limited	Baa2	394	382	12
Tata Motors Limited	B1	267	259	8
Nissan Motor Co., Ltd.	Baa3	167	160	7
NBN Co Limited	Aa3	85	79	6
LG Electronics Inc.	Baa2	86	80	6
India, Government of	Baa3	93	90	4
MTR Corporation Limited	Aa3	37	34	3
Thailand, Government of	Baa1	52	50	2
Hong Kong SAR, China, Government of	Aa3	44	42	2
Kazakhstan, Government of	Baa2	151	149	2

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 24	May. 17	Spread Diff
Adani Green Energy Limited	B2	868	899	-30
SoftBank Group Corp.	Ba3	279	308	-29
SK Hynix Inc.	Baa2	187	209	-22
Development Bank of Kazakhstan	Baa2	220	239	-19
GMR Hyderabad International Airport Limited	Ba3	294	313	-19
Boral Limited	Baa2	138	155	-17
Flex Ltd.	Baa3	139	153	-14
Rizal Commercial Banking Corporation	Baa3	85	98	-13
SK Innovation Co. Ltd.	Baa3	267	279	-12
Sydney Airport Finance Company Pty Ltd	Baa1	108	119	-11

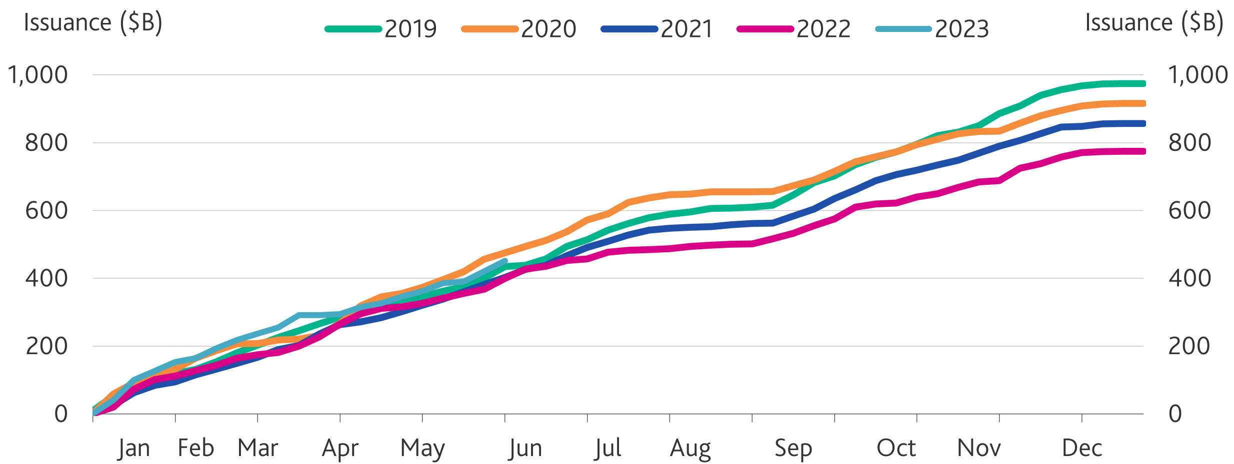
Source: Moody's, CMA

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	65.631	8.330	74.151
Year-to-Date	603.702	83.813	700.454

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	29.596	1.646	31.242
Year-to-Date	405.409	28.848	451.593

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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