MOODY'S

WEEKLY MARKET OUTLOOK

AUGUST 17, 2023

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Looking Good, So Far

The Moody's Analytics high-frequency GDP estimate for the U.S. third quarter rose from 3.4% annualized to 4.3% with the latest data on consumer spending and inflation. U.S. retail sales posted their fourth straight month of healthy growth in July. Total sales rose 0.7%, higher than our above consensus estimate of 0.5%, after rising 0.3% in June and 0.7% in May. Core sales, excluding vehicle dealers and gasoline stations, rose much stronger than expected by 1%. Gains were led by nonstore retailers, sporting goods and hobby stores, restaurants, and apparel stores. Modestly offsetting declines were led by furniture and electronics and appliance stores. Year-over-year growth accelerated as sales fell in July 2022, coming in at 3.2%, up from a revised 1.6% in June.

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There are many supports to retail sales. Income remains inflated by the cost-of-living adjustments to government payments, which took place in January. Job growth remains healthy, supporting growth in real wages, and there are still abundant job openings allowing many workers to lift their pay by switching jobs. Also, debt burdens remain near historic lows.

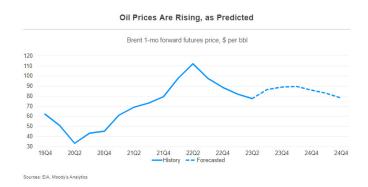
It is still early in the quarter, and our model's reliability increases as more source data become available. Our current high-frequency estimate expects consumer spending, particularly on services, drives the lion's share of third-quarter GDP growth. Looking at our high-frequency GDP model's estimate across the remaining components, nothing was surprising. Two of the more volatile GDP components, net exports and the inventory build, are expected to deliver positive contributions to growth in the third quarter. Together, the two components were neutral in the second quarter.

Unlike the first two quarters of the year, where our early estimates rose incrementally throughout the quarter, we expect third-quarter GDP growth is pulled downward with the release of more source data. Early data have been strong, but we do not expect growth to run too far ahead of the U.S. economy's estimated potential.

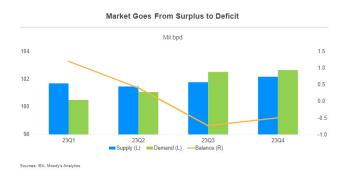
Moody's Analytics and Moody's Investors Service maintain separate and independent economic forecasts. This publication uses the forecasts of Moody's Analytics. Moody's Analytics markets and distributes all Moody's Capital Markets Research materials. Moody's Analytics does not provide investment advisory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

The oil wild card

Déjà vu is rippling through the economy as energy prices are on the up again. Oil prices have appreciated a considerable amount this summer, with Brent prices accelerating to about \$87 per barrel from \$74 at the start of July. Arguably, the biggest potential risk to retail sales is another jump in energy prices. While this would support sales at gasoline stations and fuel oil dealers, their gains would be other retailers' losses.



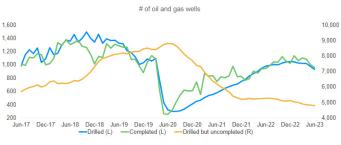
Rising demand and shrinking supply are boosting energy prices. Saudi Arabia continues to extend its 1 million-barrel per day voluntary production cut, while Russian exports are beginning to falter, leaving the market undersupplied. Simultaneously, China's reopening, while not as strong as expected, is boosting international demand. As a result, we expect a deficit of 734 million bpd in the third quarter and 493 million bpd in the fourth.



The deficit is already hurting oil inventories. The most recent weekly data showed inventories up by 5.9 million barrels, but that only reversed some of the prior week's 17-millionbarrel decline, the largest in history. As the world's largest oil producer, the U.S. can reduce the deficit and dampen energy price increases. The U.S. is producing about 12.6 million barrels per day now, its highest level of production postpandemic. Production is growing at about 8% year over year, and if the U.S. were to maintain this growth rate it would bring the market back into balance by the fourth quarter, all else equal. Increasing oil supply would be the most effective route in mitigation of energy inflation risks. However, it remains to be seen whether U.S. producers will jump on the chance to produce at this higher price point. Last year, firms capitalized on high prices by increasing cash reserves and paying down debts. This year, prices have been consistently above firms' break-even prices, but leading production indicators from the Dallas Fed surveys have been soft.

In the longer run, drilled-but-uncompleted well data suggest there is a limit on how much oil producers will be able to bring to market. Producers are completing wells faster than they are drilling them to boost near-term production. This is causing producers to tap into their existing DUCs, which have been declining since June 2020 and are at their lowest level since 2014.

Producers Relying on DUCs to Boost Production



Sources: EIA, Moody's Analytics

Newly drilled wells are declining as well, implying the DUC count has not finished its downward slide. Without an adequate supply of DUCs, producers will have a difficult time increasing production growth and will be limited in the long run.

FOMC sings a different tune

The Federal Open Market Committee returned to raising rates when it met in July. Minutes from the meeting, released Wednesday, show policymakers feel better about the U.S. economy's near-term trajectory. No longer do they expect a mild recession in 2023. However, this same momentum poses considerable upside risk for inflation and keeps alive the possibility of further rate hikes.

Policymakers believed in July that recent inflationary data have been encouraging but insufficient to instill confidence that upward pressure on prices was finally abating. Since their last meeting more evidence that inflation is trending in the right direction has been released. This has increased our confidence that the rate-setting FOMC's tightening cycle has reached its peak.

TOP OF MIND

Economy Faces Risky Ride if UAW Strikes

BY MICHAEL BRISSON

The normalization of the <u>U.S.</u> auto market is starting to come into view. Production of vehicles hit their first quarterly SAAR above the 2019 average in three years. Rising inventories are putting downward pressure on vehicle prices, the poster-child for supply-chain-related price increases. The Moody's Analytics Used-Vehicle Price Index reports used-vehicle values 19% below peak levels. New-vehicle transaction prices and <u>CPI</u> have been flat or slightly decreasing for months as sale incentives seep slowly back into the market. Nevertheless, the U.S. auto industry has a sizable roadblock on the horizon.

Recent progress may be upended by a slowdown in U.S. auto production due to a strike by the United Auto Workers union. Work stoppages are nothing new for auto assembly lines, but the contours of this strike are more concerning than usual. The first difference is the UAW appears to be targeting all Big Three U.S. automakers (Ford, GM, Stellantis), rather than the prior tactic of negotiating with one of the three and then using that as the basis for an agreement with the other two. In addition to the increased scope, the auto market and macroeconomic expansion remain shaky. New-vehicle inventories are well below longrun averages and additional supply decreases threaten to drive up already elevated vehicle prices as the <u>Federal</u> <u>Reserve</u> continues its battle against inflation.

Beyond the extended scope and low inventories, the timing will align with other known and likely economic events. These include the restarting of student loan payments and a possible government shutdown. The UAW contract is set to expire September 14. Given how the stage is set, the macroeconomic ramifications of a prolonged shutdown will be larger than past experiences. All of this has made estimating the magnitude of a strike's macroeconomic consequences more important than ever.

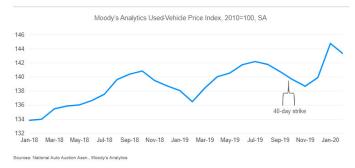
To approximate the ramifications of a strike it is useful to try and tease out impacts from previous similar events. The most useful will be the UAW strike of GM workers in late 2019. This will serve as the best test case because of its recency as well as its extended duration—40 days.

The first area of concern are possible declines in total <u>U.S.</u> <u>GDP</u>. Approximately 3% of U.S. GDP is tied to the U.S. auto industry. Depending on how it is calculated, this comes in the form of income produced or the total output from the production of vehicles, parts and services. The percentage of this 3% that comes from the auto sector that is made up by the Big Three and their suppliers is less than half when accounting for percentage of domestic sales plus exports. This leaves less than 1.5% of GDP exposed to a potential strike.

Looking at U.S. GDP from 2019, there is no indication that the third quarter of 2019 output was significantly changed by the strike. Moreover, looking at the same measures for Michigan, the most auto-dependent state, also does not present a clear case for a large drop in output from the strike that took place during one-third of the quarter. This is not surprising given the company had inventories left to sell from previous production and workers were still spending due to savings accrued in preparation of a work stoppage. This is in addition to spending from payments provided by the UAW to its members during the strike period.

Used-vehicle prices from the period also do not present any substantial movement stemming from the 2019 strike. Used-vehicle prices would be expected to rise as the supply of the substitute good of new vehicles is decreased. As shown, used-vehicle prices demonstrated some weakness in the second half of 2019, the opposite of what theory would expect.

Used-Vehicle Prices Go Down During Strike



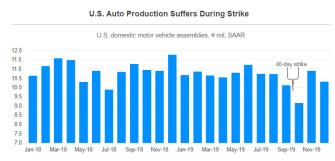
Still, pure observation of the top-line numbers does not tell the whole story. GM announced to shareholders that the strike cost the company \$36 billion in lost revenue from the 2019 strike. A \$36 billion drop on a quarterly output of about \$5.4 trillion at the time would be a 0.66% drop in quarterly GDP. However, this is a drop for one company and much of this spending went to other goods and services, other vehicle manufacturers, or other quarters. As a result, the real hit to the U.S. economy is not accurately measured by the losses to a single corporation.

Using input/output models the Center for Automotive Research concluded the total loss of incomes from the 2019 strike was \$857 million per week. For a 40-day strike, this puts income losses at about \$5 billion, or 0.09% from quarterly GDP. It is not surprising this amount might get washed out in the overall numbers.

Three companies

Still, let us use this number as an exercise. First, assume the same representation in the U.S. economy as four years ago then multiply it by the increased scope of the two additional companies. This gives a total impact of 0.29% off quarterly GDP from a strike of 40 days. Another small note on measurement; since it is happening in mid-September, any impact will be spread between two different quarters. The exercise shows that although the strike is significantly impactful for the industry and its workers, it is less of an event for the whole of the U.S. economy.

Despite a lack of significant direct loss of GDP, a prolonged reduction in new-vehicle supply will likely push up new- and used-vehicle prices. During the 2019 strike, GM estimated that about 300,000 units were not made as a result of the strike. This drop in production is obvious looking at U.S. production numbers from the period. Still, as shown before, the loss of vehicles did not have any discernible impact on used-vehicle prices. Today we are in a different situation. Auto inventories reported by the Bureau of Economic Analysis are 75% below where they were in August 2019.



Sources: Federal Reserve, Moody's Analytics

The dearth of new-vehicle inventory has led to wild fluctuations in new- and used-vehicle prices. For instance, first-quarter U.S. vehicle production was 2% lower than the prior quarter. In response, wholesale used-vehicle prices shot up 6% for the quarter. This was aided in part by limited lease returns and seasonality, but the decreased production was also partially to blame for the rise in prices, showing current sensitivity to supply.

Using the 900,000 units reported lost for GM in 2019 and multiplying across the three companies, this would be more than 30% of U.S. production for a quarter. Such a

contraction in supply would send used-vehicle prices higher. Based on the experience from 2022 and the start of 2023 this size reduction in production will result in a jump in used-vehicle prices of more than 10% going into the fourth quarter.

New-vehicle prices will not respond in the same way. MSRP for new vehicles places an upper bound on price. Dealerships are not supposed to charge more than this amount. This is not always the case, but there are many adherents to this policy. Thus, the new-vehicle CPI will not respond to the pressure in large ways in 2023, but there will be spillover into 2024 as pressure on new-vehicle prices continues due to lower supply. New-vehicle prices may well be 5% to 10% higher than they would have been in 2024 if a triple-whammy strike of around 40 days occurs.

Second-order effects

Second-order impacts from a rise in vehicle prices are important to note. The rise in vehicle prices has led to increased cost of repair as people hold on to vehicles longer and there is more demand on mechanics. Also, auto insurance costs have shot up as vehicle replacement and parts are now significantly more expensive. Still, the most important second-order impact is what happens to overall inflation.

Vehicle purchases make up 7% of the basket used for headline CPI. If we see an increase of 5% in new-vehicle sales and an increase of 10% in used-vehicle sales between now and the end of the first quarter, vehicle prices will go from being an expected drag of an average of 20 basis points on yearly inflation growth each quarter for the next year to being an increase of 20 basis points to forecast headline inflation growth. This is before any second-order impacts.

Stubborn inflation is what the Fed is fighting. Any increases in vehicle prices will be another thorn in the side of Fed policymakers as they look to finish the job on a soft landing for the U.S. economy. Beyond auto-reliant metro areas, a strike lasting a month or two will not have significant negative impacts on top-line GDP growth. However, if supply constraints from a lack of a deal with the UAW cause inflation to regain steam, the Fed may rethink its pause in interest rate target increases. If this happens, the real cost of a UAW work stoppage to the U.S. economy will be much larger than any time in history.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar will slow to a crawl, though a few key data points will emerge. Data on new and existinghome sales are unlikely to change the story of existinghome sales remaining at rock-bottom levels with many homeowners feeling locked-in to their current homes given low fixed-rate mortgages.

As has been the case in recent months, the labor market will remain crucial as we monitor for any signs of a potential slowdown. Jobless claims provide labor market insight with the shortest lag time. Initial claims swung higher last week after a period of softening but remain well below the breakeven level—which we estimate to be around 265,000. Any sustained increase in the level of claims would likely be a leading indicator of further deceleration—or potential reversal—of monthly job gains.

Other key data to be released next week include advanced durable goods and the University of Michigan consumer sentiment.

Asia-Pacific

Central banks across the Asia-Pacific region look to be mostly done with tightening monetary policy. The Bank of Korea will keep policy settings steady at 5.5% in August. It was the region's first major central bank to begin its tightening cycle, and its most recent hike was in February. With inflation cooling, the need for further tightening has abated. Still, the BoK has made clear that monetary policy needs to remain restrictive to ensure inflation sustainably returns to its 2% target. Elsewhere, receding headline and core inflation in Indonesia will see that country's central bank also keep its policy rate on hold.

Europe

The finalized estimate of German GDP is due next Friday. Based on the preliminary release, Germany's GDP is widely expected to have stalled in the second quarter of the year. We think German consumers likely did keep GDP stable. Retail trade recovered during the quarter, and there was likely a boost from the services sector. Net trade, meanwhile, likely contributed to growth. But this will be due to weaker imports than exports. Investments likely subtracted from the economy, as we saw via the contraction in industrial production and construction output during the period.

Meanwhile, we expect the number of job seekers in France, once again to have remained largely unchanged at 2.8 million for July. The labour market in France is staying tight this summer thanks in part to the boom in tourism and the services sector. That said, the overall economy is soft and there are risks of layoffs particularly in the manufacturing sector. But we think firms will first look to cut hours before resorting to layoffs.

Finally, industrial production in Russia likely grew 5.1% year over year in July following a 6.5% increase in June. Both domestic and external demand have recovered since this time last year. The July manufacturing PMI showed a stillstrong sector with rising new orders and employment.

Latin America

The upcoming week in Latin America is a light one on the economic calendar, with Peruvian second-quarter GDP and Argentina retail sales and overall economic activity for June the sole data drops among the region's major economies. By and large, this batch of hard data is backward looking, covering the end of the second quarter in Argentina and Peru. But the incoming figures will in all odds be on the weak side, foreshadowing to the two economies' more recent struggles.

Argentina's economy likely tilted into recession this summer amid triple-digit inflation and a reserve-hollowing drought. The prospect of a dramatic change in leadership after last weekend's primary elections will not help. Peru's ongoing political crisis and mining sector troubles continued to hamper confidence in recent months, and we expect only meager growth this year after trading quarters of growth and expansion. Barring Mexico and Brazil, which have consistently outperformed our expectations, struggles in the region will exceed triumphs.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk	Risk Assessment
20-Aug	Ecuador	Presidential election, first round	Medium	Low	The assassination of presidential candidate Fernando Villavicencio, who mounted an anti- corruption campaign, highlights the growing security, political, and policy challenges facing the eventual victor.
20-Aug	Guatemala	Presidential election, run-off	Medium	Low	The disqualification of leading candidate Bernardo Arévalo's political party casts more uncertainty over the future of the democratic process.
22-24 Aug	BRICS	South Africa hosts 15th BRICS Summit	Medium	Medium	On the agenda is a debate over the adoption of a BRICS common currency, an alternative to the USD for global trade.
5-6 Ѕер	Russia/ Central Asia	Eastern Economic Forum	Medium	Low	The forum will serve as a 'check-up' on the Russia- Asia cooperation and signal whether Russia can continue to depend on its allies in the region to withstand sanctions.
9-10 Sep	G-20	India hosts G-20 summit	Low	Low	The G-20 members represent close to 85% of global GDP, making it the premier forum for updates about global economic cooperation.
12-30 Sep	U.N.	General Assembly, New York	Low	Low	
1-Oct	United States	Potential government shutdown	Low	Low	Following a recent stand-off over the debt limit, risk of a standstill over next year's funding package lean to the upside, but history suggests the economic impact will be limited.
22-Oct	Switzerland	Federal elections	Low	Low	
26-27-Oct	EU	European Council summit	Low	Low	
29-Oct	Argentina	General election	Medium	Medium	The highly contested election might yield a drastic shift in economic policy and the country's political orientation. The ruling leftist coalition faces an uphill battle with two opposition candidates having strong showings in recent polls.
Oct/Nov	ASEAN	Indonesia to host ASEAN summit	Low	Low	Followers will watch for any policy developments regarding closer regional relations in the South China Sea, which is critical for global sea trade.
Oct/Nov	Poland	Parliamentary elections	Low	Low	
Nov	APEC	Economic leaders' meeting, to be held in San Francisco, U.S.	Low	Low	The APEC summit will be watched for the latest cooperation agenda between members on goods, services, investment, and people.
6-17 Nov	U.N.	COP 28, to be held in Dubai, UAE	Low	Low	
22-Nov	Netherlands	General election	Medium	Low	After a volatile first half of 2023 for Dutch politics, this snap election will determine whether the growing populist, right-wing presence will cement itself in the nation's politics.
14-15-Dec	EU	European Council summit	Low	Low	
31-Dec	U.S.	Deadline for enactment of FY24 National Defense Authorization Act	Medium	Low	As the U.S. faces a growing set of national security challenges from competitors like China and military aggressors such as Russia, Iran, and North Korea, appropriate funding has become increasingly necessary to combat external risks.
			N		The election will have deep ramifications on the
13-Jan	Taiwan	Presidential election	Medium	Medium	trajectory of U.SChina relations.

Corporate Bond Investors Upbeat on Economy

BY OLGA BYCHKOVA

CREDIT SPREADS

Corporate credit spreads widened through the first half of August but remained tight in general. Narrow credit spreads show market participants remain confident in the creditworthiness of borrowers and see the overall economy as favorable. As a result, despite monetary policy tightening worldwide, market participants see a high likelihood for a "soft landing." This has been underpinned by healthy corporate balance sheets, persistent strength in consumer spending, and a relatively low level of corporate defaults this year. The Moody's Investors Service long-term average corporate bond spread to the 10-year U.S. Treasury has narrowed by 2 basis points to 144 bps but remained above a 12-month low of 139 bps. Similarly, Moody's long-term average industrial bond spread decreased marginally by 1 bp to 125 bps over the past week. That is slightly higher than a one-year low of 120 bps.

Low-grade credit spreads—the difference between the yield on high-yield or below-investment-grade corporate bonds and the risk-free 10-year Treasury yield—have also trended lower since spiking to over 500 basis points in the wake of the banking crisis in March. This yield spread represents the compensation investors demand for the risk that businesses they invest in could run into financial trouble and miss making timely principal and interest payments. The U.S. Bloomberg/Barclays high-yield option-adjusted spread declined to 374 bps from 385 bps the previous week, while the ICE BofA U.S. high-yield option-adjusted bond spread closed Wednesday at 381 bps, down 13 bps from its value last week. This compares with an average high-yield spread of 1,000 bps during recent recessions and an average 350 bps outside of recessions. The average spread since the highyield market was established in the 1990s is about 500 bps. In the past there has been a significant correlation between credit spreads and equity market volatility, as measured by the VIX. This relationship was disrupted in recent years, but the recent decline in the VIX has brought it back in line with high-yield spreads.

GLOBAL DEFAULTS

Moody's Investors Service reported nine corporate debt issuers defaulted in July, the second lowest this year, down from the upwardly revised count of 14 in June. Defaults fell in advanced markets but edged up in emerging markets, with stress among China's property developers resurfacing. The six defaulters from advanced markets were Accuride Corporation, Anchor Glass Container Corporation, Exela Intermediate LLC, JP Intermediate B LLC, Mallinckrodt International Finance S.A., and Solocal Group S.A. All are from the U.S. except Solocal Group, which is based in France. Among these six defaults, half arose from distressed exchanges and the other half were due to missed payments. The three emerging markets defaulters in July were Brazilbased Azul S.A., Indonesia-based Agung Podomoro Land Tbk (P.T.), and China-based Greenland Holding Group Company Limited.

July's defaulters increased the year-to-date tally to 92. Across sectors, business services are the largest contributor to year-to-date defaults, with 10. Healthcare & pharmaceuticals and telecommunications followed with eight each. By region, North America had 64 defaults (62 in the U.S. and two in Canada). The rest were from Europe (16), Latin America (8) and Asia-Pacific (4).

Despite the recent slowdown in monthly defaults, the trailing 12-month global speculative-grade default rate rose to 4% at the end of July from 3.9% a month earlier. Moody's Investors Service forecast the rate to trend higher over the remainder of 2023, reaching 4.5% in December and surpassing the long-term average of 4.1%. In 2024, the credit agency expects the default rate to peak at 4.7% in March before easing to 4.3% in July. The peak rate forecast was revised downwards from 5.1% previously due to July's tightening in U.S. high-yield spreads and a downward revision in the high-yield spreads forecast for the second half of this year. Moody's Investors Service's latest baseline default rate forecasts incorporate the assumptions that the U.S. high-yield spread will widen to 528 bps over the next four quarters from about 370 bps at the end of July and that the U.S. unemployment rate will rise to 4.9% from 3.5% in the comparable period.

While U.S. economic activities remained resilient in the first half of this year, the U.S. economy is expected to slow in upcoming quarters. This slowdown will constrain aggregate demand, putting pressure on corporate earnings and cash flows. In addition, high interest rates have significantly raised companies' debt-service burdens, particularly those that rely heavily on floating rate loans. Although the fed funds rate is probably near its peak, Moody's Investors Service expects the Federal Reserve to maintain a tight monetary policy stance this year to facilitate further steady disinflation to the central bank's target. Low-rated companies will continue to struggle to meet refinancing and liquidity needs as they contend with interest rate pressure, tight lending conditions, and worsening operating performance as the economy slows.

CORPORATE BOND ISSUANCE

In the first quarter of 2022, worldwide offerings of investment-grade corporate bonds totaled \$901 billion, up 12% on a year-ago basis.

Corporate bond issuance proceeded to weaken in the second quarter of 2022. Worldwide offerings of investmentgrade corporate bonds totaled \$548 billion, down 21% on a year-ago basis. U.S. dollar-denominated high-yield corporate bond issuance was \$38 billion in the second quarter, down from \$63 billion in the first three months of the year. High-yield issuance was down 79% on a year-ago basis.

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

Corporate debt issuance remained suppressed in the fourth quarter of 2022. U.S. dollar-denominated high-yield issuance ended the year at \$2.47 billion, reflecting a drastic 77% decline from 2021. Meanwhile investment-grade bond issuance totaled \$1.29 trillion in 2022, corresponding to a 20.8% decline from 2021. Over the past 12 months, total U.S. dollar-denominated issuance has tracked at a neardecade 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. U.S. dollar-denominated investment-grade 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 the year since 2008, and posting a 15% decline compared to the first quarter of 2022.

Issuance strengthened in the second quarter of 2023 as worldwide offerings of corporate bonds revealed a yearover-year increase of 26.8% for investment grade. Highyield issuance in the period nearly doubled the amount recorded in 2022. Approximately 60% of U.S. dollardenominated high-yield proceeds in the period were allocated to debt refinancing. U.S. dollar-denominated investment-grade debt issuance totaled \$36.4 billion in the most recent week, bringing the year-to-date figure to \$853.65 billion. This reflects a 11.7% decline when compared to the same period in 2022.

Meanwhile, there was \$3.56 billion in high-yield debt issued, raising the total to \$118.43 billion this year. High-yield issuance has outstripped early-year expectations, increasing 12.2% relative to last year's pace. Total U.S. dollardenominated corporate debt issuance now tracks 10.6% below where it stood in 2022 and is 36.9% lower compared with 2021.

U.S. ECONOMIC OUTLOOK

The U.S. economy continues to show significant resilience, consistent with our expectations but somewhat stronger than the Federal Reserve desires. Consequently, we made only modest adjustments to the U.S. baseline forecast based on new data and a small modification about our assumptions regarding future actions by the Fed. Fundamentally, however, the outlook remains essentially the same and the pace of annual GDP growth has only modestly changed, largely in response to second-quarter data.

We have not changed our estimate of the terminal fed funds rate, or when rate cuts will begin, but have altered our expectations about the pace of rate cuts as inflation moderates only gradually. We still expect increases in demand from growing economies, and actions of OPEC+ and Saudi Arabia will push oil prices higher, and therefore did not change our price outlook much despite recent increases. The strong second-quarter data result in a measurable but not huge upward revision to the outlook for business investment. Fiscal policy assumptions changed little, though the fiscal outlook continues to deteriorate somewhat more than anticipated. The outlook for the 10year Treasury is only a little changed and mostly in the verynear term.

Monetary policy

We made modest adjustments to the assumptions about monetary policy compared with the last update, but only to 2024 and after. As in the previous outlook, we expect that the Fed's July 25-basis point rate hike was the last of the current tightening cycle and that the policy rate has reached its terminal range of 5.25% to 5.5%. Likewise, we anticipate that the Federal Open Market Committee will start lowering rates by June of next year. However, we now expect that the Fed will relax monetary policy more slowly than previously anticipated, cutting rates by about 25 basis points per quarter until reaching 2.75% by the fourth quarter of 2026 and 2.5% in 2027. This shift reflects more persistent than anticipated inflation in early 2023 and ongoing labor market tightness, which have caused similar revisions to the FOMC's projections.

The Fed continues to balance inflation and labor market tightness against financial conditions. The June figure for inflation in personal consumption expenditures trended in the right direction, with year-ago core inflation falling to 4%, after coming in steadily above 4.5% from last December through May. Further, job growth slowed to 218,000 on a three-month moving average basis in July, compared with 335,000 in January, but the 218,000 pace is still relatively strong. The jobless rate remains at 3.5%. While wages in the second quarter grew faster than inflation, we expect these pressures will slowly fade. Likewise, our baseline does not predict that rising oil prices since July will reignite inflation sufficiently for the Fed to hike rates further. Tighter financial conditions, meanwhile, will exert further downward pressures on demand and prices. Our baseline assumes that banks will continue to limit credit growth, but that the financial system will overall remain stable.

Inflation remains the key to our outlook. The August vintage has consumer price inflation at 3.2% year over year by the end of 2023, essentially unchanged from the previous outlook. As in the previous baseline, we anticipate inflation to approach the Fed's target range around the third quarter of 2024. We continue to expect that remaining inflation pressures from shelter and other U.S. service industries will soften. We also still believe a soft landing to be the most likely outcome for the U.S. economy, thanks to the resilience of consumers and labor markets.

Financial conditions, meanwhile, will remain tight. The 10year Treasury yield rose from 3.85% to 4% from July through early August, averaging 3.6% in the second quarter. We anticipate that the yield will average 4% in the third quarter, and then decline slightly until 2025, averaging between 3.8% and 3.9%. However, despite rising interest rates and mixed earnings reports for the second quarter, stock prices gained more ground in July, thanks to easing inflation data.

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

Changes to GDP growth

U.S. real GDP rose 2.4% annualized in the second quarter, according to the Bureau of Economic Analysis' advance estimate. It was the fourth consecutive quarter in which

growth was at or above the economy's potential, though likely it will be the last for some time. Inventories switched from a major drag to a small support. Rising consumer spending, government spending, nonresidential business investment, and lower imports contributed to the gains. On the other hand, exports and residential investment weighed on growth. Growth exceeded the prior forecast by 0.9 percentage point annualized, lifting the outlook for the calendar year. Nonetheless, the baseline outlook remains that the Fed will accomplish its goal of slowing growth in both output and inflation without precipitating a recession.

Although consumer spending remained a source of growth, its contribution shrank compared with the first quarter of 2023 in which cost-of-living adjustments had boosted aftertax income. Still, consumer spending added 1.1 percentage points to growth. Government contributed about 0.5 percentage point with state and local spending leading the gain. Nonresidential fixed investment improved measurably, adding 1 percentage point to growth, its largest contribution since the first quarter of 2022. Residential investment continued to slide, pulling growth down by 0.2 percentage point. Trade subtracted 0.1 percentage point from growth with a 1.3-percentage point drag from exports mostly offset by falling imports.

The strong second-quarter growth will provide momentum for the third quarter, after which growth will decelerate more visibly late in the year and early next year. The forecast for third-quarter growth is higher than previously forecast for real GDP and most of its major components. Postponed inventory growth will add significantly. The net effect is stronger real GDP projected for this year, but similar next year, and weaker in 2025. On an annual average basis, growth is projected to be 2% in 2023 and 1.3% in 2024, compared with projections of 1.7% and 1.1%, respectively, in the July outlook. Growth returns to trend in 2025.

Fiscal policy

The near-term federal fiscal outlook is worse than previously expected. The federal budget deficit will amount to \$1.7 trillion in fiscal 2023, or 6.5% of GDP. This is up from the \$1.5 trillion projected budget shortfall under the July vintage of the U.S. baseline forecast. A couple of factors are contributing to the expected deterioration in federal fiscal conditions. The 12-month rolling sum of non-withheld individual income taxes is collapsing, albeit from elevated levels, due to reduced capital gains and the postponement of the tax filing deadline for disaster-area taxpayers in California, Alabama and Georgia from April 18 to October 16. In addition, Congress enacted an almost 10% increase in nonemergency, base discretionary funding for the current fiscal year, which has led to a noticeable acceleration in the national defense outlay. Further, the likelihood of a government shutdown on October 1 is higher than it was immediately following the passage of the debt limit deal. In June, a small bloc of hardline Republicans, who want sharper spending cuts than the ones brokered by House Speaker Kevin McCarthy and Biden, brought legislative action on the House floor to a weeklong halt. They are threatening to block all 12 government funding bills unless fiscal 2024 appropriations are cut even lower toward fiscal 2022 levels. In the current baseline, Moody's Analytics is holding off from incorporating a shutdown, but this is subject to change in the next few months. Shutdowns are needless drags on the economy, but their economic costs are not too significant. During the Trump presidency, the 35-day shutdown, the longest on record, was estimated to have reduced the level of real GDP by only 0.1% in the fourth quarter of 2018 and 0.2% in the first quarter of 2019.

Energy

Moody's Analytics has slightly increased its oil price forecast for the second half of 2023. Prices have been rising due to a tightening market. Saudi Arabia has voluntarily cut output by 1 million barrels per day, and Russian exports are beginning to dip under the weight of sanctions. As a result, our fourth-quarter Brent price forecast has been increased by \$2 per barrel to \$89 per barrel.

The tightening oil market was already a feature of our forecast, so the recent developments do not affect our outlook. We have assumed for most of the year that China's resurgence would increase demand, while OPEC+ output cuts and slow growth from the U.S. would limit supply. China's rebound has so far been subdued due to poorly performing manufacturing. Nonetheless, the declines in supply have been enough to keep prices moving upward.

Labor market

The job market is now clearly slowing, a welcome sign for the Fed, as it aims to tame inflation through softer demand in the economy. Nonfarm payrolls rose a weaker-thanexpected 187,000 in July, essentially matching June's downwardly revised increase. The three-month moving average of total job gains has gone from 334,000 at the start of this year to 218,000 as of July. Excluding the public sector, the slowdown has been more pronounced. Industries like manufacturing, professional/business services, leisure/hospitality and retail have all slowed noticeably in terms of job gains since the start of the year.

The slowdown in the pace of job growth is corroborated by the household survey data, which show that although the unemployment rate ticked lower to 3.5% in July, household survey employment and labor force growth have also slowed since the year's start. Job openings, quits and hires have also declined from their all-time highs, further indicating that the labor market is loosening up. However, data on unemployment insurance claims remain at relatively low levels without any meaningful uptick recently to suggest that layoffs are accelerating.

While job growth appears to be slowing gracefully, wage growth is still too high to bring price inflation down to the Fed's 2% target. Wage growth in the payroll survey accelerated in July and has not changed meaningfully over the last seven months. Other surveys of wage inflation, which are more reliable, do show slowing in wage growth, though that has occurred at a slower pace than anticipated. This makes the job for the Fed trickier as it attempts to fight inflation by slowing demand for core services. The bottom line is that this seems to be happening with job growth but not yet with wage growth.

The forecast for the key labor market indicators is unchanged from last month. The forecast does not expect a sub-100,000 per month increase in payrolls until the final quarter of this year. Not until 2024 will monthly job gains be very weak at fewer than 50,000 per month on average. The unemployment rate will rise to 3.7% by the end of the year as monthly job growth is enough to keep it from rising further. The rate will peak at 4.2% in mid-2025 before slowly trending lower thereafter. Wage growth will continue to decelerate and by this time next year will be approaching 3.5% as measured by the employment cost index, which is right around where it should be to reach the Fed's inflation target.

Business investment and housing

The advance report for second-quarter GDP revealed that growth in real business investment was substantially higher than had been projected. Total real capital spending rose 7.7% annualized compared with the July forecast of just 0.7%. All major segments, equipment and structures and intellectual property, were much stronger than anticipated.

Equipment rose nearly 11% annualized compared with the July forecast of little or no gain. The largest contributor was aircraft, which rose more than 90% annualized, back to near the record peak in the fourth quarter of 2022. Airlines are investing heavily now that the pandemic is over and the previous safety issues of the Boeing 737 MAX have been resolved. Light trucks also jumped, 75% annualized. This to a large extent reflects purchases by car rental companies since much of the segment includes vehicles available for personal use. Recent growth in vacation activity is consistent with this outcome.

Structures rose nearly 10% annualized, well above the July projection for modest growth. Virtually all the unexpected

gains were construction of new factories, up more than 90% annualized, mostly reflecting the booming growth in the building of semiconductor facilities. That in turn is occurring to a large extent because of legislation such as the CHIPS Act, which provides major incentives. Otherwise mining structures fell about as expected, consistent with the decline in active drill rigs as oil prices declined since last fall. Commercial building, which includes offices, was a bit weaker than the anticipated slow growth due to the trend toward remote working. It is noteworthy that factory building at present exceeds building of new offices and retail.

The strong second-quarter data result in a measurable but not huge upward revision to the outlook for business investment. On an annual average basis, real capital spending growth will be 3.1% in 2023 and 1.6% in 2024, compared with 1.7% and 1% in the July forecast. In addition to the higher base effect because of the strong second quarter, the numbers suggest more optimism about business investment projects than had been reported in surveys. However, the forecasts in general remain subdued due to the Fed's efforts to tighten credit, because much of business investment is interest-sensitive. The Moody's Analytics forecasts for the housing market were revised to account for recent trends. Specifically, the recovery in existing-home sales was delayed by several quarters to be consistent with the revised "higher for longer" mortgage rate outlook.

In addition to lowering demand due to affordability challenges, the rate environment will weigh on the supply of homes available for sale as homeowners will be reluctant to sell and give up the low interest rates on their mortgages. The Moody's Analytics forecast for house price growth has been revised upward modestly to reflect these trends. Prices are expected to remain relatively flat over the next 18 to 24 months with a small 4.5% decline from the peak as low affordability weighs on the market.

The outlook for commercial real estate prices remains negative but has not been revised materially this month. Price declines are expected to occur over multiple quarters as leases expire and as the loans backing properties come up for renewal.

Russia Tightens Money Grip

BY OLIA KURANOVA

The Central Bank of <u>Russia</u> surprised with a dramatic 350basis point rate hike Tuesday, raising the benchmark interest rate to 12%, its highest in over a year. The meeting had been announced last-minute on Monday.

This month marks the second consecutive rate increase for the CBR, following July's 100-basis point increase. The surprise meeting was brought forward by a month, mostly due to a rapidly depreciating ruble. According to the central bank, this meeting's hike is aimed at limiting price stability risks. More importantly, a weakening ruble has prompted emergency measures. Even so, the size of the hike has surprised markets and reflects increasing government concern.

The central bank cites rising inflationary pressure as a key factor for the decision. Prices are certainly on the rise, and the pro-inflationary effect stems from several factors. For one, domestic demand is on a steadily upward trajectory; after growing consistently this year, the bank now estimates that demand surpasses output capacity. Lifting demand for imports has played a part in pulling the currency lower, which further stokes prices and price expectations as the pass-through of the ruble's depreciation gains momentum. Meanwhile, the strong labour market has added further inflationary pressure as incomes lift, outpacing the rise in productivity. Consumers are gradually giving up their prosavings behaviour. Against this background, producers are translating rising costs into higher prices.

The ruble briefly registered over 100 to the U.S. dollar early this week and has lost about a quarter of its value since the start of the war in Ukraine. An announcement that the central bank would refrain from foreign-currency purchases last week failed to arrest the rout. The currency has been under heavy pressure because of a combination of factors: persistent pressure from sanctions, reduced income from oil exports, capital flight, reduced demand from key export partners such as China and India, and a labour shortage. Political uncertainty after the Wagner mutiny in June has also dampened the ruble's value, feeding into what looks to be a long-term trend for the currency. Policymakers are relying on the August hike to curb the ruble's downward trajectory, boost domestic savings and moderate consumer demand, which has played a role in the decline of foreign trade and has resulted in the currentaccount surplus reaching its lowest level in two years.

It is becoming more likely that the CBR will hold off from further interest rate increases for the rest of 2023, but developments in the ruble value will determine further action. While Tuesday's hike changes the key policy rate forecast up to mid-2024, it is not expected to affect inflation. Instead, it aims to stabilise the ruble, which we expect will be weakest in the third quarter before strengthening again.

As such, all eyes will be on the ruble for the coming weeks to determine whether a further hike is necessary. We expect that, because Tuesday's rate hike is aimed at abating further currency depreciation, the ruble will stay closer to 90 per U.S. dollar and the CBR will forgo a September hike. However, there is a risk that the hike will not curb the ruble's fall. We expect that if the quarter average for the ruble moves closer to 100 per dollar, one more hike in September will be on the table. Meanwhile, cuts are out of the question for the rest of 2023, as inflation pressures are expected to peak in the fourth quarter.

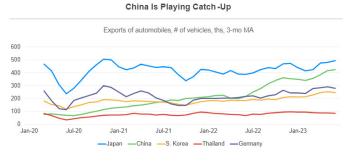
Looking ahead, we do not foresee the CBR beginning a cutting cycle until 2024, although the larger hike in August may push the timeline to the first quarter of 2024 rather than the second half of the year, as previously expected. The start of the cutting cycle will also depend on the output capacities of the Russian economy, with the precondition for cuts being a decrease in demand and/or an increase in supply. We expect that once the cutting cycle begins, it will be gradual and measured. We are unlikely to see the CBR revert to its previous rate of 7.5% until 2025. The bank has recently revised its neutral rate upwards to a range of 5.5%-6.5%, quoting a higher risk premium for the Russian market and the increase in the external neutral rate. We expect that the rate will return to its neutral level in 2026.

Electric Vehicles in the Fast Lane

BY SARAH TAN and HARRY MURPHY CRUISE

Global car production has been on a roller coaster in recent years, riding the ups and downs of the COVID-19 pandemic and Russia's war in Ukraine. A shortage of semiconductors a key input in automobiles—slowed output at car factories around the world. As households ramped-up purchases of electronics to facilitate working from home and make lockdowns more bearable, semiconductor demand went into overdrive. At the same time, pandemic-related disruptions in Taiwan, the world's largest semiconductor producer, hit chip production—creating a glaring hole between supply and demand. But those days are behind us; production is rocketing, and demand is waning. That is allowing global car manufacturers to make up for lost time.

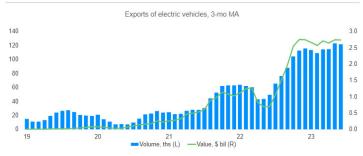
The Asia-Pacific region is home to some of the world's largest auto exporting countries, namely <u>Japan</u>, <u>China</u>, and <u>South Korea</u>. Since 2019, Japan has been number one globally for auto exports. However, China made heads turn through the pandemic as it strutted past South Korea in 2021 and <u>Germany</u> in 2022, making it the second-largest car exporter. It is now closing in on Japan, with the shortfall averaging around 70,000 cars per month in the June quarter, compared with almost 171,000 over the same period a year ago. At this pace, China is on track to overtake Japan by the end of the year.



Sources: General Administration of Customs (China), Ministry of Finance (Japan), Ministry of Trade, Industry and Energy (S. Korea), The Federation of The Industries, Statistisches Bundesamt, Moody's Analytics

Across the Asia-Pacific region, the auto-export recovery has been mixed. Surging demand for electric vehicles has sent overall auto exports from China and South Korea beyond pre-pandemic levels. In the first half of the year, China's export receipts from EVs almost doubled from the same period of 2022. South Korea's exports of EVs and hybrid vehicles jumped 70% in value terms over the same period. By contrast, shipments of overall auto exports, comprising EVs and traditional vehicles from Japan and Thailand were still shy of pre-pandemic levels. China's competitive advantage in lithium-ion battery cell production gives its carmakers an edge in terms of EV production costs. China is estimated to produce more than half of the global supply of lithium, with that advantage only compounded by the country's lower labour costs relative to its closest neighbourhood rivals, Japan and South Korea. Understandably, some of the world's largest brands have set up production facilities in China. Examples include Tesla, which opened its Shanghai factory in 2019, and BMW, which opened its new Shenyang-based EV plant in 2022. Still, those foreign brands do not eclipse local brands. In the opening months of the year, it was reported that the top export brands were China-based Chery and SAIC. Tesla, while third, was immediately followed by other Chinese carmakers, including BYD, Geely and Changan.

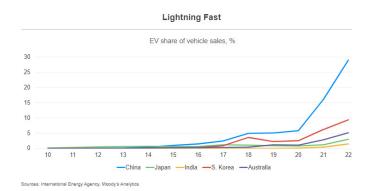




Sources: General Administration of Customs (China), Moody's Analytics

Indeed, the speed at which China has embraced new technologies in the automobile industry is unparalleled. EVs made up almost 30% of all passenger cars sold worldwide in 2022 and have hovered around 25% to 30% over the first half of this year. That figure was just less than 5% before the pandemic. The uptick in EV demand over the last year is in part due to the large price cuts by Chinese manufacturers and generous government supports. EVs have been exempt from a 10% sales tax on the purchase of new cars since 2014, with that exemption regularly extended. In July, the latest extension pushed the tax break out to 2027.

Meanwhile, EVs make up a much smaller share of worldwide vehicle sales in other Asia-Pacific countries, including South Korea, Japan, Australia and India. Of note is the divergence between China and India. Given that they are home to the world's biggest populations, the shift in reliance away from traditional internal combustion engine vehicles in China and the lack thereof in India will impact the global oil market. For China, oil demand growth will soon ease, but the slower adoption of EVs in India will see its oil demand growth run for longer.



Europe is emerging as China's greatest export market for EVs. Since 2021, Belgium and the U.K. have been the two largest destination markets. There are a few reasons why

Europe tops the list. First, the tariff imposed on imported cars into the EU is relatively low at around 10%. Second, government subsidies on the purchase of clean-energy vehicles includes imports. Third, the EU and U.K. are set to ban the sale of new ICE vehicles from 2035, so auto retailers need to phase out traditional ICE vehicles.

All in all, the global shift to cleaner energy options will support long-term demand for EVs. Combined with lower production costs and government supports, that should give China the boost it needs to overtake Japan as the world's largest car exporter by the end of the year. That said, not all commercial decisions are based on the financials. Increasingly, the U.S. and Europe are looking to "de-risk" from China, which could create barriers to Chinese imports, even if production costs are lower. This could see China's current acceleration in the auto export race run out of puff.

Flexible Currencies Help Keep Inflation at Bay

By ALFREDO COUTINO

Disinflation in Latin America has been successfully achieved with the help of flexible currencies. Floating exchange rate systems allow Latin American central banks to have independent monetary policies that are incredibly effective in fighting inflation. This was accomplished through monetary restriction and currency appreciation, also known as competitive appreciation.

The post-pandemic inflation episode lasted for almost two years, from the end of 2020 to mid-2022, when most inflation rates reached a peak. Thanks to a policy rectification, after central banks realized their incorrect perception of transitory inflation and consequently accelerated the monetary dose, inflation started to recede and the disinflation process began across the region, with inflation rates returning toward their target ranges.

Beyond the vanishing transitory factors that triggered the rebound in inflation, the disinflation success of Latin American monetary policies was due to two components. The first was the monetary restriction implemented through the price and quantity of money, which directly acted against demand pressures generated by the prolonged monetary expansion during the pandemic. This monetary tightening made financial credit more expensive and reduced its availability, consequently restraining consumption and investment decisions.

The second component was the competitive appreciation of Latin American currencies generated by the increasing rate differentials between domestic and external rates. Given that rates in Latin America increased faster than in the U.S. and Europe, the widening rate differential made Latin American bond markets more attractive for international investors, with increasing capital flows strengthening local currencies.

Thus, while the monetary restriction acted directly on demand pressures on prices, the currency appreciation produced downward pressures on domestic prices through the reduction of prices of imported goods. The currency effect caused an acceleration of the declining inflation trend in most Latin American countries. Even though it is not the result of a deliberate policy to affect the exchange rate, currency appreciation is competitive because it results from specific anti-inflation policies that produce an indirect effect by inducing downward pressures on prices.

The competitive currency appreciation generated by Latin American monetary policy was possible because most countries have adaptable exchange rate systems. This currency flexibility provides monetary independence since the exchange rate becomes the adjustment variable. Thus, the effect of capital inflows attracted by positive rate differentials found accommodation in the exchange rate.

Therefore, the consolidation of the inflation convergence implies that Latin American central banks must preserve attractive rate differentials for a sufficient period to avoid a sudden reversion of capital flows that could produce currency depreciations and obstruct the disinflation process. This also implies that Latin American central banks must conduct gradual monetary relaxation cycles.

Corporate Credit Quality Improves

BY OLGA BYCHKOVA

U.S.

U.S. credit upgrades outnumbered downgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of investment- and speculative-grade bonds and industrial firms. Upgrades comprised five of the seven rating changes and 83% of affected debt.

The largest upgrade, accounting for almost 81% of debt affected in the period, was issued to global security and aerospace company Lockheed Martin Corp. with its senior unsecured ratings raised to A2 from A3 and its short-term rating lifted to Prime-1 from Prime-2. According to Moody's Investors Service senior vice president Jonathan Root, "The upgrades recognize Lockheed Martin's strong business profile, anchored by its diverse portfolio of defense and space equipment and support services that sustain its leading position among defense contractors based on revenue." The outlook is stable, reflecting the rating agency's expectation of stability in the company's operating performance and credit metrics supported by sustained strong U.S. defense spending. The ratings could be upgraded further if Lockheed Martin prioritizes returns to shareholders via growing dividends and recurring share repurchases. At the same time, significant execution problems on key programs that pressure operating margins and cash flows or lead to contract cancellations could lead to a ratings downgrade. The ratings could also be downgraded if share repurchases exceed free cash flow on a recurring basis, resulting in higher debt and financial leverage, the credit agency added.

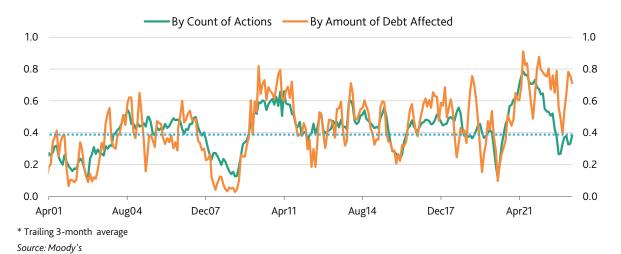
Downgrades were headlined by a midstream energy company Genesis Energy L.P., with its corporate family rating lowered to B2 from B1, its probability of default rating cut to B2-PD from B1-PD, the senior unsecured notes decreased to B3 from B2, and the speculative grade liquidity rating affirmed at SGL-3, impacting 13% of debt affected in the period. The outlook is stable. According to Moody's Investors Service vice president James Wilkins, "The downgrade reflects Genesis Energy's continued high leverage, still significant growth capital spending and lower interest coverage relative to higher rated peers. The company will continue to generate negative free cash flow in 2023-2024 due to spending on its soda ash and offshore pipeline expansion projects, even after bringing online additional soda ash capacity." The stable outlook reflects the rating expectation that Genesis Energy's credit metrics will remain supportive of the current rating, with leverage metrics improving despite negative free cash flow generation.

EUROPE

Across Western Europe, corporate credit rating change activity was similar to the U.S. with four upgrades issued to the diverse set of investment-grade bonds and industrial and utility companies.

The largest upgrade last week was made to a leading global biopharmaceuticals company AstraZeneca PLC, which saw its senior unsecured ratings raised to A2 from A3 and its short-term commercial paper rating increased to Prime-1 from Prime-2. Concurrently, Moody's Investors Service upgraded the backed senior unsecured ratings of AstraZeneca Finance LLC and Zeneca Wilmington Inc. to A2 from A3. The outlook on all the ratings remains stable. According to the rating agency, the upgrade reflects AstraZeneca's strong portfolio and pipeline, which positions it well for continued solid growth in organic revenues and EBITDA; low leverage on a Moody's-adjusted basis, which is expected to gradually reduce over the next 12 to 18 months; and conservative financial policy with modest growth in dividend distributions, low leverage and balanced acquisition policies. The change impacted 92% of debt affected in the period. The stable outlook reflects Moody's Investors Service's expectation that the company will continue to maintain solid organic growth, whilst executing successfully on its new product pipeline. The outlook assumes that the AstraZeneca's Moody's-adjusted leverage will be maintained at or reduce from current levels, driven by earnings growth. The outlook also assumes that debt-financed acquisitions will remain relatively modest with leverage metrics returning to current levels within 12 to 18 months in the event of larger transactions, the credit agency noted.

Upward pressure on AstraZeneca's ratings could develop should the company continue the successful execution of its late-stage pipeline, maintain strong diversity of revenues across products, and record strong product sales growth with operating leverage. A further upgrade would also require cash flow generation to strengthen in line with earnings and a track record of demonstrating a more conservative financial policy, including the absence of materially releveraging business development and limited increases in payments to shareholders. Meanwhile, downward pressure on AstraZeneca's ratings could arise if pipeline quality significantly deteriorates or financial policy turns more aggressive, the rating agency added. FIGURE 1



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

FIGURE 2 Rating Key

BCF	Bank Credit Facility Rating	MM	Money-Market
CFR	Corporate Family Rating	MTN	MTN Program Rating
СР	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

MOODY'S ANALYTICS	CAPITAL MARKETS RESEARCH / WEEKLY MARKET OUTLOOK

FIGURE 3 Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG
8/10/2023	CAPITAL SERVICES-APTIM CORP.	Industrial	SrSec/LTCFR/PDR	515	U	Caa2	Caa1	SG
8/11/2023	AES CORPORATION (THE)-DPL INC.	Industrial	SrUnsec/LTIR	1240	D	Ba1	Ba2	SG
8/14/2023	LOCKHEED MARTIN CORPORATION	Industrial	SrUnsec/CP	20767.03	U	A3	A2	IG
8/14/2023	GENESIS ENERGY, L.P.	Industrial	SrUnsec/LTCFR/PDR	3250	D	B2	B3	SG
8/14/2023	WAND NEWCO 3, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
8/14/2023	EPICOR, INCEPICOR SOFTWARE CORPORATION (CD&R)	Industrial	SrSec/BCF/LTCFR/PDR		U	B3	B2	SG
8/15/2023	MAXIM CRANE WORKS HOLDINGS, INCMAXIM CRANE WORKS HOLDINGS CAPITAL, LLC	Industrial	LTCFR/PDR		U	B3	B2	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
8/10/2023	PHILIP MORRIS INTERNATIONAL INCSWEDISH MATCH AB	Industrial	SrUnsec	927.7608	U	Baa2	A2	IG	SWEDEN
8/10/2023	ASTRAZENECA PLC	Industrial	SrUnsec/MTN/CP	26483.77	U	A3	A2	IG	UNITED KINGDOM
8/10/2023	STIRLING WATER SEAFIELD FINANCE PLC	Utility	SrSec	130.8212	U	Baa1	A3	IG	UNITED KINGDOM
8/14/2023	THE UNITE GROUP PLC	Industrial	SrUnsec/LTIR	1112.425	U	Baa2	Baa1	IG	UNITED KINGDOM
Source: Moody's									

MARKET DATA

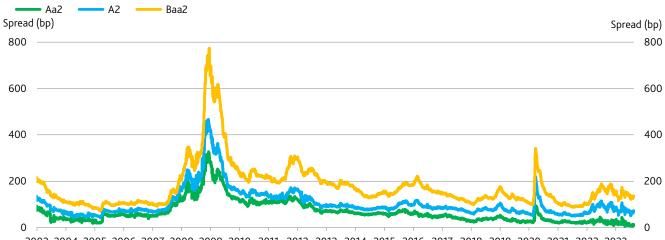


Figure 1: 5-Year Median Spreads-Global Data (High Grade)

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

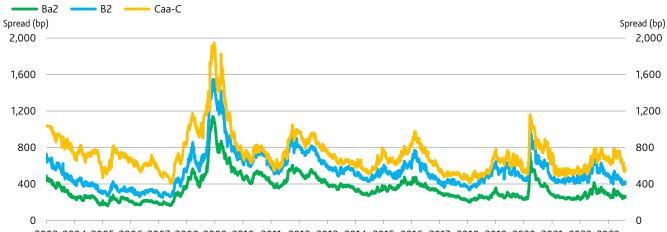


Figure 2: 5-Year Median Spreads-Global Data (High Yield)

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

CDS Movers

Figure 3. CDS Movers - US (August 9, 2023 – August 16, 2023)

CDS Implied Rating Rises	CDS Impli		
ssuer	Aug. 16	Aug. 9	Senior Ratings
Enterprise Products Operating, LLC	A1	A3	Baa1
United States of America, Government of	Aa1	Aa2	Aaa
Amgen Inc.	A1	A2	Baa1
nternational Business Machines Corporation	A1	A2	A3
IcDonald's Corporation	Aa1	Aa2	Baa1
ank of New York Mellon Corporation (The)	A2	A3	A1
outhern California Edison Company	Baa1	Baa2	Baa1
arget Corporation	Aa3	A1	A2
enet Healthcare Corporation	Ba3	B1	B3
Velltower OP LLC	Baa1	Baa2	Baa1

CDS Implied Rating Declines	CDS Impli		
lssuer	Aug. 16	Aug. 9	Senior Ratings
Comcast Corporation	A3	A2	A3
Caterpillar Financial Services Corporation	A2	A1	A2
3M Company	A2	A1	A2
Ford Motor Company	B1	Ba3	Ba1
PNC Financial Services Group, Inc.	Baa1	A3	A3
1PLX LP	Baa3	Baa2	Baa2
erkshire Hathaway Energy Company	Aa1	Aaa	A3
Vaste Management, Inc.	A3	A2	Baa1
Prologis, L.P.	A3	A2	A3
PacifiCorp	Aa1	Aaa	A3

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
Rite Aid Corporation	Ca	16,340	11,802	4,538
Staples, Inc.	Caa2	2,816	2,714	102
American Axle & Manufacturing, Inc.	B2	548	469	79
Domtar Corporation	Ba3	868	815	53
Jnisys Corporation	ВЗ	927	882	45
Nordstrom, Inc.	Ba1	501	458	43
Cleveland-Cliffs Inc.	Ba3	324	284	41
K. Hovnanian Enterprises, Inc.	Caa2	697	662	35
Macy's, Inc.	Ba2	377	347	31
Ford Motor Company	Ba1	288	261	28

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
CSC Holdings, LLC	B2	1,837	2,063	-227
Lumen Technologies, Inc.	Caa1	3,187	3,406	-219
Embarq Corporation	Caa2	2,777	2,965	-188
Qwest Corporation	B1	1,427	1,524	-97
United States Steel Corporation	B1	293	383	-90
Pitney Bowes Inc.	B3	1,450	1,509	-59
American Greetings Corporation	Caa1	469	522	-53
Deluxe Corporation	B3	635	687	-52
iHeartCommunications, Inc.	Caa1	1,736	1,776	-40
Carpenter Technology Corporation	B2	208	230	-21

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (August 9, 2023 – August 16, 2023)

DS Implied Rating Rises	CDS Impli		
suer	Aug. 16	Aug. 9	Senior Ratings
lorddeutsche Landesbank Girozentrale	Baa2	Baa3	A3
andesbank Baden-Wuerttemberg	A2	A3	Aa3
iraeus Financial Holdings S.A.	Ba3	B1	B2
NP Paribas Fortis SA/NV	A1	A2	A2
lpha Services and Holdings S.A.	Ba3	B1	B1
nk of Scotland plc	A1	A2	A1
niths Group plc	A3	Baa1	Baa2
lekom Austria AG	Aa1	Aa2	Baa1
3 SKF	Baa1	Baa2	Baa1
ppi Papier Holding GmbH	B1	B2	Ba2

CDS Implied Rating Declines	CDS Impli		
Issuer	Aug. 16	Aug. 9	Senior Ratings
BPCE	A3	A2	A1
HSBC Holdings plc	Baa2	Baa1	A3
Banque Federative du Credit Mutuel	Baa2	Baa1	Aa3
NATIXIS S.A.	A3	A2	A1
Electricite de France	Baa3	Baa2	Baa1
Standard Chartered Bank	A1	Aa3	A1
TotalEnergies SE	Aa3	Aa2	A1
Deutsche Telekom AG	A1	Aa3	Baa1
Orange	Aa3	Aa2	Baa1
Bankinter, S.A.	Baa1	A3	Baa1

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
Casino Guichard-Perrachon SA	С	72,576	63,564	9,012
Novafives S.A.S.	Caa2	583	562	21
Stellantis N.V.	Baa2	150	130	20
Ardagh Packaging Finance plc	Caa1	666	646	20
OI European Group B.V.	Ba3	240	220	19
FORVIA SE	Ba2	272	254	18
Valeo S.E.	Baa3	232	214	18
Lorca Telecom Bondco, S.A.U.	B3	391	374	18
thyssenkrupp AG	Ba3	248	231	18
Jaguar Land Rover Automotive Plc	B1	489	473	16

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
Boparan Finance plc	Caa3	1,872	2,014	-143
Garfunkelux Holdco 3 S.A.	Caa2	1,489	1,605	-116
Sappi Papier Holding GmbH	Ba2	320	364	-43
Banca Monte dei Paschi di Siena S.p.A.	B1	282	301	-19
TK Elevator Holdco GmbH	Caa1	441	459	-18
Telecom Italia S.p.A.	B1	315	330	-15
Wm Morrison Supermarkets Limited	B2	740	755	-15
Nidda Healthcare Holding GMBH	Caa3	599	611	-13
Piraeus Financial Holdings S.A.	B2	273	285	-12
Eurobank Ergasias Services and Holdings S.A.	B2	222	235	-12

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (August 9, 2023 – August 16, 2023)

CDS Implied Rating Rises	CDS Impli		
Issuer	Aug. 16	Aug. 9	Senior Ratings
New Zealand, Government of	Aaa	Aa1	Aaa
LG Chem, Ltd.	Baa2	Baa3	A3
Kirin Holdings Company, Limited	Aaa	Aa1	Baa1
Japan Tobacco Inc.	Aaa	Aa1	A2
Japan, Government of	Aaa	Aaa	A1
Australia, Government of	Aa1	Aa1	Aaa
Korea, Government of	Aa1	Aa1	Aa2
India, Government of	Baa2	Baa2	Baa3
Indonesia, Government of	Baa2	Baa2	Baa2
Export-Import Bank of Korea (The)	Aa1	Aa1	Aa2

CDS Implied Rating Declines	CDS Impli		
lssuer	Aug. 16	Aug. 9	Senior Ratings
China, Government of	Baa2	A3	A1
Export-Import Bank of China (The)	Baa2	A3	A1
Malaysia, Government of	A2	Aa3	A3
China Development Bank	Baa2	Baa1	A1
Philippines, Government of	Baa2	Baa1	Baa2
Macquarie Bank Limited	Baa1	A3	A1
NBN Co Limited	A3	A2	Aa3
Macquarie Group Limited	Baa3	Baa2	A2
Thailand, Government of	A1	Aa3	Baa1
Bank of East Asia, Limited	Baa3	Baa2	A3

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
Gemdale Ever Prosperity Investment Limited	Ba3	7,069	1,951	5,118
Pakistan, Government of	Caa3	2,839	2,813	26
SK Hynix Inc.	Baa2	152	127	25
Adani Green Energy Limited	B2	734	710	23
Bank of China (Hong Kong) Limited	Aa3	97	78	19
Bank of China Limited	A1	86	69	17
Vanke Real Estate (Hong Kong) Company Limited	Baa2	433	417	17
China, Government of	A1	73	57	16
Agricultural Bank of China Limited	A1	82	66	16
China Development Bank	A1	78	63	15

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Aug. 16	Aug. 9	Spread Diff
LG Chem, Ltd.	A3	82	93	-11
JSC Halyk Savings Bank of Kazakhstan	Ba2	384	391	-7
LG Electronics Inc.	Baa2	83	89	-6
Kirin Holdings Company, Limited	Baa1	20	23	-3
Boral Limited	Baa2	133	136	-3
Amcor Pty Ltd	Baa2	106	109	-3
Rizal Commercial Banking Corporation	Baa3	100	102	-3
Mizuho Financial Group, Inc.	A1	51	52	-1
Scentre Management Limited	A2	116	117	-1
Toyota Motor Corporation	A1	16	17	-1

Source: Moody's, CMA

ISSUANCE

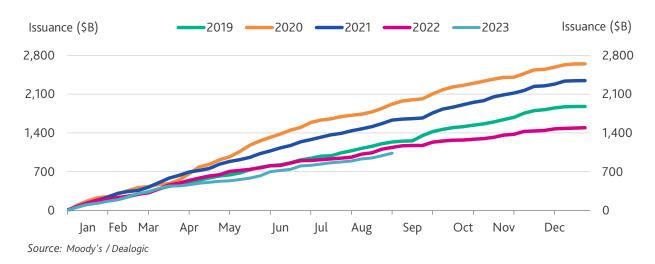
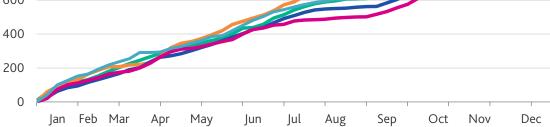


Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated



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



Source: Moody's / Dealogic

400

200

0

		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount	Amount	Amount
	\$B	\$B	\$B
Weekly	38.360	6.800	45.344
Year-to-Date	892.013	125.228	1,035.335
		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	investment ordet	i ngiri ricio	TOtal
	Amount	Amount	Amount
		•	
Weekly	Amount	Amount	Amount

Figure 8. Issuance: Corporate & Financial Institutions

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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