MOODY'S

WEEKLY MARKET OUTLOOK

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Pausing for Longer?

The Federal Open Market Committee, at its September meeting, decided to leave rates unchanged. The move was well anticipated and keeps the fed funds rate's target range at 5.25% to 5.5%. Communication in Fed Chair Jerome Powell's press conference was generally hawkish, keeping the door open for future hikes and deftly avoiding being interpreted as declaring victory. However, the FOMC's latest forecasts signal a growing sense of optimism within the committee that little else needs to be done to bring inflation to its target and that a recession is decreasingly likely.

Moody's Analytics views the FOMC's policy stance as sufficiently restrictive to bring inflation to the central bank's 2% target. Our expectation is that July's rate hike was the FOMC's last and our latest

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baseline puts the first rate cut in mid-2024. September's Summary of Economic Projections shows ours and the Fed's thinking have come into closer alignment.

September's pause was expected and anticipation was instead trained on the committee's updated forecasts. Since they were last published in June, FOMC members have grown more optimistic about the U.S. economy. The latest SEP shows the median estimate for GDP in 2023 rose from 1% in July to 2.1% in September and from 1.1% to 1.5% in 2024. The strengthening of the U.S. economy also resulted in a lower unemployment rate forecast. The median estimate for the unemployment rate was lowered from 4.1% to 3.8% in 2023 and from 4.5% to 4.1% in both 2024 and 2025. The reacceleration of the U.S. economy this summer, evidenced by a steady flow of strong consumer, GDP and labor market data, drove the improved outlook.

Despite a stronger outlook, inflation's path was lowered, and a slimmer majority of committee members expect another rate hike will be needed this year. The median estimate for the fed funds rate in 2023 was unchanged. The median expectation for core PCE in 2023 was lowered from 3.9% to 3.7%. Participants did, however, push back their timeline for the first rate cut.

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Within the SEP is the latest dot plot. Seven of 19 participants believe the fed funds rate is sufficiently restrictive. The remainder believe another 0.25-percentage point hike would do the trick. None believe a further half point is necessary. In June, three expected the upper bound of the fed funds rate would need to hit 6% or more.

There were no dissenting votes at September's meeting, which contained a full roster of voting members after Adriana Kugler filled the position left open by Lael Brainard's resignation. It was also the first meeting with Philip Jefferson as vice chair.

Strike and oil

Swirling over the central bank are two headwinds picking up speed and threatening to stall the progress. In coordination with OPEC, Saudi Arabia opted to cut oil production in late June. Since then, energy prices have embarked on a steady climb upward. In July, the CPI for energy jumped 5.6% from the month before, driven by a 10.6% increase in gasoline prices. This caused headline CPI to rise at its fastest monthly rate since June 2022—the post-pandemic bout of inflation's peak in the U.S.

The second headwind blowing is the United Auto Workers strike. Should the strike last through October, we estimate used-vehicle prices will be 10% higher than if the work stoppage did not occur. New-vehicle prices will be less affected immediately but would increase by 5% in the second half of 2024.

Both events are being closely monitored by the rate-setting FOMC, though neither is likely to derail the committee's near-term plans. We expect oil prices to retreat, with West Texas Intermediate averaging a little more than \$80 per barrel in 2024. Higher prices will enable new sources of production to come on line in the Americas. Oil prices are well above the break-even cost of extraction in U.S. shale formations. We also expect Saudi Arabia to lower its production cut from 1 million barrels per day. As for the strike, our baseline calls for the dispute to be over before that degree of disruption occurs.

TOP OF MIND

Lukewarm Holiday Sales Likely in U.S.

By SCOTT HOYT

The last few holiday seasons have been a roller-coaster ride for U.S. retailers. The pandemic made 2020 a year to forget, except for online retailers, which benefited from consumers' reluctance to visit stores. The subsequent retail rebound made 2021 one for the record books. Year-over-year retail sales growth in the fourth quarter of that year set records in aggregate and for many traditional holiday-related segments.

Last year was a mixed bag. It had no hopes of repeating the 2021 performance, but growth was still strong by the standards of the years leading up to the pandemic. The only drawback was that nearly all the growth came from higher prices, not increased volumes as inflation soared. This year will be even more of a challenge. Sales growth by some measures will be the weakest since 2016, excluding 2020, of course.

The shifting mix

The biggest weight on holiday sales growth is the shifting mix in consumer spending. In real terms, service spending growth is strong and since service spending prices are once again growing faster than goods prices, in dollar terms service spending is growing faster than goods spending. This is even evident in the retail data. Compared with the final three months of 2022, restaurants will be the third-fastest growing segment, lagging only nonstore retailers as they continue to gain share, and drug stores, which are benefiting from a dip in sales late last year.

Another mix issue hurting holiday retailers is the increased availability of vehicles. While the autoworker strike adds uncertainty to the outlook, we expected vehicle dealer sales to be the fourth-fastest major segment as consumers spend more on vehicles and more costly parts and repairs. All of this is clearly draining funds away from traditional holiday segments.



Related to this, <u>spending is spent up</u> for most nonvehicle durable goods and some nondurable goods including apparel. Since the onset of the pandemic, consumers have bought many more of these goods than would have been expected over the period, meaning they now have less than the usual amount of need and desire to purchase them. Hence, even over the holiday period, spending may be more focused on services and experiences than goods.

There are a number of supports to spending, but they support aggregate spending, so the lift may not benefit holiday-related spending as it might have in other years. The labor market remains strong. Clearly, job growth is slowing and the number of openings is falling, but they are still strong. Wage growth is also softening. Year-over-year growth in nominal wage income will not match last year's level this holiday season, but with the cost-of-living adjustments to taxes and transfer payments, total after-tax income growth will be faster. The fact that the lift was a onetime adjustment may limit the support it provides to holiday spending.

Wealth and inflation

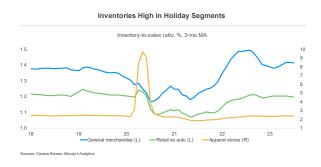
There are several other supports of note. Wealth is rising again as the stock market gains ground and house prices have stopped declining in many areas, at least for now. Some households still retain excess saving they may be willing to spend. Debt burdens and financial obligations remain extremely low by pre-pandemic standards.

Inflation will provide much less support than last year, but by longer-run standards will have mixed impacts. Holiday sales are measured in nominal terms, so higher prices for holidayrelated goods directly increase holiday sales. However, higher prices on other goods and services, especially essentials such as food, gasoline, and other forms of energy purchased and utilized by consumers, housing, and medical care can siphon money away from holiday spending.

Inflation is lower this year than last for most retail segments but more mixed by longer-run standards. Recent price growth has been below the long-run average for appliance and electronics stores and nonstore retailers, but higher for apparel stores, department stores, and sporting goods and hobby stores. Holiday sales would seem set for a lift from gasoline prices well below their year-ago level, but by the holiday season the year-over-year decline will be small if it even remains. Food price inflation will also be higher than last year and will drag on holiday spending.



Another potential drag on sales for some holiday segments comes from inventories. Inventories are higher for some retail segments compared with during the holiday season last year. They have risen particularly strongly for other general merchandise stores, while apparel retailers do seem to have inventories under control. High inventories, where they exist, could result in more discounting and weaker sales.



Overall retail sales growth will be weaker in the fourth quarter of this year than the fourth quarter last year. This will be true for almost all major retail segments and most holiday-related segments. Sales will barely grow at general merchandise stores with department store sales falling more than last year. Apparel stores will barely see any growth. Furniture store sales will continue to fall sharply.

The few exceptions where year-over-year growth in the fourth quarter of this year is expected to outpace last year's performance are electronics and appliance stores, drug stores, vehicle dealers, and miscellaneous store retailers. All but vehicle dealers notably underperformed late in 2022, while vehicle dealers are benefiting from improved supply of vehicles. Electronics and appliance stores are the only holiday-related segment in the mix. The weakness at holiday segments comes despite declining sales at gas stations and building supply stores, segments that siphoned sales away from holiday segments last year.

Dim Holiday Outlook					
Retail sales, Q4, % change yr ago					
	2019	2020	2021	2022	2023F
Total retail sales	3.9	4.9	15.9	7.0	3.2
Ex autos	4.1	4.6	17.0	8.1	2.5
Core	4.6	6.9	14.6	7.5	3.6
Core ex building supply	5.0	6.0	14.8	7.8	4.5
GAFO	0.8	-1.4	14.4	3.9	-0.2
Vehicle	3.3	5.9	11.7	2.4	6.3
Furniture	2.0	4.0	11.0	-1.1	-7.9
Electronics and appliances	-2.8	-11.3	14.7	-5.4	5.7
Building supply	0.5	16.3	12.5	4.8	-5.3
Food	2.8	8.0	9.1	7.5	0.0
Drugstores	0.6	6.1	7.7	3.1	8.4
Gasoline stations	0.0	-15.0	43.6	12.8	-7.0
Apparel	0.9	-12.7	27.9	2.4	0.7
Sporting goods and hobby	3.8	15.4	11.2	1.7	-0.4
General merchandise	0.8	1.5	11.0	6.5	0.2
Other	5.1	2.7	21.8	4.4	5.2
Nonstore retailers	13.0	38.7	9.9	10.5	9.2
Restaurants	8.7	-15.3	32.6	13.5	7.9

Sources: Census Bureau, Moody's Analytics

Even nonstore retailers are expected to post weaker growth than last year. Consumers continue to shift their spending online. This will also siphon sales away from traditional retail segments, although it could be argued that nonstore retailers should be consider a holiday segment these days.

Risks to the forecast remain large. Another spike in oil prices is not out of the question and would clearly undermine spending on other goods and services, including holiday merchandise. The automakers strike, the resumption in student loan payments, and instabilities in the financial system are additional wild cards that could undermine the outlook further.

The abundance of cash and available jobs provide upside risks. Income growth, especially wage income, could be understated. Further, betting against U.S. consumers' spending when they have the funds has not been a good bet over recent decades.

The Week Ahead in the Global Economy

U.S.

Next week represents the final week of the third quarter and we'll see an influx of data from August. Economic data for the third quarter have been surprisingly strong and pushed our high-frequency GDP estimate above 4%. Next week will give a sense of whether that accelerated pace will hold up. On Tuesday, new-home sales data for August are released. In July, new-home sales rose by 4.4% to 714,000 seasonally adjusted units. Also scheduled is the final estimate of second-quarter GDP. The second estimate resulted in a reduction in second-quarter GDP from 2.4% annualized to 2.1%. At week's end, the Bureau of Economic Analysis will publish its latest data on personal income and spending. Both have been growing at a healthy clip.

Asia-Pacific

Japan will post unemployment, industrial production and retail sales figures for August. We expect the unemployment rate to tick down to 2.6% from 2.7% in July. Softening employment conditions in recent months have kept the unemployment rate above the pre-pandemic average of 2.2% to 2.4%.

We expect industrial production to fall 0.4% month over month, extending a 1.8% decline in July. With domestic weakness adding to external risks, the outlook for industrial production looks fragile. Retail sales likely rose 0.1% month over month after July's 2.1% jump. Retail sales growth is mainly driven by inflation, which has been cooling recently.

Aussie inflation is also in retreat. From its peak of 8.4% year over year in December, the CPI indicator has fallen 3.5 percentage points to reach 4.9% in July. We expect the downward trend to extend into August, resulting in a reading of 4.7%. Much of the improvement will come from falling goods inflation. Services inflation—which accounts for a larger share of the basket in August than July—will pull in the other direction, muting some of the improvement coming from goods.

Europe

The euro zone's preliminary estimate of its Harmonised Index of Consumer Prices inflation rate will top headlines next week. We forecast that the rate will decelerate to 4.4% year over year in September from 5.5% in August. Base effects in the energy segment will be the main downward pull on the headline rate, but we should see a lower core inflation rate as well. Part of the decline in core inflation will be due to an unwinding of base effects in the transport services segment; but even beyond that, we foresee inflation pressures cooling more broadly as demand stays wan. The euro zone's economic sentiment indicator, meanwhile, should fall back further. We expect it to come in at 92 in September, down from 93.3, with losses across the major sectors. Services sentiment will inch closer to negative territory, while manufacturing is likely to take another hit. Importantly, the quarterly survey questions from the September stanza will shed light on the situation among manufacturers' backlogs, and whether there will continue to be such a large buffer among factories, even as order books continue to dry up.

Meanwhile, we expect consumer spending on goods to creep higher this August in Germany, France and Spain. In Germany, we foresee a 0.2% month-over-month increase in retail sales, zero retail growth in Spain, and a 0.2% increase in consumer expenditures in France. While we expect there to be some added consumer activity at the tail end of summer, this will remain slanted towards services, resulting in weak dynamics for retail and goods trades.

Germany's unemployment rate likely was unchanged at 5.7% between July and August. Despite the headwinds on the economy, labour demand has held up. Factories have not wanted to let go of skilled labour, and they have been able to use the country's short-time work benefits as a way to avoid doing so.

Across the Channel, we expect the U.K.'s finalized estimates of second-quarter GDP to be published without major revision. This would mean GDP grew 0.2% quarter over quarter in the second stanza, accelerating marginally from a 0.1% rise in the first quarter. A dismal situation in the external trade balance will largely wipe out gains made in the domestic economy. That said, much of the growth domestically in aggregate demand came from government consumption during the period. This reflects underlying sluggishness in the U.K. economy as it continues to struggle high inflation and rising interest rates.

Finally, regarding Russia, we are following suit with consensus forecasts for retail sales, unemployment and industrial production. We expect to see retail sales grow at a slightly slower pace between August and July, up 10% year over year during the month. Likewise, industrial production will also likely grow at a slower rate in August, at 4.3% year over year, while the unemployment rate will likely stay at its record low of 3%.

Latin America

Upcoming economic releases will continue to reflect the relative strength of the Mexican and Brazilian economies compared with others in the region. Labor markets in the region's two largest economies remains solid. In Brazil, the rate of unemployment likely averaged 7.8% in the rolling quarter ending in August, down from 8.9% a year before. Meanwhile, in Mexico, the unemployment rate is expected to have reached 3.1% in August, compared with the 3.5% reported a year before. In Chile, the labor market remains weak as the economy struggles to recover. Indeed, Chile's unemployment rate likely averaged 8.8% in the rolling quarter ending in August, up from 7.9% a year earlier. When looking at seasonally adjusted figures, the unemployment rate likely averaged 8.5%, unchanged from the previous month. Meanwhile, manufacturing output in Chile likely contracted 2.8% year over year in August, while retail and wholesale sales also likely contracted again in August, though at a slower rate.

Argentina and Mexico will report monthly GDP figures for July next week. In Mexico, we see the index of economic activity advancing 3.8% year over year after growth of 4.1% in the previous month. Conditions in Argentina are much worse, with the economic activity index likely showing a 4.5% year-over-year contraction in July. Seasonally adjusted, GDP declined an estimated 0.4% month on month in this period.

Central banks in Colombia and Mexico meet next week, with both entities expected to leave policy interest rates unchanged. In Mexico, the central bank's board of governors will likely extend the monetary pause again by leaving the policy rate unchanged for the sixth consecutive time at 11.25%. Similarly, Colombia's monetary authority will keep the policy interest rate unchanged at 13.25% at its September meeting as inflation remains stubbornly high.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk	Risk Assessment
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, risks of a standstill over next year's funding package lean to the upside, but history suggests the economic impact will be limited.
15-Oct	Ecuador	Second round presidential election	Low	Low	Against a backdrop of rising drug-related violence and concerns over corruption, Ecuadorians will head to the polls to elect a successor to President Guillermo Lasso.
22-Oct	Switzerland	Federal elections	Low	Low	
22-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.
26-27-Oct	EU	European Council summit	Low	Low	
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.
13-Jan	Taiwan	Presidential election	Medium	Medium	The election will have deep ramifications on the trajectory of U.SChina relations.
14-Feb	Indonesia	General election (including presidential election)	Low	Low	
March	Russia	Presidential election	High	Medium	As the first presidential election in Russia since the war in Ukraine began and constitutional amendments were made in 2020, the election will be closely watched for internal instability and potential disruption, even as Vladimir Putin is highly likely to win re-election.
March	China	Two Sessions (Meetings of China's top legislative body and political advisory body)	High	Medium	The annual Two Sessions meeting sets the wider policy agenda along with economic and social goals for the world's second largest economy.
10-Apr	South Korea	General election	Low	Low	The election will determine whether President Yoon's policy agenda will continue to face opposition in the National Assembly.
May	India	Election (Lok Sabha, lower house)	Medium	Low	Prime Minister Narendra Modi is vying for a third term building India as an economic engine of the world, but the domestic focus is now towards inflation and economic inequality.

THE LONG VIEW: U.S.

U.S. Issuers Have the Highest Share of Defaults YTD

By OLGA BYCHKOVA

CREDIT SPREADS

Corporate credit spreads have narrowed further through the first three weeks of September. Tight 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 marginally by 1 basis point to 133 bps, remaining below a 12-month low of 136 bps. Similarly, Moody's longterm average industrial bond spread decreased 1 bp to 113 bps over the past week. That is less than a one-year low of 116 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 369 bps from 374 bps the previous week, while the ICE BofA U.S. high-yield option-adjusted bond spread closed Wednesday at 377 bps, down 8 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.

The VIX index also reflects investor optimism: the index slightly increased to 15.1 points Wednesday but remained well below its historical average. 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 12 corporate debt issuers defaulted in August, the same as the previous month's upwardly revised count. In August, eight of the defaults were from the U.S., including Carvana Co., the month's largest defaulter. The Arizona-based used-vehicles online retailer completed a debt restructuring in which about \$5.5 billion in unsecured bonds were exchanged for roughly \$4.2 billion of senior secured notes with extended maturities. This restructuring constituted a distressed exchange.

Of the eight U.S. defaults last month, five were in the form of distressed exchanges, the most common default type in recent years, particularly for companies owned by private equity firms. Besides Carvana, the other four U.S. companies that completed distressed exchanges in August were CNG Holdings Inc, CSTN Merger Sub Inc, Digital Media Solutions LLC, and U.S. Renal Care Inc. Outside the U.S., Moody's Investors Service recorded two defaults in Europe and two in the Asia-Pacific region. The two European defaulters were Casino Guichard-Perrachon SA, a French retailer, and Keter Group BV, a Netherlands-based manufacturer and distributor of a variety of resin-based consumer goods. The two APAC defaulters, both property developers, were Chinabased Sino-Ocean Group Holding Limited and Vietnambased BIM Land Joint Stock Company.

August's defaulters increased the year-to-date tally to 109. Across sectors, business services and telecommunications are the largest contributors to year-to-date defaults, with 10 each. Healthcare and pharmaceuticals followed with nine. By region, North America had 77 defaults (75 in the U.S. and two in Canada). The rest were from Europe (18), Latin America (8) and Asia-Pacific (6).

Despite the recent slowdown in monthly defaults, the trailing 12-month global speculative-grade default rate rose to 4.3% at the end of August from 4.2% a month earlier, both surpassing the long-term average of 4.1%. Moody's Investors Service forecast the rate to trend higher over the remainder of 2023, reaching 4.6% in December. In 2024, the credit agency expects the default rate to peak at 4.7% in the first quarter before easing to 4.2% in August. Moody's Investors Service's latest baseline default rate forecasts incorporate the assumptions that the U.S. high-yield spread

will widen to 522 bps over the next four quarters from about 372 bps at the end of August and that the U.S. unemployment rate will rise to 4.3% from 3.8% in the comparable period.

The above default rate forecasts are based on the assumption that economic activity will continue to slow this year and into 2024 in most countries, including the U.S., as the full effects of tight monetary policy on aggregate demand are realized. In addition, major central banks are expected to maintain a restrictive policy stance through 2024 as core inflation, although declining, remains above target levels. The combination of higher rates and lower growth will dent corporate earnings and cash flows, particularly for financially weaker companies. This underpins Moody's Investors Service's prediction that the global default rate will likely remain above the historical average in the coming 12 months.

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% 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 \$37 billion in the most recent week, bringing the year-to-date figure to \$1,009.1 billion. This reflects an 8.1% decline compared with the same period in 2022.

Meanwhile, there was \$11.9 billion in high-yield debt issued in the same period, raising the total to \$145.1 billion this year. High-yield issuance has outstripped early-year expectations, increasing 23.5% relative to last year's pace. Total U.S. dollar-denominated corporate debt issuance now tracks 6.2% below where it stood in 2022 and is 35.7% lower compared with 2021.

U.S. ECONOMIC OUTLOOK

The U.S. economy continues to show significant resilience, consistent with our expectations. Consequently, we made only modest September adjustments to the U.S. baseline forecast largely in response to revised second-quarter data and high-frequency data showing a strong start to the third quarter despite recent data resulting in a slight weakening in the outlook for the job market.

Key assumptions changed little in September. Monetary policy assumptions were not changed at all. We did add a two-week federal government shutdown in October, but the impact on the broader economy is small. 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. Recent data slightly weakened the outlook for business investment, though it improved the outlook for house prices modestly. The outlook for the 10-year Treasury is slightly changed, reflecting the recent increase in the rate. Housing forecasts responded modestly to recent data showing lower existinghome supply and sales, shifting demand to new homes.

Fiscal policy

As of September, the baseline forecast explicitly assumes a two-week government shutdown. In June, President Biden signed into law the Fiscal Responsibility Act, which resolved the debt-limit crisis and established limits on federal discretionary spending for the next two years. Originally, it was assumed that these spending limits would have reduced, if not eliminated, the potential for brinkmanship around the federal budget for the coming fiscal year. We had expected that Congress would pass the 12 annual spending bills, which fund all federal government activities, in a reasonably graceful manner and that these 12 bills would sum up to the limits established by the FRA.

This assumption was partly correct. The Senate has passed all 12 annual spending bills and has heeded the letter of the law as written in the FRA. However, the same cannot be said of the House of Representatives. House Republicans are dissatisfied with the FRA, and they want to cut federal spending even more than agreed-upon limits in the FRA. In June, a small bloc of Republicans brought legislative action on the House floor to a weeklong halt. Unlike the Senate, the House has passed only one of the 12 annual spending bills. The House has returned from its August break and has only three weeks left to pass the remaining 11 spending bills and forge compromises with the Senate before current funding for federal government operations ends on September 30. We now assume that lawmakers will let government funding expire at the end of September, leading to a two-week shutdown starting October 1.

In the national accounts, compensation of federal workers is counted as output by the federal government. However, there is an important difference in the way the Bureau of Economic Analysis treats real versus nominal compensation. Nominal compensation is the actual pay federal workers receive. Therefore, the back pay they traditionally get retroactively after a shutdown ends erases the shutdown's direct impact on nominal GDP. On the other hand, real compensation is calculated from hours worked. Since furloughed federal workers do not work overtime after a shutdown, hours that are not worked are permanently lost, raising the implicit cost of public services. Implied prices paid for federal government compensation is the ratio between nominal and real compensation. During past shutdowns, because there was a decrease in real compensation due to fewer hours worked without a corresponding decrease in nominal compensation, which was restored by retroactive back pay, implied prices for federal compensation shot up. In other words, the furlough's effect on the BEA's estimates was to lower the level of government services provided while maintaining the same cost of those services. In the September baseline forecast, Moody's Analytics has shocked the price deflator for federal government compensation to a similar degree as has been observed during past shutdowns. The result is a 0.2percentage point reduction in annualized real GDP growth in the fourth quarter of 2023. Much of the reduction to fourthquarter GDP growth due to productivity losses by

furloughed federal workers will be made up in the first quarter of 2024 as work schedules return to normal. Therefore, we boosted our estimate of annualized real GDP growth in the first quarter of 2024 by a similar 0.2 percentage point.

Changes to GDP growth

U.S. real GDP rose a healthy 2.1% in the second quarter, according to the BEA's second estimate. Although this was unexpectedly lower than the BEA's initial estimate of 2.4%, it was still the fourth consecutive quarter of growth near or above the economy's potential. The drag from inventories diminished and many components, including higher consumer spending, government spending, and total nonresidential business investment, and lower imports contributed to higher growth estimates with none dominating. However, the new data for exports, residential investment, business equipment investment, and intellectual property were lower than the first estimate. Upward revisions to state and local spending on structures were a modest offset.

Consumer spending remained a source of growth, but its contribution shrank a lot compared with the first quarter, which had been elevated by cost-of-living adjustments that had boosted after-tax income. Overall, consumer spending added 1.1 percentage points to growth. Nonresidential fixed investment improved, adding 0.8 percentage point to growth, its largest contribution since the third quarter of last year. Government contributed 0.6 percentage point with state and local spending leading the gain. Residential investment continued to slide, pulling growth down by 0.1 percentage point. Trade subtracted 0.2 percentage point from growth with a 1.3-percentage point drag from exports mostly offset by falling imports. Inventories reduced growth by 0.1 percentage point.

Despite the downward revision to second-quarter growth, high-frequency data suggest the economy had more momentum at the start of the third quarter than previously thought. Hence, growth is expected to accelerate briefly before slowing in the fourth quarter. We now expect that third-quarter real GDP growth will be higher than previously forecast, with upward revisions to consumer spending growth and international trade outweighing downward revisions to the contribution from investment and government spending. The net effect is slightly stronger real GDP projected for this year and next, followed by modestly weaker growth the next few years. On an annual average basis, growth is projected to be 2.1% in 2023 and 1.4% in 2024, compared with projections of 2% and 1.3%, respectively, in the August outlook. Growth returns to trend in 2025.

Monetary policy

Monetary policy assumptions are unchanged from the last update. We expect that the Fed's 25-basis point rate hike in July 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 still anticipate that the Federal Open Market Committee will start lowering rates by June. We expect that the Fed will relax monetary policy slowly, cutting rates by 25 basis points per quarter until reaching 2.75% by the fourth quarter of 2026, and 2.5% in 2027.

The Fed continues to balance inflation and labor market tightness against financial conditions. July inflation as measured by changes in the personal consumption deflator displayed a mild uptick from June, with year-ago core inflation rising from 4.1% to 4.2%. However, core inflation has stabilized below the 4.5% average seen earlier in the year. Meanwhile, U.S. labor markets slowed more significantly in August, with the pace of hiring near 150,000 payrolls on a three-month moving average basis, compared with 335,000 in January. The August jobless rate also saw an uptick to 3.8%, suggesting that labor market pressures on inflation are now fading. Concerns, meanwhile, stem from rising oil prices, which continued to increase throughout August. However, our baseline does not predict that energy prices 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 overall remains stable.

Inflation remains the key to our outlook. The September vintage has consumer price inflation at 3% year over year by the end of 2023, a small drop 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. Remaining inflationary pressures from shelter and other U.S. service industries will soften. We also 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. Amid higher oil prices, and the realization that the Fed will not likely cut rates in early 2024, the 10-year Treasury yield rose from 3.85% to 4.3% from July through early September. We anticipate that the yield will average 4.1% in the third quarter, and then ease slightly until 2025, averaging between 3.9% and 4%.

Foreign exchange markets have relaxed as the Fed has approached the end of the current hiking cycle, although the pace has slowed recently. On a real broad trade-weighted basis, the U.S. dollar is still up more than 5% from its prepandemic level. By August, it had depreciated by more than 5% from its October 2022 peak.

Energy

Moody's Analytics has modestly raised its crude oil price forecast in the near term. The forecast is essentially unchanged for the remainder of 2023 but \$1.67 higher in 2024. This change reflects the assumption that Saudi Arabia is prioritizing high prices and revenue over market share. Saudi Arabia is expected to keep its voluntary production cut at 1 million barrels per day through the end of the year and only gradually reduce its size in 2024.

Moreover, supply will also be restricted by the compounding effect of oil sanctions on Russia. Russia will have a more difficult time securing the capital, equipment and resources it needs to invest to ensure that its wells continue to produce. It will also struggle to invest in new sources of production. A similar story has played out on a larger scale in Venezuela.

Moody's Analytics has also lowered its forecast for natural gas prices. This reflects the assumption that arbitrage on the wide gap between U.S. and EU gas prices will take a long time to materialize.

Labor market

The August employment report was a mixed bag. Payroll employment rose by 187,000, slightly stronger than both our forecast and consensus expectations, despite the impact of a major business closure and a strike. However, the impact of revisions to prior months was significant and negative with the June and July figures revised lower by a combined 110,000. Job growth has now averaged just 150,000 over the last three months, compared with a prerevision average of 218,000 in July. The unemployment rate jumped to 3.8%, though this was partly because of an outsize gain in the labor force.

The weakening of the labor market is underway and will continue through the end of the year. Monthly job gains in the second quarter came in weaker than previously expected given the downward revisions to prior months, and will ease further, averaging about 160,000 in the third quarter before dropping below 100,000 per month during the fourth quarter. Growth will ease further in 2024 as the risk of a recession remains elevated.

The unemployment rate forecast has shifted slightly given the jump to 3.8% in the August report. We now expect the unemployment rate to hit 3.9% by the end of this year, compared with 3.7% in the prior forecast. The unemployment rate will rise a bit further next year and peak at 4.2%, unchanged from the prior forecast. Over the next year, the change in the unemployment rate will be right on the border of a 50-basis point increase. Historically, an increase of that size within a 12-month period has been an indicator that the economy is in a recession.

Business investment and housing

The BEA revised its estimate of second-quarter business investment downward in its August report. Real growth was 6.1% annualized compared with 7.7% in July. All major segments, equipment, structures and intellectual property were lower than the original estimate. Nonetheless, even the 6.1% figure was significantly more than had been forecast earlier in the year.

Equipment rose approximately 8% annualized compared with the first estimate of 11%. The bulk of the strength was in transportation equipment. Specifically, the largest contributor was aircraft, which rose more than 100% annualized to a record peak. Airlines are making up for time lost during the pandemic. Investment in light trucks was a bit less than previously estimated, but still jumped 70% annualized, reflecting purchases by car rental companies. A substantial proportion of new vehicles are SUVs, which are considered trucks. IT equipment spending was a lot lower than previously estimated, as new data confirm that spending by companies to support remote working has long since peaked.

Structures rose about 11% annualized, a bit more than the original estimate. All the growth was new factories, up more than 90% annualized, reflecting the booming construction of facilities to make semiconductor and EVs. The value of new factories put in place now exceeds that for office and retail. In contrast, spending on mining structures fell along with active drill rigs as oil prices declined through July, though they have rebounded in August.

High-frequency data have not been as sanguine. When adjusted for inflation, monthly data on shipments of

nondefense, nonaircraft capital goods declined again in July and have been down for five of the past six months. Year over year, the contraction has been 1.9%. Moreover, inflation-adjusted new orders have declined for two months and are down 3.2% year over year.

The lower figure for second-quarter business investment contributes to a slightly lower outlook. Real fixed business investment will grow by 2.7% at an annual rate in 2023 compared with 3.1% in the August forecast.

The short-term trajectories for existing- and new-home sales were adjusted this month to account for recent trends. Existing-home sales are expected to remain low for several quarters as the supply of available homes for sale is depressed by interest rate lock-in effects. Conversely, newhome sales are expected to come in higher as more buyers turn to new construction to satisfy their demand.

Permits and starts for single-family construction are expected to be modestly higher in the near term as a result. However, multifamily permits and starts are expected to retreat to pre-pandemic levels given tighter lending standards for CRE construction loans and the record number of projects under construction.

House prices are forecast to trend down slightly through late 2025. Limited inventory will support prices in the near term, but lack of affordability will lead to modest price declines longer term given expectations for persistently high interest rates.

The outlook for CRE prices remains pessimistic but is largely unchanged except for apartment buildings. The Moody's Analytics CRE Price Index registered a 17% drop in the second quarter for apartments, which has been incorporated into the September outlook.

Persistent Inflation Dips Further in the U.K.

By ROSS CIOFFI

In August, consumer price inflation was 6.7% year over year, down from 6.8% in July. The retreat defied expectations of an increase. We thought a 0.1-percentage point increase was in store, while the Bank of England forecast a rise to 7.1%. While energy prices fell at a slower pace because of rising fuel prices, a positive surprise was the stronger-thanexpected year-over-year decline in core inflation to 6.2% from 6.9% in July. Not only did core goods inflation fall year over year to 5.2% from 5.9%, but service inflation also eased to 6.8% from 7.4%. This signals that consumer demand is weakening in the <u>U.K.</u> and monetary policy is transmitting to the economy.

There had been little doubt that the BoE would announce another interest rate hike at Thursday's meeting, but the latest inflation data may create more uncertainty around the Monetary Policy Committee's decision. At this point, we still believe the BoE will see a precautionary rate hike as the best choice.

The August print marks a minor 0.1-percentage point decline in the headline rate, and even with the more impressive decline in core inflation, the rate is still three times the bank's target. Most of all, the BoE will see the continued acceleration in wage growth as cause for concern. On top of this, producer price inflation did not show much improvement. Producers' input prices fell 2.3% year over year in August—a softer pace of decline than July's 3.2% drop. Likewise, producers' output prices declined 0.4% year over year in August after a 0.7% decrease in July.

Therefore, we are not changing our forecast for Thursday's BoE meeting: we still expect a 25-basis point hike to the bank rate, to 5.5%.

Exports Fall In Singapore and Malaysia

By DENISE CHEOK

<u>Singapore</u>'s nonoil domestic exports tumbled 20.1% from a year earlier. This 11th straight retreat for NODX came close to matching July's surprisingly steep fall. It was also more severe than our and consensus estimates.

The electronics segment fell 21.1% as weak global growth hit home. Within this segment, integrated circuits, disk media products, and personal computers led the way with falls of more than 25%.

Exports of nonelectronics did little better, falling 19.9% from August 2022. The retreat was mainly due to ship and boat structures, where exports dived nearly 98%, as well as pharmaceuticals and specialised machinery. In the first two cases, results were up against high comparison figures. Electronics and nonelectronics also declined in seasonally adjusted month-over-month terms.

Exports to top destinations as a whole fell, with the U.S., China and the EU leading the way. Indonesia was the only export destination to see an increase. Electronic exports to major Asian economies, including Japan, South Korea, Malaysia and Thailand, tumbled between 26% and 43%. Exports of nonelectronics to top markets fared slightly better, although base effects were at play.

The August data are at odds with better-than-expected industrial production figures. Factory output of electronics finally clocked a positive year-over-year reading in July—the first since December 2022. Recent trade readings from major tech hubs such as South Korea and Japan have also indicated modest pickups in the electronics segment. Although we expect the tech downturn to be bottoming out, the road to recovery will be a long one. We are unlikely to see a pickup in export numbers until late this year or early next year.

With the Monetary Authority of Singapore set to review monetary policy settings in mid-October, August's trade numbers support our view that the central bank will stand pat. Any monetary policy tightening would need to take into account the impact of a stronger Singapore dollar on exports; although a stronger currency would make imports cheaper, it would dampen already-weak demand for exports.

Malaysian exports and imports struggle

<u>Malaysia</u>'s foreign trade surplus rose to MYR17.3 billion from MYR17.1 billion in July. But exports and imports disappointed. Both clocked double-digit year-over-year declines, although this was partly caused by high base effects from surging commodity prices a year ago.

Manufactured goods, which make up almost 90% of exports, declined mainly because of electronic products, petroleum products, palm oil-related products, and chemical products. The decline was also broad-based by export destination, with shipments to most of Malaysia's top 10 markets down from a year ago. Vietnam and Australia were the exceptions. Electronic exports to Singapore and China, Malaysia's largest two export markets, both fell 20% year over year. After a relatively robust run for most of 2023, electronics exports have recently been hit by the tech-cycle downturn.

Base effects hit mining and agriculture exports the hardest. As commodity prices have fallen from last year's peak, nominal exports of these products have consequently declined. Tepid global growth hit unit volumes for commodities such as refined petroleum and liquefied natural gas.

Imports of intermediate and consumption goods fell 22.6% and 5.4%, respectively, while imports of capital goods rose a modest 5.4%.

The return of El Niño after three years of La Niña is a risk for the agricultural sector. High temperatures later this year will hurt crops such as palm oil fruit, but an uptick in palm oil prices might not offset the hit to supply.

The trade outlook remains relatively subdued in the coming months. Although data out of tech hubs such as South Korea, Japan and Taiwan have indicated that the tech cycle has largely bottomed out, we are cautious on the outlook. The road to recovery will be a long one, with no significant uptick expected until late 2023 or early 2024.

LatAm Gets a Boost From Oil Price Spike

By JUAN PABLO FUENTES

Oil prices have rallied in recent weeks with the price for Brent crude topping the \$95 per barrel mark for the first time since late 2022. Saudi Arabia's decision to voluntarily cut oil supply by 1 million barrels per day until the end of the year and more robust demand from China have pushed oil prices higher. Saudi Arabia's voluntary cut comes on top of OPEC-mandated supply restrictions. The recent runup in prices is good news for most of Latin America. According to the Energy Information Administration, the region will produce 9.5 million barrels per day of oil this year, up from 8.7 million barrels per day last year. Higher prices, if sustained, will incentivize further investment in upcoming months, leading to higher output levels in 2024 and 2025.

All major producers in the region, except Ecuador, will report an increase in output this year, led by Argentina, Brazil and Guyana. Drilling activity in Brazil and Argentina increased 40% and 13% year over year, respectively, in the first eight months of the year, signaling solid output growth in upcoming months. Even Mexico and Venezuela, which have seen output dwindle sharply in the last decade, will achieve some growth in oil production this year. Colombia, another large regional producer, will see a stabilization in output after sharp yearly declines in recent years. The region's hottest oil spot in 2023 is Guyana, which will see oil output increase by 45% to 400,000; the small South American country made significant discoveries of oil reserves in the last five years.

Increasing oil output and higher prices bring extra revenue to governments and boost exports. Similarly, investing in adding oil output capacity also produces many indirect economic benefits. Argentina's ongoing shale oil mini-boom has partially offset the devastating negative impact of the recent historic drought. In Brazil, the region's leading oil producer, investment in new capacity has been partly responsible for the economy's better-than-anticipated performance this year.

On the negative side, rising international oil prices might push inflation higher in upcoming months, putting pressure on central banks to keep restrictive monetary conditions for longer. Net oil importers such as Chile, Bolivia, Peru, and most of Central America and the Caribbean are most at risk. These countries cannot afford to subsidize domestic gas prices when international prices rise measurably. Moreover, their external balances tend to deteriorate as they must pay more for oil imports. Yet, on net, the region benefits from higher oil prices given the larger size of oil producers. Oil-producing countries must use the incipient oil windfall wisely. With countries such as Colombia and Brazil facing high debt levels, they would benefit from reducing their fiscal deficits. Long term, the region must still plan for a global energy transition that diminishes the use of fossil fuels in favor of renewable sources. This transition will be gradual, however, and Latin American oil producers can still benefit from boosting production levels.

More Weakening Seen in U.S., Upgrades Dominate in Europe

By OLGA BYCHKOVA

U.S.

U.S. credit downgrades outnumbered upgrades in the latest weekly period. The changes issued by Moody's Investors Service spanned a diverse set of speculative- and investment-grade bonds and industrial and financial companies. Downgrades comprised nine of the 12 rating changes and 44% of affected debt.

Downgrades were headlined by a real estate investment trust Diversified Healthcare Trust, with its corporate family rating and senior unsecured guaranteed notes lowered to Ca from Caa3, its senior unsecured notes cut to C from Ca, and its speculative-grade liquidity rating affirmed at SGL-4, indicating weak liquidity and impacting 29% of debt affected in the period. The ratings actions followed the announcement that DHC and Office Properties Income Trust—an affiliate REIT with whom DHC shares an external manager—have mutually decided to terminate their merger agreement. Moody's Investors Service believes that DHC now has limited options as it seeks to refinance \$700 million of debt that comes due in early 2024.

The ratings downgrades reflect DHC's weak liquidity, the credit agency's view that its capital structure is unsustainable, and that the probability of a major financial restructuring is high. This could include a bankruptcy, or transactions which Moody's Investors Service would view as a distressed exchange, and hence a default. In the event of a restructuring, the rating agency expects that the recovery rates for the REIT's unsecured debt will be low given the mixed quality of the unencumbered asset pool. The stable outlook reflects Moody's Investors Service's view that the default probability is high and is appropriately captured at the current rating level. The ratings could be downgraded further if for whatever reason the probability of default increases or if the prospects for recovery continue to decline. Although unlikely in the near term, a material improvement in DHC's liquidity and its operating performance would be needed to prompt an upgrade, the credit agency added.

The largest upgrade, accounting for 56% of debt affected in the period, was issued to semiconductor manufacturer Microchip Technology Inc with its senior unsecured rating raised to Baa1 from Baa2. Moody's Investors Service also assigned a P-2 short-term rating to Microchip's new commercial paper program. The outlook is stable. The upgrade reflects the company's high margin portfolio of microcontroller, analog, mixed signal, and specialized semiconductor solutions. According to the rating agency, this product suite, combined with the fab-lite manufacturing model and low financial leverage, supports strong, consistent cash flow generation. Given Microchip's broad product portfolio and long product cycles of primarily proprietary products, EBITDA margin will be sustained in the mid to upper 40% level (Moody's adjusted) over time while cash flow remains robust. The outlook is stable, motivated by the credit agency's expectation of flat to low single digits annual revenue growth over the next 12 to 18 months.

Europe

Corporate credit rating change activity was lighter but much stronger across Western Europe with seven upgrades issued to the diverse set of speculative-grade financial firms and a lone downgrade made to UK industrial company. Upgrades comprised 97% of debt affected in the period.

Last week, Moody's Investors Service upgraded the longterm deposit ratings of six Greek banks—Alpha Bank S.A., Attica Bank S.A., Eurobank S.A., National Bank of Greece S.A., Pancreta Bank S.A., and Piraeus Bank S.A.—by either one or two notches as well as the standalone baseline credit assessment of those banks, impacting 95% of debt affected in the period. The rating action was driven by structural improvements in the Greek economy as well as significant enhancements in banks' financial fundamentals. Structural improvements and reforms have improved the economy's resilience to shocks, triggering a recent sovereign rating upgrade to Ba1 (stable) from Ba3 (positive). As a result, Moody's Investors Service raised the Macro Profile it assigns to Greece to 'Moderate+' from 'Moderate-', which in turn exerted upward pressure to all six rated banks' standalone credit profiles. The upgrades also capture the rating agency's view of the good prospects for Greek banks to sustain their relatively strong financial performance in the next two years, which will also enhance their tangible capital base and loss absorbing capacity.

The positive outlook for the six banks' various long-term deposit, issuer and senior unsecured ratings signals the rating agency's expectation for potential further improvements in the country's operating environment and the banks' standalone credit profiles in the next 12 to 18 months despite the challenges that lie ahead. Moody's Investors Service expects that all banks will be able to further strengthen their capital base through robust retained earnings, and that any downside credit risks stemming from inflation pressures and high interest rates will remain manageable with no immediate material risk to their asset quality.

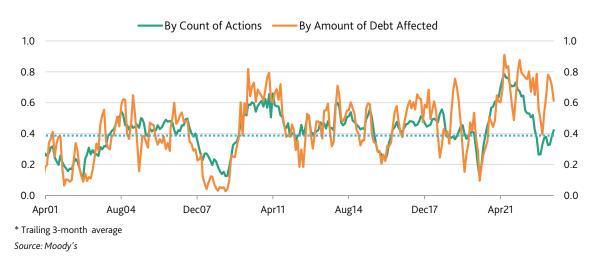


FIGURE 1 Rating Changes - US Corporate & Financial Institutions: Favorable as a % of Total Actions

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

FIGURE 3 Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/S G
9/13/2023	CAMPING WORLD HOLDINGS INCCWGS ENTERPRISES, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG
9/13/2023	PH BEAUTY HOLDINGS II, INCPH BEAUTY HOLDINGS III, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG
9/13/2023	RVRH HOLDINGS, LLC-RVR DEALERSHIP HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG
9/13/2023	NATIONAL VISION HOLDINGS INC-NATIONAL VISION, INC	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba1	Ba2	SG
9/14/2023	DIVERSIFIED HEALTHCARE TRUST	Industrial	SrUnsec/LTCFR	2350	D	Ca	С	SG
9/14/2023	LEARFIELD COMMUNICATIONS, INCLEARFIELD COMMUNICATIONS, LLC	Industrial	SrSec/BCF/PDR		D	Caa1	Caa3	SG
9/15/2023	MICROCHIP TECHNOLOGY INC.	Industrial	SrUnsec	4600	U	Baa2	Baa1	IG
9/15/2023	RUSSELL INVESTMENTS CAYMAN MIDCO, LTDRUSSELL INVESTMENTS US INSTITUTIONAL HOLDCO, INC.	Financial	SrSec/BCF/LTCFR/PDR		D	Ba3	B1	SG
9/18/2023	CPM HOLDINGS, INC.	Industrial	LTCFR/PDR		U	B3	B2	SG
9/18/2023	CARESTREAM DENTAL TECHNOLOGY PARENT LIMITED- CARESTREAM DENTAL TECHNOLOGY, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	Caa1	SG
9/18/2023	VACO INTERMEDIATE HOLDINGS LLC-VACO HOLDINGS, LLC	Industrial	SrSec/BCF		D	B2	B3	SG
9/19/2023	RS IVY HOLDCO, INCITT HOLDINGS LLC	Industrial	SrUnsec/LTCFR/PDR	1220	D	B2	B3	SG
Source: Moodu's								

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/S G	Country
9/14/2023	CERBERUS CAPITAL MANAGEMENT L.PHAYA HOLDCO 2 PLC	Industrial	SrSec/LTCFR/PDR	392.9558	D	Ca	С		UNITED KINGDOM
9/19/2023	NIBC BANK N.V.	Financial	PS	143.8637	U	Ba1	Ba1	SG	NETHERLANDS
9/19/2023	NATIONAL BANK OF GREECE S.A.	Financial	SrUnsec/STD/LTD/Sub/MTN	1957.129	U	Ba3	Ba1	SG	GREECE
9/19/2023	ALPHA SERVICES AND HOLDINGS S.AALPHA BANK S.A.	Financial	SrUnsec/LTIR/LTD/Sub/MTN	3541.296	U	Ba3	Ba2	SG	GREECE
9/19/2023	EUROBANK ERGASIAS SERVICES AND HOLDINGS S.AEUROBANK S.A.	Financial	SrUnsec/STD/LTD/Sub/MTN	2453.307	U	Ba3	Ba1	SG	GREECE
9/19/2023	PIRAEUS FINANCIAL HOLDINGS S.APIRAEUS BANK S.A.	Financial	SrUnsec/LTIR/LTD/Sub/MTN	3039.968	U	B1	Ba2	SG	GREECE
9/19/2023	ATTICA BANK S.A.	Financial	LTD		U	Caa1	B3	SG	GREECE
9/19/2023	PANCRETA BANK S.A.	Financial	LTD		U	B3	B2	SG	GREECE

MARKET DATA

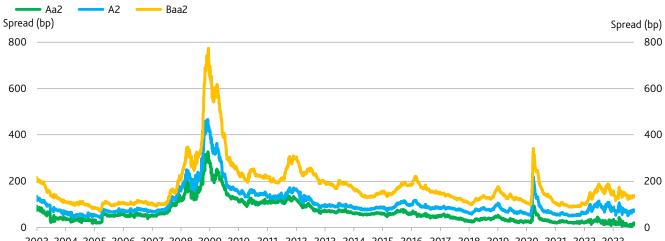


Figure 1: 5-Year Median Spreads-Global Data (High Grade)

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

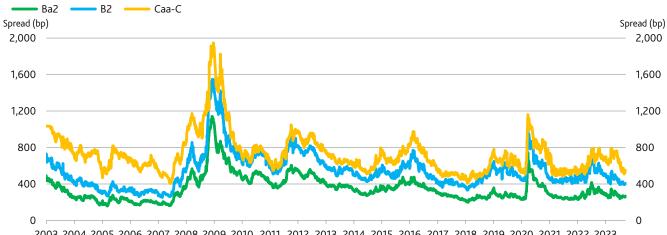


Figure 2: 5-Year Median Spreads-Global Data (High Yield)

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 (September 13, 2023 – September 20, 2023)

CDS Implied Rating Rises	CDS Impli	ed Ratings	
lssuer	Sep. 20	Sep. 13	Senior Ratings
Microsoft Corporation	Aaa	Aa1	Aaa
Charles Schwab Corporation (The)	Baa1	Baa2	A2
American Tower Corporation	Baa3	Ba1	Baa3
Brunswick Corporation	Ba1	Ba2	Baa2
Truist Financial Corporation	Baa2	Baa3	A3
State Street Corporation	A2	A3	A1
MPLX LP	Baa2	Baa3	Baa2
Fidelity National Information Services, Inc.	Baa1	Baa2	Baa2
Crown Castle Inc.	Baa3	Ba1	Baa3
Becton, Dickinson and Company	Baa1	Baa2	Baa2

CDS Implied Rating Declines	CDS Impli		
Issuer	Sep. 20	Sep. 13	Senior Ratings
Thermo Fisher Scientific Inc.	A1	Aa2	A3
Oracle Corporation	Baa1	A3	Baa2
T-Mobile USA, Inc.	Baa3	Baa2	Baa2
International Business Machines Corporation	A2	A1	A3
Walmart Inc.	Aa2	Aa1	Aa2
Philip Morris International Inc.	A3	A2	A2
3M Company	A3	A2	A2
Coca-Cola Company (The)	Aa3	Aa2	A1
Lowe's Companies, Inc.	Aa3	Aa2	Baa1
Pfizer Inc.	Aa2	Aa1	A1

CDS Spread Increases				
Issuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Rite Aid Corporation	Ca	31,352	30,274	1,078
Liberty Interactive LLC	Caa2	2,713	2,530	183
Staples, Inc.	Caa2	2,729	2,556	173
CSC Holdings, LLC	B2	1,676	1,596	80
OPL Inc.	Ba2	244	165	79
Steelcase Inc.	Ba3	267	206	61
Kohl's Corporation	Ba3	617	560	57
American Axle & Manufacturing, Inc.	B2	541	487	55
Gap, Inc. (The)	B1	481	428	53
Goodyear Tire & Rubber Company (The)	B2	380	331	50

CDS Spread Decreases			CDS Spreads	
lssuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Embarq Corporation	Caa2	2,448	2,960	-512
Lumen Technologies, Inc.	Caa3	3,216	3,673	-457
Qwest Corporation	B3	1,415	1,644	-229
Pitney Bowes Inc.	B3	1,177	1,308	-131
HeartCommunications, Inc.	Caa1	1,427	1,540	-113
Bristow Group Inc.	B3	365	393	-29
PENN Entertainment, Inc.	B3	294	318	-24
First Industrial, L.P.	Baa2	171	189	-18
KeyCorp	Baa1	178	195	-17
Motiva Enterprises LLC	Baa1	146	162	-16

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (September 13, 2023 – September 20, 2023)

CDS Implied Rating Rises	CDS Impli		
lssuer	Sep. 20	Sep. 13	Senior Ratings
Credit Mutuel Arkea	A3	Baa2	Aa3
BAWAG P.S.K. AG	A3	Baa2	A1
Orsted A/S	Aa3	A2	Baa1
BNG Bank N.V.	Aa1	Aa2	Aaa
Banque Federative du Credit Mutuel	Baa1	Baa2	Aa3
DZ BANK AG	A1	A2	Aa2
Danske Bank A/S	A2	A3	A3
Electricite de France	Baa2	Baa3	Baa1
Svenska Handelsbanken AB	A2	A3	Aa2
Erste Group Bank AG	Baa2	Baa3	A1

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings		
Issuer	Sep. 20	Sep. 13	Senior Ratings	
NXP B.V.	A3	A1	Baa3	
Schneider Electric SE	Aa3	Aa1	A3	
Spain, Government of	A1	Aa3	Baa1	
BNP Paribas	A2	A1	Aa3	
Greece, Government of	Baa2	Baa1	Ba1	
Nordea Bank Abp	A1	Aa3	Aa3	
Standard Chartered Bank	A1	Aa3	A1	
ENEL Finance International N.V.	A3	A2	Baa1	
Veolia Environnement S.A.	A1	Aa3	Baa1	
Merck KGaA	Aa2	Aa1	A3	

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Nidda Healthcare Holding GMBH	Caa3	536	480	56
Bellis Acquisition Company PLC	Caa2	626	601	26
Lanxess AG	Baa2	181	159	23
Cirsa Finance International S.a r.l.	Caa2	352	329	23
INEOS Quattro Finance 2 Plc	B2	472	451	21
Carnival plc	B3	490	469	21
Wm Morrison Supermarkets Limited	B2	758	738	20
Lorca Telecom Bondco, S.A.U.	ВЗ	389	370	18
FCE Bank plc	Baa2	172	154	17
Renault S.A.	Ba1	237	221	17

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Vedanta Resources Limited	Caa2	2,675	3,128	-452
Novafives S.A.S.	Caa2	447	546	-99
Boparan Finance plc	Caa3	1,663	1,700	-37
Piraeus Financial Holdings S.A.	Ba3	249	282	-33
Garfunkelux Holdco 3 S.A.	Caa2	1,303	1,331	-28
Stagecoach Group Limited	Baa3	170	190	-20
Stena AB	B1	287	306	-19
Alpha Services and Holdings S.A.	Ba3	246	264	-18
Iceland Bondco plc	Caa2	556	572	-16
Intelsat Jackson Holdings S.A.	Caa2	2,391	2,404	-13

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (September 13, 2023 – September 20, 2023)

CDS Implied Rating Rises	CDS Implied Ratings			
Issuer	Sep. 20	Sep. 13	Senior Ratings	
Macquarie Group Limited	Baa2	Baa3	A2	
Bank of East Asia, Limited	Baa2	Baa3	A3	
Kazakhstan, Government of	Baa3	Ba1	Baa2	
SK Hynix Inc.	Ba1	Ba2	Baa2	
Sumitomo Corporation	Aa1	Aa2	Baa1	
Sydney Airport Finance Company Pty Ltd	Baa2	Baa3	Baa1	
RHB Bank Berhad	Baa2	Baa3	A3	
Flex Ltd.	Baa3	Ba1	Baa3	
Development Bank of Kazakhstan	Ba1	Ba2	Baa2	
Stockland Trust Management Limited	A3	Baa1	A3	

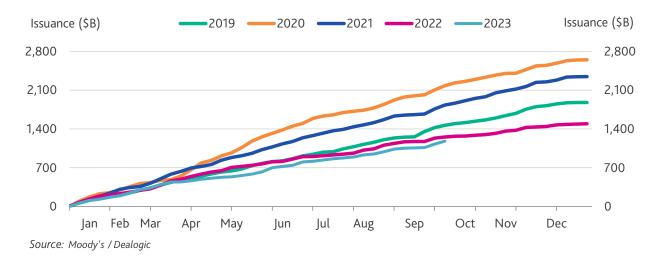
CDS Implied Rating Declines	CDS Impli		
Issuer	Sep. 20	Sep. 13	Senior Ratings
Commonwealth Bank of Australia	A1	Aa3	Aa3
India, Government of	Baa2	Baa1	Baa3
Mitsubishi UFJ Financial Group, Inc.	Aa3	Aa2	A1
Thailand, Government of	A1	Aa3	Baa1
Oversea-Chinese Banking Corp Ltd	Aa2	Aa1	Aa1
Kansai Electric Power Company, Incorporated	Aa2	Aa1	A3
MUFG Bank, Ltd.	Aa3	Aa2	A1
Transurban Finance Company Pty Ltd	Baa3	Baa2	Baa2
Korea Electric Power Corporation	Aa2	Aa1	Aa2
Indian Railway Finance Corporation Limited	Baa3	Baa2	Baa3

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Indian Railway Finance Corporation Limited	Baa3	95	76	18
Canara Bank	Baa3	85	68	17
Nissan Motor Co., Ltd.	Baa3	124	110	15
Rizal Commercial Banking Corporation	Baa3	115	100	15
State Bank of India	Baa3	74	59	15
ICICI Bank Limited	Baa3	72	58	14
India, Government of	Baa3	77	64	13
Transurban Finance Company Pty Ltd	Baa2	98	86	12
Vietnam, Government of	Ba2	125	114	11
GMR Hyderabad International Airport Limited	Ba3	221	210	11

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Sep. 20	Sep. 13	Spread Diff
Pakistan, Government of	Caa3	3,056	3,209	-153
Vanke Real Estate (Hong Kong) Company Limited	Baa2	616	651	-34
Sydney Airport Finance Company Pty Ltd	Baa1	86	101	-14
JSC Halyk Savings Bank of Kazakhstan	Ba2	372	379	-7
Tokyo Electric Power Company Holdings, Inc.	Ba1	52	58	-6
LG Chem, Ltd.	A3	81	86	-5
Toyota Industries Corporation	A2	94	99	-5
Development Bank of Kazakhstan	Baa2	177	180	-3
Boral Limited	Baa2	118	121	-3
Sumitomo Corporation	Baa1	34	35	-2

Source: Moody's, CMA

ISSUANCE



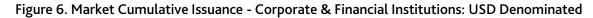
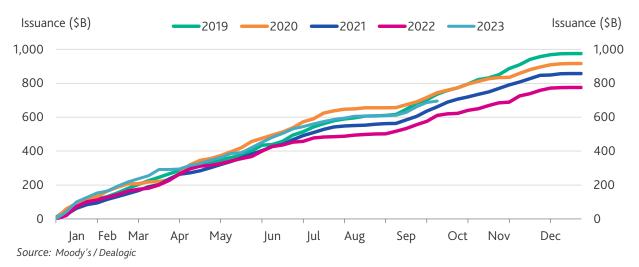


Figure 7. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



•					
		USD Denominated			
	Investment-Grade	High-Yield	Total*		
	Amount	Amount	Amount		
	\$B	\$B	\$B		
Weekly	37.000	11.900	49.230		
Year-to-Date	1,009.094	145.108	1,178.318		
		Euro Denominated			
	Investment-Grade	High-Yield	Total*		
	Amount	Amount	Amount		
	\$B	\$B	\$B		
Weekly	7.241	1.544	8.786		
Year-to-Date	619.019	52.513	694.645		

Figure 8. Issuance: Corporate & Financial Institutions

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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