MOODY'S
ANALYTICS

WEEKLY MARKET OUTLOOK
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Inside Economics Podcast:

Rising Rates Won't Bring Golden Age of Banking

As a core monetary policy transmission mechanism, banks pass on policy rate hikes to lending and deposit rates, although the strength of this response varies by asset class and maturity. Since March, U.S. deposit rates have only slowly responded to the rising fed funds rate, while lending rates picked up more quickly. For instance, the 30-year fixed mortgage rate rose 200 basis points from March to June, while money market or savings deposit rates moved between only 1 and 25 basis points. As one argument goes, high deposit demand in the pandemic's aftermath has made rates less responsive to tighter money, creating an opportunity to boost bank incomes with new originations and adjustable-rate loans.

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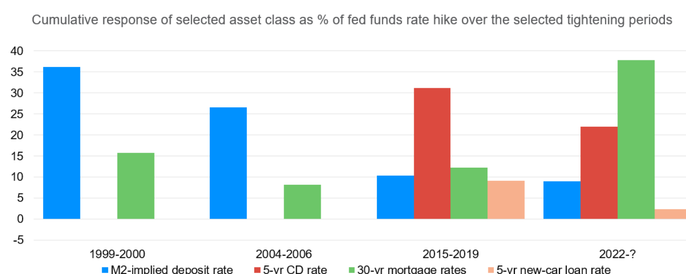
Deposit betas—the response of deposit rates to a policy rate change—have certainly declined in recent decades. Using the return on M2, adjusted for noninterest-bearing components, as a proxy for average deposit rates, banks passed on about 35% of the Fed's hikes to depositors during the 1999 tightening cycle. By contrast, during the 2015-2019 cycle, banks passed on only 10%.

Deposit Betas Dropped Off After the Global Financial Crisis

Cumulative response of selected asset class as % of fed funds rate hike over the selected tightening periods



Sources: Board of Governors of the Federal Reserve, FDIC, Freddie Mac, Center for Financial Stability, Divisia, Moody's Analytics

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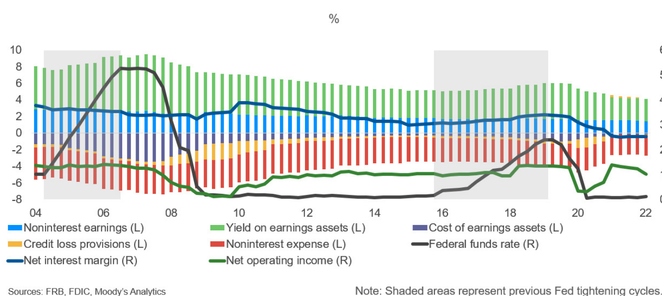
With the initial current cycle response similarly anemic, perhaps rising rates may indeed benefit banks.

However, this argument is at odds with economic theory; short-term rates should respond more to policy rate hikes than long-term rates. Since bank liabilities have shorter maturities than their assets, rising policy rates should reduce net interest margins—the difference between interest earnings and expense—as a percent of earning assets. Empirically, average NIM behavior has varied across tightening episodes. For instance, when the Fed tightened in 2004, and in every cycle since the 1980s, the NIM fell. Consistent with theory, a flattening yield curve typically pushed deposit rates up quicker than longer-term lending rates.

Low Policy Rates Caused Historic Margin Compression



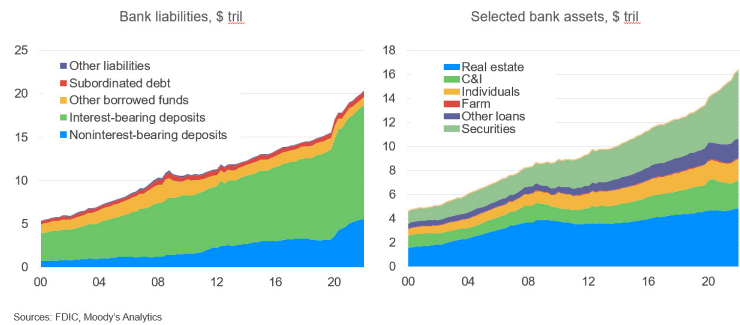
Sources: FRB, FDIC, Moody's Analytics

Note: Shaded areas represent previous Fed tightening cycles.

One exception was the 2015-2019 cycle, when the NIM increased about 35 basis points, as interest income rose faster than expense. However, this behavior is attributable to low interest rates after the global financial crisis. Historically, deposit rates traded below the fed funds rate, and when the policy rate crashed to zero in 2009, banks were unwilling to charge depositors negative rates. Rising policy rates in 2015 caused a sluggish response in deposit rates, as equilibrium levels were still negative.

In a similar vein, policy rates during the pandemic fell back to zero, and recent hikes did not create much initial competitive pressure on bank liabilities. Moreover, banks entered 2022 flush with funds. The pandemic caused the largest-recorded single-quarter deposit increase in early 2020, followed by more growth. As companies drew down lines of credit, the Fed purchased large quantities of Treasuries, and fiscal stimulus drove up personal savings rates. By early 2022, interest-bearing deposits exceeded 2019 levels by more than 25%. However, this trend is reverting. Stimulus has faded, inflation has eroded savings, and rising yields make other assets more attractive for savers, accelerating deposit withdrawals.

Record Deposit Growth Supported Lackluster Lending in Post-Pandemic U.S.



Sources: FDIC, Moody's Analytics

On the asset side, banks had adjusted their portfolios since 2019. Conventional loan segments expanded at below pre-pandemic rates, with some exceptions. At the same time, securities and cash holdings rose by 70% since 2019. This shift exposes banks to near-term capital losses and will act as a longer-term drag on interest earnings, as a larger share of funds are now stuck in low-interest reserves or securities. Securities sales, alternatively, create capital losses.

Powell dashes hopes of a pivot

Federal Reserve Chair Jerome Powell's speech at Jackson Hole last week was hawkish and introduced additional upside risk to our forecast for a 3.5% terminal fed funds rate this cycle. Powell's comments nudged the market-implied path for the fed funds rate higher; markets have the terminal rate a touch north of 3.8%. He emphasized that "estimates of longer-run neutral rates are not a place to stop or pause" and that "restoring price stability will likely require maintaining a restrictive policy stance for some time to come."

Powell reinforced that the bar is high for the central bank to start reducing the size of rate hikes as it manages the risks of declaring a premature victory over inflation. The core personal consumption expenditure deflator rose 0.1% in July, leaving it up 6.3% on a year-ago basis following a 6.8% gain in June. This isn't overly welcome news for the Fed as it wants concrete signs that inflation is steadily moving toward its 2% objective. Powell acknowledged that rate hikes are going to cause "some pain" for households and businesses.

We constructed a scenario in which the Fed hikes interest rates even higher than markets are pricing in for the next year. In this scenario, the Fed panics and does whatever it takes to bring year-over-year growth in the core PCE deflator back down to the central bank's 2% target by the end of 2023. The core PCE deflator is the Fed's preferred measure of inflation. In such a way, the terminal rate—or the peak in the fed funds rate during this tightening cycle—would be 4%, which is only slightly higher than the implied path from financial markets.

While there is no outright decline in real GDP, the economy suffers a so-called growth recession in 2023, as annualized real GDP growth grounds to a near halt. More important, the labor market goes from red-hot to lukewarm, and the unemployment rate rises to 5% by the end of next year.

Much of Powell's commentary focused on the importance of keeping inflation expectations well-anchored, which he views as a key lesson from the inflationary episodes of the 1970s and early 1980s. There are few signs of a loss in credibility, with the latest reading of five- to 10-year inflation expectations from the University of Michigan survey (2.9%) still well within the range seen as consistent with the Fed's 2% inflation target—and not an enormous gap the Fed can't close. Also, survey-based measures of inflation expectations track energy prices. Market-based measures of inflation expectations, which are based on the CPI, remain anchored and in line with the Fed's inflation objective.

We still expect a 50-basis point rate hike this month, but the risks are weighted toward another 75-basis point hike. What is clear is that the Fed isn't going to pause soon.

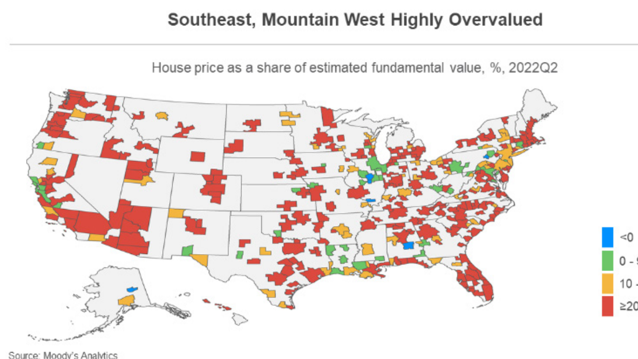
Powell's comments rippled through the corporate bond market. Markets are repricing credit risk. They have altered their expectations for the path of the fed funds rate, and the odds of the central bank cutting rates late next year or in early 2024 are diminishing. High-yield corporate bond spreads have widened recently and are well off their recent lows; spreads have widened more quickly for the lowest-rated companies, which isn't surprising. Those at the low end of the credit-rating ladder are most vulnerable to rising interest rates, weaker corporate profit growth, and a slowing economy.

TOP OF MIND

U.S. Housing More Overvalued than Ever

BY MATTHEW WALSH

While the second quarter of 2022 brought higher mortgage rates and lower housing affordability that bit into demand, the U.S. housing market remained extremely overvalued. Nationally, the price of homes rose more than 17% from a year earlier, according to the Moody's Analytics Home Price Index. With more than a year of double-digit price gains, house prices now exceed their long-run fundamental values by more than 25% nationally, the highest level in more than 30 years of record-keeping.



Additionally, an increasing number of metro areas are registering significant overvaluation. A record-breaking two-thirds of all metro areas are extremely overvalued. Most of the extremely overvalued markets are in the South and West, though this isn't saying much given how broad-based house price appreciation has been. The Mountain census division, which has experienced the largest growth in population and among the fastest appreciation in house prices, is highly overvalued. The Northeast, where house prices are rising slower, has the most fairly valued markets in the nation.

Moody's Analytics estimates overvaluation by comparing the Moody's Analytics Home Price Index for a given geography to its long-run equilibrium home value. This equilibrium home value, or fundamental value, is determined by estimating the long-run statistical relationship between house prices and per capita wage and salary income. House prices that exceed their fundamental value by more than 20% are considered extremely overvalued.

Of large U.S. metro areas, the five most overvalued markets are little changed from last quarter. Boise City ID is the most overvalued market in the U.S. with the current price of homes exceeding the long-run equilibrium value by 77%. As a top destination for residents fleeing high-cost Pacific coast states, Boise has experienced explosive population and house price growth since the start of the pandemic. Prices have risen nearly 50% since the start of 2020. House price growth peaked in Boise last year but continued—though slowing—appreciation has kept home valuations sky-high.

With deteriorating affordability driven by rapid price growth over the past two years and higher financing costs, price appreciation is beginning to turn over in some of the most overvalued markets. Price growth peaked in not only Boise but also Austin TX, Las Vegas and Phoenix on a year-ago basis with many potential buyers increasingly stretched to make monthly mortgage payments.

No major metro area is undervalued

The bottom of the list is also similar to the rankings in the prior quarter. Given the breadth of house price appreciation over the last two years no major metro areas are undervalued. It may be a bit surprising to see that San Jose CA ranks dead last on the list, since it is one of the most expensive residential real estate markets in the U.S. However, with extremely high incomes and rapid out-migration of tech workers taking advantage of teleworking opportunities, San Jose's house prices are largely in line with their fundamental value.

While other metro areas at the bottom of the list may not have incomes that rival San Jose's, they have experienced a shrinking population that is keeping their housing markets more balanced than most. For example, in Pittsburgh, price growth has normalized back to its pre-pandemic average, and homeowner vacancy rates have risen to their highest point since the pandemic began.

Cooling ahead

Nationally, house price appreciation will quickly cool in the coming quarters as higher mortgage rates zap demand. Home sales will flatline next year as a growing number of homebuyers have a more difficult time affording a higher monthly mortgage payment. The regional outlook is varied, with the most overvalued markets seeing the greatest weight from the housing correction. House price gains have already peaked in some markets, and a sharper decline is on the way as prices fall back in line with their fundamental value.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar is light in the holiday-shortened week. Among the key data are the ISM nonmanufacturing survey for August. We also get new data on the nominal and real trade deficits in July, which could have implications for our high-frequency GDP model's tracking estimate of third quarter GDP, currently 1.7% at an annualized rate. Initial claims for unemployment insurance benefits will also be released, but the data can be volatile around the Labor Day Holiday. There isn't any significant data that could alter our subjective odds of a 50- or 75-basis point rate hike by the Fed later this month.

Europe

The European Central Bank's monetary policy decision will top economic headlines next week. We expect the policy Main Refinancing Rate will be hiked by 75 basis points to 1.25%. This will mean that the deposit rate will increase to 0.75%. With inflation rising in August, and still not likely peaked, we think the ECB will opt for a more hawkish move at the September meeting. That said, the pace will go back to 50-basis point hikes at the October meeting.

Meanwhile, euro zone retail sales likely only partially recovered by 0.5% m/m in July after June's 1.2% decline. The July reading will be saved mostly by a jump in German retail. Overall, we see retail sales continuing to struggle through the rest of the year, as inflation eats away at purchasing power. In that vein, we expect retail sales increased 0.2% m/m in Italy after a 1.1% decline in June.

We are forecasting contractions in German and French industrial production in July. In Germany we expect industrial output slipped 0.1 % m/m, after a 0.4% rise in June, while in France we foresee a 0.5% decline that follows a 1.4% increase. Here too, production cost inflation will be exerting a negative effect on the manufacturing sector. With gas and electricity prices soaring above year-ago levels, reports began to spread of firms cutting output.
Finally, Russia's inflation rate likely decelerated to 14.5% y/y this August from 15.1% in July.

Asia-Pacific

The Reserve Bank of Australia and Bank Negara Malaysia will stay on the tightening bandwagon next week.

The RBA won't be taking its foot off the pedal as it races to neutral, seeking to realign demand pressure with a smaller supply capacity. Medium-term inflation expectations are anchored, though they under threat from the tight labour market and resulting wage increases. The unemployment rate fell in July, reaching 3.4%. Job vacancies remained strong and retail turnover in July posted its largest month-on-month gain in four months, signalling that demand-side pressures are gathering. As such, a strong, 50-basis point hike in September seems most appropriate in the RBA's front-loaded response to maintaining price stability. This will take the cash rate to 2.35%, putting it on track to end the year at 3%.

We expect Bank Negara Malaysia to hike its overnight policy rate by 25 basis points to 2.5%. Soaring price pressures, coupled with a robust economic rebound, will likely push BNM to a third consecutive rate hike. Headline CPI rose by 4.3% y/y in July, a full percentage point increase from the previous month. Meanwhile, Malaysia's second-quarter GDP came in far above expectations, driven by an uptick in demand for services after borders fully reopened in April. On the external front, raising the overnight policy rate will shore up the ringgit, which has been slipping against the greenback amidst aggressive rate hikes by the U.S. Federal Reserve.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
4-Sep	Chile	Referendum on new constitution	Medium	Low
6-Sep	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
6-Sep	Chile	Banco Central Chile monetary policy announcement	Medium	Low
8-Sep	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
9-Sep	Peru	Banco Central de Reserva monetary policy announcement	Medium	Medium
11-Sep	Sweden	General election	Low	Low
15-Sep	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
20-Sep	Sweden	Riksbank monetary policy announcement	Low	Low
21-Sep	Brazil	Banco Central do Brasil monetary policy announcement	Low	Low
20-21-Sep	U.S.	Federal Open Market Committee meeting	High	High
22-Sep	Japan	Bank of Japan monetary policy announcement	Medium	Low
22-Sep	Switzerland	Swiss National Bank monetary policy announcement	Medium	Low
22-Sep	Norway	Norges Bank monetary policy announcement	Medium	Low
25-Sep	Italy	General election	Low	Low
29-Sep	Mexico	Banxico monetary policy announcement	Low	Low
30-Sep	India	Reserve Bank of India monetary policy announcement	Medium	Low
30-Sep	Colombia	Banrep monetary policy announcement	Low	Low
2-Oct	Brazil	Presidential and congressional elections	High	Medium
4-Oct	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
Oct 16-24	China	National Party Congress	High	Medium
20-21-Oct	European Union	European Council summit	Low	Low
27-Oct	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
28-Oct	Japan	Bank of Japan monetary policy announcement	Medium	Low
1-Nov	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
1-2-Nov	U.S.	Federal Open Market Committee meeting	High	High
3-Nov	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
3-Nov	Norway	Norges Bank monetary policy announcement	Medium	Low
7-18-Nov	U.N.	U.N. Climate Change Conference 2022 (COP 27)	Medium	Low
8-Nov	U.S.	Midterm elections	High	Medium
15-16-Nov	G-20	G-20 Heads of State and Government Summit, hosted by Indonesia	Medium	Low
18-19-Nov	APEC	Economic Leaders' Meeting, hosted by Thailand	Low	Low
24-Nov	Sweden	Riksbank monetary policy announcement	Medium	Low
7-Dec	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
7-Dec	India	Reserve Bank of India monetary policy announcement	Medium	Low
13-14-Dec	U.S.	Federal Open Market Committee meeting	High	High
15-Dec	United Kingdom	Bank of England monetary policy announcement	Medium	Medium
15-Dec	Euro zone	European Central Bank monetary policy announcement	Medium	Medium
15-Dec	Switzerland	Swiss National Bank monetary policy announcement	Medium	Low
15-Dec	Norway	Norges Bank monetary policy announcement	Medium	Low
15-16-Dec	European Union	European Council summit	Low	Low
20-Dec	Japan	Bank of Japan monetary policy announcement	Medium	Low

August Issuance Was Light, as Usual

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread narrowed from 172 to 164 basis points over the past week. This is below the 176-basis point average in August. The long-term average industrial corporate bond spread narrowed by 6 basis points to 150. It averaged 160 basis points in August.

The ICE BofA U.S. high-yield option adjusted bond spread widened from 461 basis points to 503. The Bloomberg Barclays high-yield option adjusted spread widened this past week from 447 to 484 basis points. This compares with an average high-yield spread of 1,000 basis points during recent recessions and an average of 350 outside of recessions. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread but are wider than what is implied by a VIX of 27. The VIX increased over the course of the past week.

DEFAULTS

Despite the drop in the default count from last month, the trailing 12-month global speculative-grade default rate held steady at 2.1% at the end of June, the same reading as at the end of May.

The default tally reached 43 in the first half of the year, up from 29 in the same period last year. Across sectors, Construction & Building remains the largest contributor to defaults with 11. The banking sector followed with eight. By region, North America had 18 defaults (17 in the U.S. and one in Canada). The rest were from Europe (12), Asia-Pacific (11), and Latin America (two).

In accordance with our credit conditions outlook, we lifted our one-year baseline global speculative-grade default rate forecast to 3.7% from last month's 3.3%. If realized, the new forecast will inch closer to the historical average of 4.1%.

U.S. CORPORATE BOND ISSUANCE

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 14% for IG and 19% for high-yield, wherein US$-denominated offerings increased 45% for IG and grew 12% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 32% for high-yield, wherein US$-denominated offerings increased 142% for IG and grew 45% for high yield.

Third-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 6% for IG and an annual advance of 44% for high-yield, wherein US$-denominated offerings increased 12% for IG and soared upward 56% for high yield.

Fourth-quarter 2020's worldwide offerings of corporate bonds revealed an annual decline of 3% for IG and an annual advance of 8% for high-yield, wherein US$-denominated offerings increased 16% for IG and 11% for high yield.

First-quarter 2021's worldwide offerings of corporate bonds revealed an annual decline of 4% for IG and an annual advance of 57% for high-yield, wherein US$-denominated offerings sank 9% for IG and advanced 64% for high yield.

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

Issuance softened in the third quarter of 2021 as worldwide offerings of corporate bonds revealed a year-over-year decline of 5% for investment grade. U.S. denominated corporate bond issuance also fell, dropping 16% on a year-ago basis. High-yield issuance faired noticeably better in the third quarter.

Fourth-quarter 2021's worldwide offerings of corporate bonds fell 9.4% for investment grade. High-yield US$ denominated high-yield corporate bond issuance fell from $133 billion in the third quarter to $92 billion in the final three months of 2021. December was a disappointment for high-yield corporate bond issuance, since it was 33% below its prior five-year average for the month.

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

In the second quarter, corporate bond issuance weakened. Worldwide offerings of investment grade corporate bonds totaled $548 billion, down 21% on a year-ago basis. US$ denominated high-yield corporate bond issuance was $38 billion in the second quarter, down from $63 billion in the first three months of the year. High-yield issuance is down 79% on a year-ago basis.

In the week ended August 24, there was no US$-denominated high-yield issuance. This puts the year-to-date total at $114.2 billion. Investment-grade bond issuance totaled $3.2 billion in the same week, bringing its year-to-date total to $1.022 trillion. Issuance is normally light in August and is still tracking that seen in 2018 and 2019.

U.S. ECONOMIC OUTLOOK

There were significant changes to the U.S. baseline forecast in August. We cut the forecast for GDP growth in the second half of this year, which will bleed into the unemployment rate. We also made an adjustment to our fiscal policy assumptions, incorporating the Inflation Reduction Act, but the implications for the near-term forecast for both GDP and inflation were on the margin.

Fiscal assumptions

The Inflation Reduction Act, which passed the Senate recently, has been incorporated in the soon-to-be-published August baseline forecast, as the legislation is all but certain to advance through the House and onto the president's desk.

To obtain the support from Arizona Senator Kyrsten Sinema, Senate Democrats nixed a provision that would have taxed more carried interest that general partners of investment funds receive for carrying out investment management services as ordinary income, limited the scope of the 15% corporate minimum tax by exempting certain accelerated cost recovery expenditures, and added extra funding for drought resiliency. To make up for the loss of revenue, Senate Democrats revived a 1% excise tax on stock repurchases, which had been included in the House-passed Build Back Better Act from November. The Senate parliamentarian ruled that the reconciliation bill could not require drugmakers to pay the government a rebate if drug prices increase faster than the rate of U.S. inflation in the commercial market. The inflation rebate will still apply to Medicare. Prior to final passage, an amendment was adopted to extend for two years the limitation on Section 461(l) business loss deductions of noncorporate taxpayers, which is scheduled to sunset after 2026 under current law.

The macroeconomic implications are likewise broadly unchanged. The IRA is estimated to reduce U.S. inflation, as measured by the consumer price index, by 3.3 basis points per year on average over the next 10 years. Also, the legislation will add 2 basis points per year to real GDP growth on average during the same period.

The baseline forecast does not assume that any further major piece of fiscal legislation will get passed during President Biden's current term in office. Republicans are poised to seize control of at least the House, which will slam the door shut on budget reconciliation as an avenue for Democrats to pass additional areas of the president's Build Back Better agenda.

COVID-19 assumptions

Confirmed case counts are elevated but remain below their January peak. The prevalence of at-home testing and asymptomatic or mild cases results in significant undercounting of infections in official statistics. We also assume that hospitalizations ebb and flow but remain below prior peaks due to widespread vaccinations and new treatments. Hospitals are able to manage the demand without compromising other services. Daily deaths attributable to COVID-19 remain in the low hundreds or 1.5 per million U.S. residents.

Energy price forecast and assumptions

The baseline forecast still assumes West Texas Intermediate crude oil prices peaked in the second quarter. The August baseline forecast includes the recent slide in West Texas Intermediate crude oil prices in July and early August. Therefore, oil prices are now forecast to average $97.25 per barrel this quarter, compared with $101.93 per barrel in the July baseline. Recession concerns, appreciation in the U.S. dollar, and a number of countries releasing some of their oil reserves have helped to push global oil prices lower recently. The forecast assumes a modest increase in oil prices in the fourth quarter before they steadily decline in 2023 and the first half of 2024. Oil prices bottom in 2024, a touch below $65 per barrel.

A key assumption is that even with the European ban, the global oil market will be roughly balanced by the end of 2022. Risks are that it takes longer than expected. The EU ban will reduce Russian oil shipments to global markets by an additional 1 million bpd, but it has been slow to be implemented. The official bans cover about 4% of total global supply.

Cutting GDP forecast

The August baseline incorporates the new data on second-quarter GDP. Real GDP fell 0.9% at an annualized rate in the second quarter, the second consecutive decline. GDP is only one of many variables that the National Bureau of Economic Research, the de facto arbiter of U.S. business cycles, uses to define a recession. Its stated definition is a "significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income and other indicators." Outside of GDP, the other key data the NBER relies on have generally continued to increase, including nonfarm employment, real consumer spending, industrial production, and weekly hours worked. Even real personal income—excluding transfers, another variable it watches—is flat to increasing.

A large portion of the weakness in GDP is due to a dramatic widening in the trade deficit. This reflects the strength of the U.S. economy compared with its trading partners and the

strength of the U.S. dollar, which is at its highest in decades against many currencies. Another portion comes from slowing inventory accumulation, a temporary phenomenon caused by businesses adjusting to wild swings in demand as the economy shut down and reopened. Domestic demand, including consumer spending and fixed business investment, remains sturdy. Moreover, real gross domestic income, which totals up the income earned by households and businesses—and in theory should add up to real GDP—continues to grow. The difference between real GDP and real GDI, also known as the statistical discrepancy, has never been as large as it is now. It would not be surprising if the Bureau of Economic Analysis is having an especially difficult time accurately measuring real GDP during the pandemic given the resulting big swings in global trade and inventories; real GDP could ultimately be revised higher to be more consistent with real GDI.

Real GDP growth increases in the second half of this year, but for all of 2022, it is now expected to increase 1.6%, compared with 1.9% in the July baseline. We have cut our forecast for U.S. GDP growth this year by a total of 190 basis points over the past several months. We nudged the forecast for GDP growth in 2023 down from 1.9% to 1.5%. The economy is now expected to be below its potential this year and next, which is likely around 2%.

Our baseline forecast for real GDP growth this year is below the Bloomberg consensus of 2%. The forecast for next year is 0.2 percentage point stronger than the Bloomberg consensus of 1.5%.

Business investment and housing

We lowered the forecast for growth in real business equipment spending this year, as it is now expected to increase 4.6%, compared with the 6.4% gain in the prior baseline. Fundamentals have turned less favorable for the outlook as financial market conditions have tightened this year, but there has been some recent relief as investment-grade and high-yield corporate bond spreads have narrowed noticeably. This is unlikely to have a noticeable impact on business investment as spreads should widen soon. The share of banks tightening lending standards on commercial and industrial loans breached the threshold that has been consistent with a recession in the past. We doubt recession fears will vanish soon and this should boost high-yield corporate bond spreads. Another reason why spreads will widen is that corporate profit margins are coming under pressure. Productivity plunged in the first half of this year while until labor costs surged. This isn't a good combination for corporate profit margins.

The interest rate-sensitive segments of the economy have weakened, which is not surprising as the Federal Reserve is front-loading rate hikes. Housing starts are expected to be 1.65 million, compared with 1.75 million in the prior baseline. Housing starts are expected to total 1.56 million next year, down from 1.81 million in the July baseline. Housing starts are forecast to increase in 2024, totaling 1.64 million.

There are likely only so many homes that can be built each year because of labor-supply constraints and a lack of buildable lots. Some of the labor-supply issues will ease as the pandemic winds down, but the reduction in immigration is particularly problematic for homebuilders' ability to find workers.

A decline in affordability has cut into our forecast for home sales, which are expected to total 6.27 million this year, less than the 6.46 million in the July baseline. We also cut the forecast for total home sales next year to 6.14 million, compared with 6.52 million in the prior baseline. New-home sales account for about 10% of total sales and existing-homes make up the remainder.

There were minor revisions to the forecast for the FHFA All-Transactions House Price Index this year and next. The July baseline has it rising 12.9% this year, compared with 12.7% in the prior baseline. The forecasts for 2023 and 2024 continue to expect little house price appreciation.

Labor market

The U.S. labor market remains very strong, but job growth is set to moderate. Nonfarm employment increased by a net 528,000 in July, and the net revision to the prior two months was 28,000. The total number of employed women rose by 327,000 last month, accounting for more than half of the 528,000 increase in overall payrolls.

July's gain and the revisions to prior months put employment above its pre-pandemic level. The seasonal adjustment factors boosted job growth less than normal for July. Also, not seasonally adjusted employment fell 385,000 in July, compared with the 1.13 million decline that normally occurred prior to the pandemic.

We have job growth averaging 370,000 per month this year before dropping to 110,000 in 2023. Job growth next year is weaker than that needed to keep the unemployment rate stable. The unemployment rate fell from 3.6% in June to 3.5% in July. The forecast is for the unemployment rate to gradually increase in the second half of this year, averaging 3.7% in the fourth quarter. The unemployment rate keeps rising in 2023 because of below-potential GDP growth and job growth that will be weaker than that needed to keep the unemployment rate stable. Therefore, the unemployment rate is expected to average 4% in the fourth quarter of 2023.

We assume a full-employment economy is one with approximately a 3.5% unemployment rate, around a 62.5% labor force participation rate, and a prime-age employment-

to-population ratio a little north of 80%. The labor force participation rate is close but still 0.4 of a percentage point below this threshold.

On the surface, there appears to be a disconnect between employment and GDP. The correlation coefficient between average monthly job growth in a given quarter and annualized growth in real GDP since 2000 is 0.71. Granger causality tests show that the causation between job and GDP growth runs both ways. The results didn't change when using different lags. This isn't surprising. Still, job growth has been stronger than GDP growth—but the disconnect between it and employment isn't unusual. Initial reports are volatile and subject to revision, and thus don't always tell similar stories.

Beyond data issues, there are real differences in how output and the labor market respond during the business cycle. For example, firms normally adjust workers' hours before adding or subtracting staff, which can cause output to rise or fall before employment does. Also, if we factor in productivity growth, it doesn't appear that employment and GDP are telling different stories.

Risks to our employment forecast are weighted to the downside. Per Okun's law, a 1-percentage point deceleration in GDP growth over the course of a year would amount to around 800,000 jobs per year. This would also increase the unemployment rate by about 0.5 percentage point.

Monetary policy

The Federal Reserve continues to quickly remove monetary policy accommodation as it attempts to tame inflation. The Federal Open Market Committee unanimously raised the target range for the fed funds rate by 75 basis points to 2.25% to 2.5% at the July meeting. The Fed has raised the target range for the fed funds rate by 150 basis points over the past two meetings. There were very few changes to the statement. The Fed didn't alter its forward guidance but did mention that spending and production have softened while job gains have been robust.

There was only a slight change in the forecast for the fed funds rate. The new forecast wasn't attributed to any changes to our assumptions. Rather, we adopted a new approach for forecasting the fed funds rate on a monthly basis to better align changes with the fed funds rate and updates from the FOMC meetings. The monthly forecast is then rolled up into our quarterly forecast.

The forecast is for a 50-basis point hike at the September meeting. This will be followed by 25-basis point rate hikes at the November and December meetings. The terminal fed funds rate remained at 3.5%, less than the median projection from the latest Summary of Economic Projections. The assumption is that the Fed will keep the fed funds rate at 3.5% for less than a year before gradually cutting by 100 basis points over the course of 2024, returning it to its neutral rate of 2.5%.

The 10-year Treasury yield has dropped recently, and we incorporated this into the August baseline. The 10-year Treasury yield is now forecast to average 3.1% in the fourth quarter of this year, compared with 3.33% in the July baseline. The 10-year averages 3.48% in 2023, 3 basis points lower than in the prior baseline. The July and August baseline forecasts for the 10-year Treasury yield converge in early 2024. The forecast has the yield curve, or the difference between the 10- and two-year Treasury yields, remaining inverted for the remainder of this year. The August baseline has the difference between the 10-year and three-month Treasury yields flattening but avoids inverting.

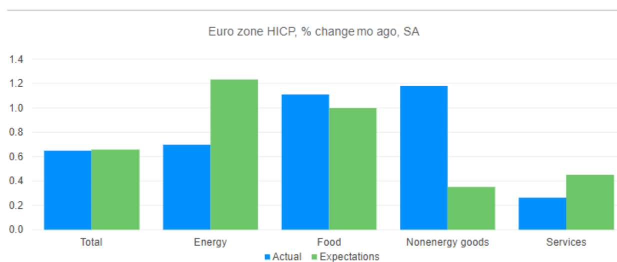
THE LONG VIEW: EUROPE

A Double-Digit Threat

BY KAMIL KOVAR

The euro zone inflation release brought mixed news Wednesday. Start with headline inflation, which increased from 8.9% to 9.1%. While this is a slight increase compared with the rapid increases during the spring, August was always expected to be a month with a small annual inflation increase because of last year's large base effect. On a seasonally adjusted, month-ago basis, prices still increased 0.7%, in line with increases in the last few months. This translates into an annualized rate of 8%, which is far from comforting.

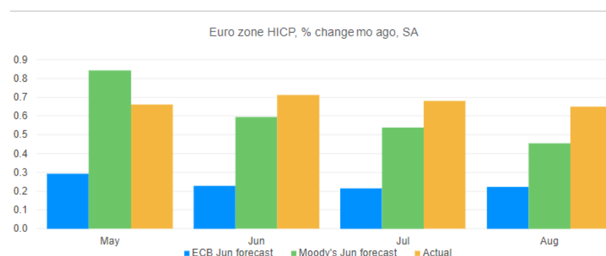
In contrast to the headline number, the numbers for the four main categories did bring substantial surprises. Most important was that nonenergy goods prices saw a large jump from July to August. While it is impossible to know the exact driver of this jump before we see the detailed data in the final release, the most plausible explanation is that industrial firms decided to increase prices alongside spiking energy costs. If so, then fall will bring further upside surprises.



The jump in goods prices was partly outweighed by a smaller-than-expected increase in services prices. This is by far the best news from the preliminary report, as it suggests that the period of rapid and broad-based increases in service prices driven by service sector recovery might be nearing an end. That said, this moderation will have to wait until October, since service prices will record a jump when the €9 public transport ticket in Germany expires in September. Even with this moderation, core inflation will remain above 4% until next spring.

Energy and food prices have brought less of a surprise. True, energy prices increased less than we thought, but this is hardly good news for the future. The lower-than-expected decrease is likely because of a slower-than-expected pass-through of sky-high wholesale electricity and gas prices to retail prices. Given that such pass-through is coming sooner or later, the good news from this month won't last, especially since petrol prices are not going to bring further reprieve. Finally, food prices recorded another abnormally large increase, although it was the lowest since March. The tendency for moderation in monthly increases is set to continue on the back of lower wholesale food prices, and annual growth will continue to rise.

This release is the last before next week's meeting of the European Central Bank, which will bring new projections. It is therefore useful to take stock of the last projection from June and appreciate just how woefully imprecise it turned out to be. Compared with the ECB's projection, monthly price increases were three times as high in each of the summer months. Cumulatively, prices between April and August have increased by 1.7 percentage points more than the ECB expected. And this time around, unlike in the spring, the forecast miss was foreseeable rather than caused by unexpected shocks.



This forecast miss will translate into another large upward revision in ECB's inflation forecast to be published next week. We believe that this alone will be enough to push the central bank to hike by 75 basis points this meeting. And since next month's inflation report will bring a large increase in the inflation rate, leaving it close to double digits, the October ECB meeting is likely to bring a 50-basis point hike. Only in December will the central bank likely moderate the pace of tightening, as base effects finally end the streak of monthly record inflation rates.

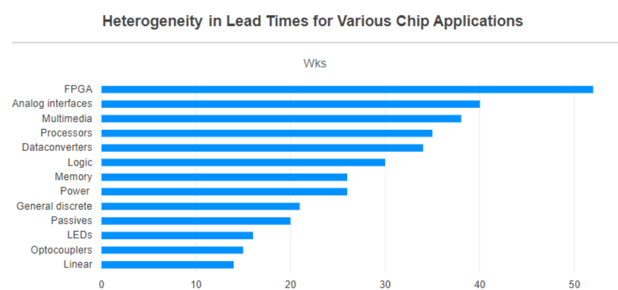
The Chip Shortage's Uncertain Future

BY TIM UY

The semiconductor chip shortage captured the world's attention early on during the pandemic as the first clear sign that the measures undertaken during the pandemic were creating significant supply-chain disruptions. These disruptions have since expanded to include many other industries and have caused inflation to skyrocket in countries around the world. And while there are signs that supply-chain stresses are easing and the chip shortage is abating, in what follows we discuss the risks and uncertainties associated with the semiconductor chip industry and what to expect next.

The importance of lead times

One of the best metrics for assessing supply-chain stress has been semiconductor chip lead times—the time it takes for a microchip that is produced to reach the end consumer—as semiconductor chips are the oil of the digital economy. They power practically all electronic devices including cars, computers, sensors, gaming consoles, ovens and so on. For most of the past two years, the aggregate chip lead time has been increasing. Last month was the first time since the start of the pandemic that this key metric fell, though ever so slightly, from 27.1 weeks to 27 weeks. While the decline is notable given the upward trend in lead times in the past couple of years, 27 weeks is still far from the norm, and we expect lead times to remain elevated going into 2023.



Why are lead times so high, and what do they mean for the broader economy? Chip lead times are important because they are an indication of the degree to which new orders can be filled and therefore are a harbinger of future production capacity. Heretofore unseen lead times reflect demand for chips that has far outpaced supply. The shift toward goods during the pandemic coupled with the challenges in creating new supply capacity meant that lead times would inevitably rise as existing capacity was maximized to meet unrelenting demand. Meanwhile, creating new supply for chips is a multiyear process. It takes significant time and resources to build a new foundry, but there is also significant lead time in obtaining the lithographic machines needed to make the chips themselves.

However, given how severe the chip shortage was earlier in the pandemic most corporate consumers resorted to ordering more than they need, resulting in excess inventory to be cleared. When excess inventory levels are high, lead times become less informative, since inventory supply can be used in lieu of new orders to produce the electronic gadgets eventually purchased by end consumers. That said, we argue that aggregate chip lead times will continue to be elevated, and it will be some time before the chip shortage truly comes to an end.

Why the shortage is so persistent

At the core of the chip shortage is the fact that most of the world's advanced chips (size 7nm and less) are manufactured in Taiwan and South Korea, and there are significant entry costs to penetrate this market. To put this in perspective, China has spent more than $10 billion over the past decade investing in its semiconductor industry, and its largest manufacturer only recently announced that it is finally able to produce 7nm chips, though the frontier has already moved to much smaller chip sizes. Even for companies like the Taiwan Semiconductor Manufacturing Co. and Samsung it takes years before they are able to build a new foundry, or plant for making chips. The pandemic has accelerated the pace of digitization worldwide, and with this the demand for consumer electronics. Chips are the foundation of modern electronic devices, and as technology advances, so does the demand for chips. Electric cars can use 10 times the number of chips required for older cars and also require more advanced microchips. In addition to cars, gaming consoles, electronic appliances and existing applications, the increasing use of artificial intelligence and big data in all facets of life will drive demand for advanced chips.

If the growing demand for advanced chips is what makes the shortage for that part of the spectrum so pervasive, it is the constrained supply for older chips that makes the shortage for the opposite side of the spectrum challenging to solve. Older chips still make up more than half of all chips that are manufactured, largely because more chips are needed for the applications where they are used. A modern cellphone may only use a handful of chips, while a single car would require thousands of older chips. Despite this, hardly any new capacity is being created for older chips, the reason being that advanced chips have been a larger revenue driver for the biggest chipmakers, to wit: Apple makes up nearly

half of TSMC sales while automotive applications make up less than 10% of sales. Limited supply thus makes accommodating strong demand challenging, particularly over very short time horizons.

The impact of geopolitical and climate events

Though we see lead times remaining elevated through the end of the year, we expect the chip shortage to normalize eventually. To understand the context, it is worth noting that the chip shortage came to the fore not only during a global pandemic, but also in a year with unprecedented climate events in regions critical to the semiconductor chip supply chain. Taiwan experienced its most serious drought in 56 years that summer, followed by a factory fire and multiple earthquakes in Japan, and subsequently a deadly ice storm in Texas. All of this contributed to exacerbating the chip shortage beyond what ensued following the pandemic-induced lockdowns. With these events largely behind us, it is no surprise that the resulting demand-supply imbalance is gradually easing.

While pandemic-related measures have mostly been lifted around the world, China's zero-COVID policy remains largely in place. The intermittent lockdowns associated with implementing this policy have constrained supply to some extent but have also suppressed demand for chips and chip applications, since China constitutes the largest market in the world for most modern electronics. Recent developments around the Taiwan Strait following the visit of the speaker of the U.S. House of Representatives are also worth noting: China has restricted sand exports to Taiwan and could restrict other exports critical to chip production if the situation escalates. The other geopolitical event that has significant ramifications for the chip shortage is the Russian invasion of Ukraine. Both countries are significant producers of neon, palladium, helium and other inputs important for chip manufacturing. The reason this has not disrupted the chip supply chain more radically is because some chipmaking companies have lithographic machines that recycle more than 80% of the neon and noble gases used in production. It remains to be seen whether this will have a more material impact if the military conflict persists.

What to expect of the chip shortage in the near term

The chip shortage is indicative of larger supply-chain disruptions that have roiled the global economy and caused inflation in many countries to spike to levels not seen in decades. The chip sector is not immune to these price pressures. Both Intel and TSMC have indicated that they are raising prices later in the year and in 2023 because of rising raw material and production costs. This comes at a time when demand for consumer electronics is softening, though demand for automotive and data center clients remains strong. Other than rising production costs, chipmakers are dealing with elevated lead times for lithographic machines and other production equipment.

As the situation normalizes, we will see some divergence in the demand and supply balance for various chip applications. At the time of writing, chips used for networking, optimal and telecommunications equipment are in short supply—field-programmable gate arrays have lead times in excess of 50 weeks. By contrast, microcontroller units as well as power and memory chips have seen some of the largest declines in lead times. We expect lead times and prices for memory applications to stabilize but can see prices and lead times rising for discrete and analog applications if the aforementioned production pressures continue.

Rattler Midstream Sees the Week's Largest U.S. Upgrade

BY STEVEN SHIELDS

U.S.

U.S. rating changes were broadly positive last week. Upgrades outnumbered downgrades 5:3 and accounted for 55% of the affected debt. Rating change activity was split across a diverse set of industries with speculative-grade companies representing all but one rating change.

The largest upgrade in the period was made to Rattler Midstream LP. Moody's Investors Service upgraded Rattler's senior unsecured notes to Ba2 from Ba2. The change follows the completion of Diamondback Energy's acquisition of Rattler's publicly held units representing the limited partnership interests in Rattler not already owned by Diamondback and its subsidiaries. Rattler has ceased to exist as a public company and will continue operations as a wholly owned subsidiary of Diamondback. Artera Services, LLC's senior secured and corporate family rating was downgraded to Caa1 from B3. According to the ratings action, the ratings downgrade reflects Artera's weak earnings, high debt leverage, and increased liquidity risk.

In July, 53% of ratings actions issued by Moody's Investors Service were favorable, and credit upgrades comprised more than 80% of the total affected debt. Year to date, Moody's Investors Service has issued 234 credit upgrades and 174 downgrades. The highest number of upgrades by subsector have been issued to exploration and midstream energy firms thanks to rising prices, while consumer durables have received the highest number of downgrades.

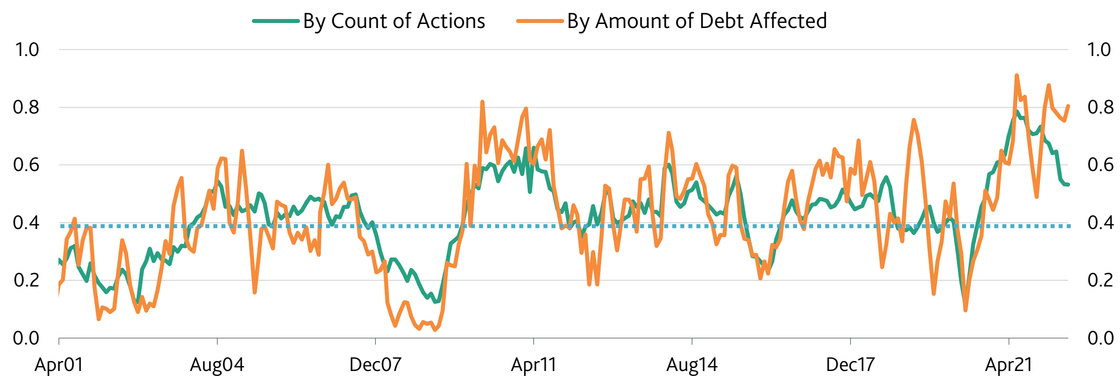
Europe

Western European rating change activity remained light, registering just one downgrade in the period.

Moody's Investors Service lowered Cimpress plc's senior unsecured rating from B3 to Caa1. Additionally, Cimpress' corporate family rating was lowered one notch to B2. The downgrade of the CFR reflects the significantly weaker than expected operating and financial performance in fiscal year ending June 2022 and Moody's expectations that Cimpress leverage will remain high and cash flow will not improve materially in fiscal 2023. High inflation, weakening consumer confidence and the need to continue investing in business transformation will make it difficult for Cimpress to improve profitability and return to its target leverage over the coming year.

RATINGS ROUND-UP

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



* Trailing 3-month average
Source: Moody's

FIGURE 2
Rating Key

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

FIGURE 3

Rating Changes: Corporate & Financial Institutions - US

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/SG
8/25/2022	LENDINGTREE, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba3	B1	SG
8/25/2022	MAH HOLDING CORPORATION-MILLER'S ALE HOUSE, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	Caa1	B3	SG
8/26/2022	POWER MIDCO, LLC-ARTERA SERVICES, LLC	Industrial	SrSec/SrSec/BCF/LTCFR/PDR	986.735	D	B3	Caa1	SG
8/26/2022	PROVIDENT GROUP - EMU PROPERTIES LLC	Industrial	SrSec		D	Ba3	B3	SG
8/26/2022	RATTLER MIDSTREAM LP	Industrial	SrUnsec	1000	U			SG
8/29/2022	DTE ENERGY CENTER, LLC	Utility	SrSec	98.698	U	Baa3	Baa2	IG
8/29/2022	NATHAN'S FAMOUS, INC.	Industrial	SrSec/LTCFR	110	U	B3	B2	SG
8/29/2022	ODYSSEY LOGISTICS & TECHNOLOGY CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		U	B2	B1	SG

Source: Moody's

FIGURE 4

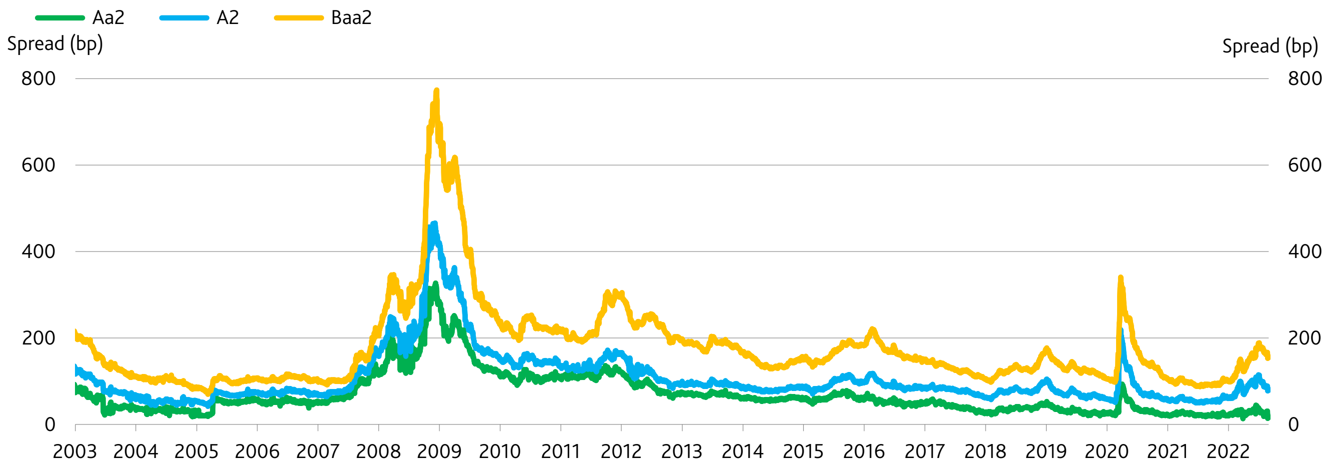
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
8/24/2022	CIMPRESS PLC	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	600	D	B3	Caa1	SG	IRELAND

Source: Moody's

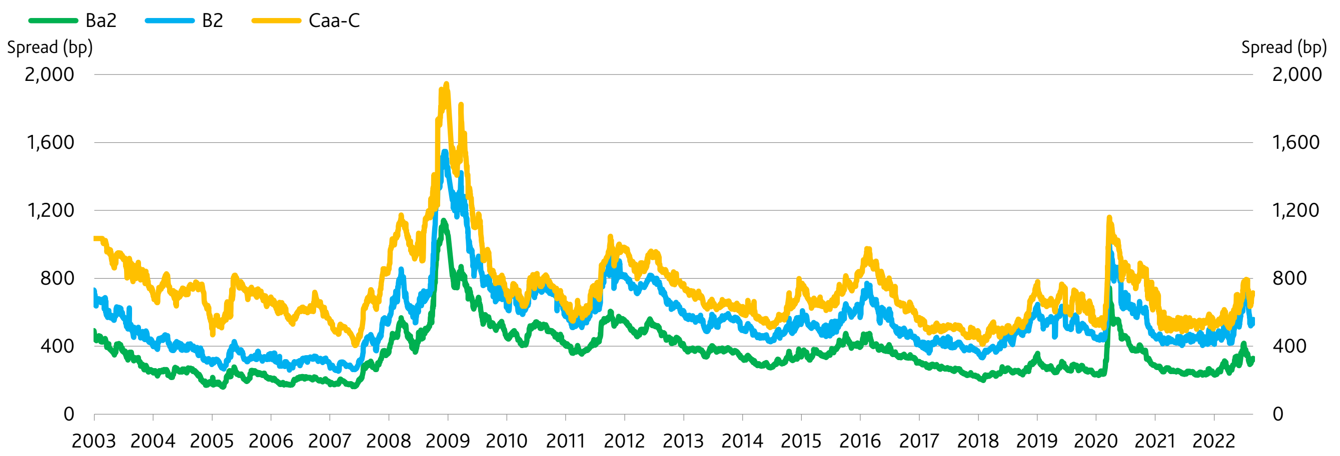
MARKET DATA

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



Source: Moody's

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



Source: Moody's

CDS MOVERS

Figure 3. CDS Movers - US (August 24, 2022 – August 31, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
Emerson Electric Company	Aa2	A1	A2
Intuit Inc.	Aa3	A2	A3
Philip Morris International Inc.	Baa2	Baa3	A2
Southern California Edison Company	Baa2	Baa3	Baa2
Consolidated Edison Company of New York, Inc.	A3	Baa1	Baa1
Cargill, Incorporated	A2	A3	A2
Kinder Morgan Energy Partners, L.P.	Aa3	A1	Baa2
Boston Properties Limited Partnership	A3	Baa1	Baa1
Kimco Realty Corporation	Aa3	A1	Baa1
Ventas Realty, Limited Partnership	Baa2	Baa3	Baa1

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
JPMorgan Chase & Co.	Baa1	A3	A2
Citigroup Inc.	Baa2	Baa1	A3
Morgan Stanley	Baa2	Baa1	A1
Campbell Soup Company	A3	A2	Baa2
AT&T Inc.	Baa3	Baa2	Baa2
Ally Financial Inc.	Ba2	Ba1	Baa3
Comcast Corporation	Baa1	A3	A3
Oracle Corporation	Baa3	Baa2	Baa2
Citibank, N.A.	Baa3	Baa2	Aa3
McDonald's Corporation	Aa2	Aa1	Baa1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Anywhere Real Estate Group LLC	B2	833	742	91
American Airlines Group Inc.	Caa1	1,468	1,394	74
Nordstrom, Inc.	Ba1	594	521	73
SLM Corporation	Ba1	552	483	68
Service Properties Trust	B1	434	372	62
Rite Aid Corporation	Caa2	1,908	1,850	58
Liberty Interactive LLC	B2	1,280	1,225	55
Gap, Inc. (The)	Ba3	656	606	51
Delta Air Lines, Inc.	Baa3	503	453	50
DPL Inc.	Ba1	284	234	50

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Staples, Inc.	Caa2	1,670	1,729	-59
Wendy's International, LLC	Caa2	254	284	-30
Hasbro, Inc.	Baa2	93	111	-17
Crown Castle Inc.	Baa3	131	146	-15
Emerson Electric Company	A2	44	57	-14
Mattel, Inc.	Ba2	288	302	-14
Sysco Corporation	Baa1	105	118	-13
First Industrial, L.P.	Baa2	165	178	-13
Intuit Inc.	A3	51	63	-12
United States Cellular Corporation	Ba2	240	252	-12

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (August 24, 2022 – August 31, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
Coca-Cola HBC Finance B.V.	A1	Baa2	Baa1
Piraeus Financial Holdings S.A.	B2	Caa1	Caa1
UniCredit Bank Austria AG	A3	Baa1	Baa1
Alpha Services and Holdings S.A.	Ba3	B1	B3
NXP B.V.	Aa3	A1	Baa3
Deutsche Lufthansa Aktiengesellschaft	B1	B2	Ba2
ASML Holding N.V.	Aa1	Aa2	A2
Wm Morrison Supermarkets Limited	Baa3	Ba1	B1
Vedanta Resources Limited	Caa3	Ca	B3
Novafives S.A.S.	Caa3	Ca	Caa2

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
SSE plc	Baa1	A2	Baa1
Orsted A/S	A2	Aa3	Baa1
Deutsche Bank AG	Baa3	Baa2	A2
BNP Paribas	A3	A2	Aa3
Intesa Sanpaolo S.p.A.	Baa3	Baa2	Baa1
HSBC Holdings plc	Baa2	Baa1	A3
Barclays PLC	Baa3	Baa2	Baa2
CaixaBank, S.A.	Baa1	A3	Baa1
Banco Bilbao Vizcaya Argentaria, S.A.	Baa1	A3	A3
Natixis	A3	A2	A1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Iceland Bondco plc	Caa2	1,283	1,125	159
Boparan Finance plc	Caa3	2,124	1,981	143
Casino Guichard-Perrachon SA	Caa1	2,965	2,829	136
Ardagh Packaging Finance plc	Caa1	1,113	1,058	56
RCI Banque	Baa2	219	168	50
thyssenkrupp AG	B1	580	543	37
Bankinter, S.A.	Baa1	161	129	32
Centrica plc	Baa2	142	110	32
Sappi Papier Holding GmbH	Ba2	310	278	32
Marks & Spencer p.l.c.	Ba1	417	389	28

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Piraeus Financial Holdings S.A.	Caa1	571	869	-299
Vedanta Resources Limited	B3	1,441	1,712	-272
Coca-Cola HBC Finance B.V.	Baa1	58	113	-55
Alpha Services and Holdings S.A.	B3	391	426	-36
Wm Morrison Supermarkets Limited	B1	170	181	-11
UniCredit Bank AG	A2	82	90	-7
UniCredit Bank Austria AG	Baa1	74	81	-7
Jaguar Land Rover Automotive Plc	B1	981	987	-6
Greece, Government of	Ba3	161	163	-2
ASML Holding N.V.	A2	35	37	-2

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (August 24, 2022 – August 31, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
India, Government of	Baa2	Baa3	Baa3
Commonwealth Bank of Australia	A1	A2	Aa3
Korea Development Bank	Aa1	Aa2	Aa2
Export-Import Bank of Korea (The)	Aa1	Aa2	Aa2
Export-Import Bank of China (The)	A2	A3	A1
Kyushu Electric Power Company, Incorporated	Aaa	Aa1	Baa3
Shinhan Bank	Aa1	Aa2	Aa3
Chubu Electric Power Company, Incorporated	Aaa	Aa1	A3
Kazakhstan, Government of	Ba1	Ba2	Baa2
Woori Bank	Aa1	Aa2	A1

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	Aug. 31	Aug. 24	Senior Ratings
China, Government of	A3	A2	A1
China Development Bank	Baa1	A3	A1
Thailand, Government of	A2	A1	Baa1
Japan, Government of	Aaa	Aaa	A1
Australia, Government of	Aaa	Aaa	Aaa
Korea, Government of	Aa1	Aa1	Aa2
Indonesia, Government of	Baa2	Baa2	Baa2
Australia and New Zealand Banking Grp. Ltd.	A1	A1	Aa3
Sumitomo Mitsui Banking Corporation	Aa3	Aa3	A1
Westpac Banking Corporation	A2	A2	Aa3

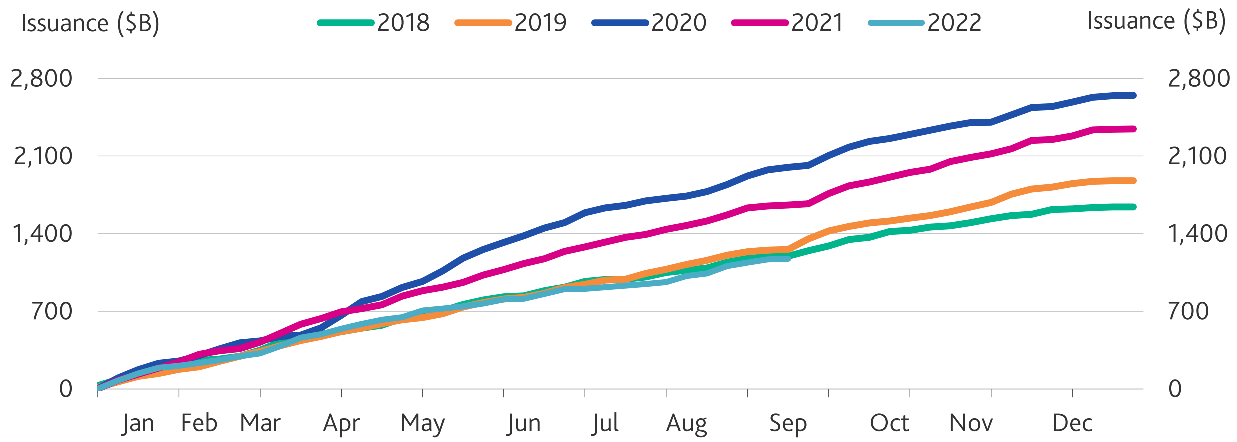
CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Indonesia, Government of	Baa2	113	107	7
Pakistan, Government of	B3	2,259	2,253	6
Vietnam, Government of	Ba3	135	130	6
China Development Bank	A1	81	76	5
China, Government of	A1	71	67	4
Philippines, Government of	Baa2	102	98	4
Thailand, Government of	Baa1	60	56	4
Malayan Banking Berhad	A3	92	88	4
Honda Motor Co., Ltd.	A3	41	37	4
Malaysia, Government of	A3	77	74	3

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Aug. 31	Aug. 24	Spread Diff
Flex Ltd.	Baa3	96	119	-23
Halyk Savings Bank of Kazakhstan	Ba2	440	461	-20
India, Government of	Baa3	110	126	-16
Development Bank of Kazakhstan	Baa2	262	277	-15
Export-Import Bank of India	Baa3	97	103	-7
ICICI Bank Limited	Baa3	109	116	-7
Bank of East Asia, Limited	A3	103	109	-6
Telekom Malaysia Berhad	A3	68	74	-6
Suncorp-Metway Limited	A1	86	91	-5
SK Hynix Inc.	Baa2	166	172	-5

Source: Moody's, CMA

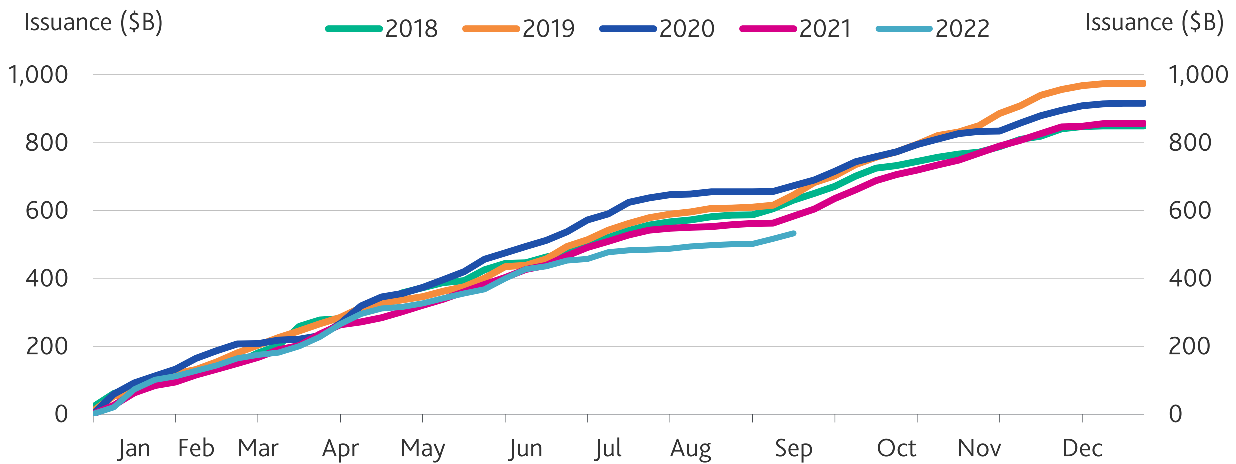
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

Figure 8. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	3.192	0.000	3.765
Year-to-Date	1,022.541	114.234	1,173.316

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	15.963	0.000	16.209
Year-to-Date	495.813	28.087	532.604

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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