

**WEEKLY MARKET
OUTLOOK**

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Vulnerable U.S. Economy Faces Test

OPEC+ announced a significant cut to its collective output limit, just as the [U.S. economy](#) is vulnerable and financial market conditions have tightened. The reduction of 2 million barrels per day is the largest since 2020 and will remain in place until the end of 2023, unless there are material changes in markets. A number of OPEC+ countries are already operating below their quotas, therefore the hit to output should be less. Still, West Texas Intermediate and Brent crude oil prices were trading higher following the announcement.

There could be some modest implications for the U.S. high-yield corporate bond market. In our past work, we used Granger causality tests to see if there is a causal relationship between the high-yield corporate bond spread and WTI crude oil prices. With no lags, fluctuations in WTI crude oil prices were found to Granger-cause changes in the high-yield corporate bond spread. The results showed that the causality runs one way, which isn't surprising. High-yield spreads have tightened in the past couple of trading sessions and some further improvement is likely.

Elsewhere, the implications for our U.S. baseline forecast are likely minor. It introduces upside risk to the near-term forecast for growth in consumer prices. Energy prices only needed to remain unchanged to be disinflationary, but the OPEC+ decision adds more uncertainty to the near-term path for oil and retail gasoline prices.

We likely won't have to make a significant revision to our forecast for near-term GDP growth because of Wednesday's decision. A \$10-per-barrel increase in the price of oil would shave only 0.1% from U.S. real GDP growth over the subsequent year.

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Q3 being kept afloat by trade

The U.S. trade deficit narrowed in August, and net exports will add more to third-quarter GDP growth than previously thought. The nominal trade deficit narrowed from a revised \$70.5 billion (previously \$70.7 billion) in July to \$67.4 billion in August.

Nominal exports fell 0.3% in August after they had been steadily increasing. Nominal imports were down 1.1%, the third consecutive monthly decline. The nominal goods deficit narrowed while the services surplus fell modestly. The real goods deficit narrowed from \$103.1 billion to \$98.95 billion.

Through August, the nominal trade deficit is averaging \$68.95 billion in the third quarter, compared with the \$84.5 billion in the second quarter. Our high-frequency GDP model now has net exports adding 1.8 percentage points to third-quarter GDP growth. All told, third-quarter GDP growth is now on track to rise 2.2%, compared with 1.8% prior to the August trade deficit.

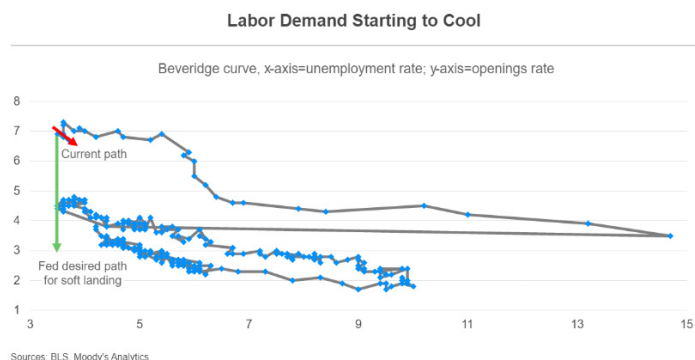
Just as we downplayed some of the weakness in GDP in the first half of the year because of a noticeable drag from net exports and inventories, don't get too excited about growth in the third quarter. Excluding net exports, GDP is on track to rise only 0.4% at an annualized rate. Consumer spending is coming in light, and residential and nonresidential structures investment will be weights.

Watching the Beveridge Curve?

The Fed needs to tighten monetary policy sufficiently to slow GDP growth to a below-potential pace. This will rebalance supply and demand in the labor market enough to bring down wage growth, then inflation. The August Job Openings and Labor Turnover Survey data suggest that the

weakness in GDP and heightened concerns about a recession could be cutting into the demand for labor.

We have updated the Beveridge curve through August. The Beveridge curve is the relationship between the job openings rate and the unemployment rate. The economy's position on the Beveridge curve reflects the state of the business cycle. The Fed's preferred path toward a soft landing is for the job openings rate to decline without translating into an increase in the unemployment rate, so that the Beveridge curve doesn't shift out. Currently, the Beveridge curve has shifted out modestly.



As the Fed continues to tighten monetary policy, labor demand will weaken further and more workers should be laid off. The path toward a soft landing is via a reduction in job openings with a minimal, if any, increase in the unemployment rate. This is a narrow path.

Per Okun's law, a 1-percentage point deceleration in GDP growth over the course of a year would trim employment growth by around 800,000 jobs per annum. This would also increase the unemployment rate by about 0.5 percentage point and shave a few basis points off year-over-year growth in both the consumer price index and PCE deflator.

Risking an Earthquake

BY MARK ZANDI

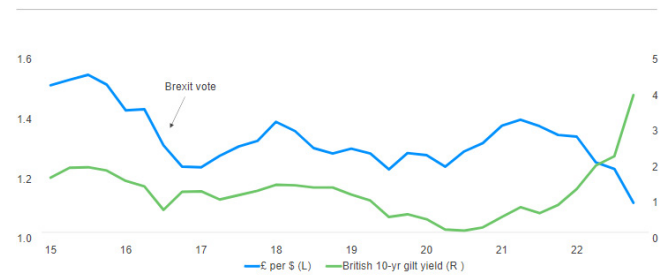
Fault lines are forming under the global financial system and economy as the [Federal Reserve](#) ratchets up interest rates; policymakers must be careful not to trigger a financial earthquake.

The [U.S. economy](#) is struggling with painfully high inflation and rising interest rates as the Federal Reserve works aggressively to quell the wage and price pressures. As rates surge higher, financial conditions are tightening. The bear market in stocks is intensifying, mortgage rates have more than doubled, corporate credit spreads are widening, and the value of the dollar is soaring against most currencies. While increasingly uncomfortable, so far this is roughly to the Fed's script—monetary tightening impacts growth and inflation via restrictive financial conditions. However, with stresses mounting, the financial system and economy are susceptible to anything that may not go as anticipated. Several potential threats have come into relief in recent days, including the meltdown in the British pound and financial markets, quickly falling house prices in more areas of the country, and the renewed slide in stock prices. While none seems serious enough to precipitate a financial crisis or recession—at least not yet—they highlight the economy's increasing vulnerability.

United Kingdom

The most startling recent threat emanates from the United Kingdom. New British Prime Minister Liz Truss unveiled a fiscal plan that featured large deficit-financed tax cuts and government spending increases. While the temporary cap on energy prices faced by households and businesses makes sense as the U.K. has been hit hard by the fallout from Russia's invasion of Ukraine and resulting sanctions, the permanent tax cuts that mostly benefit large corporations do not (the government initially proposed tax cuts for the wealthy but has since backed down under intense criticism). The U.K. is already operating well beyond full employment and inflation is a serious problem, and this large dose of fiscal stimulus will only exacerbate the tight labor market and further entrench the inflation. The deficit financing will also significantly add to the U.K.'s already heavy debt load and raises reasonable concerns over the sustainability of that debt. The new government circumvented the typical budget process, including failing to have the plan's cost scored by the British analogue to our Congressional Budget Office, which is disconcerting. Spooked global investors have dumped British government bonds or gilts, sending long-term rates higher and the value of the British pound lower. The pound fell to an all-time low and has flirted with parity against the dollar.

British Pound Sinks, Gilt Yields Soar



Sources: Federal Reserve, BoE, Moody's Analytics

The situation has calmed at least temporarily with the Bank of England's rushed decision to resume its quantitative easing and buy more gilts. The BoE argued this was necessary to forestall problems among U.K. pension funds that suffered debilitating losses on their gilt portfolios, but it also raises the specter that the BoE will overly accommodate the new government's poor fiscal policy. Adding to this worry was the prime minister's comments suggesting that a review of the BoE's monetary policy-setting framework was in order. The BoE publicly affirmed its independence, but that it felt compelled to do so is not comforting. To quash these worries and offset the inflation pressures fanned by the fiscal stimulus, the BoE will need to raise interest rates much more aggressively in coming weeks. If not, stagflation—persistently high inflation and a weak economy—is more likely.

While the turmoil in the U.K. is in good part British policymakers' own doing, it is also due to the Federal Reserve's aggressive monetary tightening. Indeed, the value of the U.S. dollar is up strongly against nearly all currencies. On a broad trade-weighted basis, it is as strong as it has been in the 50 years since the adoption of flexible exchange rates, save for the early 1980s, the last time inflation was a serious problem, and the Fed was raising rates to rein it in. Global central banks are in the tough position of having to keep up with the Fed's rate hikes and stem the decline in their currencies and the resulting inflation. But the higher rates go, and the longer they remain high, the greater the odds there will be more events like those that are wreaking havoc in the U.K. So far, the fallout on the U.S. has been modest. Treasury yields are up, and stock prices are down partly in reaction, and a struggling U.K. economy will ultimately weaken the U.S. trade balance and growth. But the U.K.'s travails are more important in signaling the intensifying pressures on the global financial system and economy caused by rising interest rates.

The Muscular U.S. Dollar



Surging mortgage rates pose another developing threat to the reeling single-family housing market and broader economy. How bad the damage will be, largely depends on how high mortgage rates go and for how long. Fixed mortgage rates have recently touched 7%, substantially more than double what they were a year ago when they hovered near a record low. This has been a massive hit to housing demand. Potential first-time homebuyers are effectively locked out of homeownership given the collapse in affordability as higher mortgage rates conflate with house prices that were juiced-up by the previously exceedingly low rates. The monthly mortgage payment for a household earning the median income looking to buy the median-priced home with a 20% down payment at the prevailing mortgage rate is about \$2,000, up \$700 from a year ago. Households that already own their homes are effectively locked in, unable to move. The typical homeowner with a mortgage has refinanced more than once when rates were low and falling, and now has a mortgage with a 3.5% rate. To sell an existing home and purchase another with a mortgage at current rates doesn't make economic sense. The other important source of housing demand, housing investors, have also stopped buying. They expect house prices to decline, eventually providing a better investment opportunity.

Fed watch

Investors will get that opportunity. Mortgage rates won't significantly recede until it is clear the Fed has ended its rate hikes, and that's unlikely until well after next year's spring home selling season. The higher mortgage rates reflect higher Treasury yields (the 10-year Treasury yield, the benchmark lenders use to set mortgage rates, is now near 4%) as well as the unusually wide 3% difference between mortgage rates and Treasury yields. This spread is the compensation required by mortgage investors and lenders who fund, originate and service mortgages—and it is a spread currently four standard deviations larger than usual. There are several reasons why, but key is the recent surge in interest rate volatility. Big swings in rates increase the prepayment risk, which is the risk for investors that borrowers will pay back their mortgages faster. Rate volatility won't normalize—and thus the spread narrow and mortgage rates fall—until the Fed is done hiking rates.

House prices, which had skyrocketed throughout much of the pandemic, are now quickly coming back to earth. Prices are down since peaking in June in approximately half the nation's 400-plus metropolitan areas, and a lot more price declines are in train. Nationwide, house prices as measured by the Moody's Analytics repeat sales index are expected to fall almost 10% peak to trough, with the bottom expected in summer 2024. And this assumes the economy is able to skirt a recession. If the economy suffers a typical downturn, peak-to-trough declines approaching 20% seem likely. This means that some of the previously highest flying areas in the South and Mountain West will see declines upward of 30%. This would only retrace one-year of price gains, and thus only those buyers who purchased their homes recently would be underwater—with home values below the amount due on the mortgages—but mortgage defaults and foreclosures are sure to rise. A scenario in which conditions become as dark as during the financial crisis is all but impossible. However, there is still room for significant economic damage.

Fragile market

The fragile stock market is also important to watch as the Fed pushes rates higher. Stock prices are sliding again, down almost 25% from the all-time high at the start of the year. This translates into a loss in stock wealth of \$12.5 trillion, of which an estimated \$7.5 trillion is owned by U.S. households. The impact this loss of wealth has on consumer spending, known as the wealth effect, is estimated to be approximately one penny. That is, consumers will reduce their spending by one cent due to a one dollar decline in their stock wealth in the year after the decline in wealth. Thus the \$7.5 trillion in lost stock wealth will reduce consumer spending by \$75 billion in the coming year, equal to 0.3% of GDP. This is a meaningful but modest impact, and likely close to what the Fed would like to see in its effort to slow growth and inflation.

Negative Stock Wealth Effect Kicks In



However, the stock wealth effect is highly variable and difficult to gauge. Indeed, on average through the business cycle it is estimated at closer to 2.5 cents. The estimate is much smaller currently because high net worth households that own the bulk of the stocks have substantial excess savings built up during the pandemic. Those in the top quintile of the income distribution have close to \$50,000 in

excess savings. With cushions so large, the decline in stock wealth won't compel these households to save more. Moreover, the decline in stock prices simply puts them back where they were at the start of 2021, before that year's surge in stock prices. Shareholders likely never really thought they were as wealthy as the value of their stockholdings suggested at the start of 2022, so they aren't as affected by the decline. If the stock wealth effect is still 2.5 cents, then the slide in stock prices to date would reduce consumer spending by 0.75% of GDP. For an economy otherwise just skirting recession, this would be enough to push it over the edge. Of course, the wealth effect will be larger and the recession deeper if the stock market continues to slide. In a typical recession, stock prices fall by closer to 30% peak to trough.

Unknown fault lines

These are the evident fault lines. Other likely stresses have yet to reveal themselves but will do so as the Federal Reserve pushes interest rates higher and for longer. Possible flashpoints include the rapidly growing market for leveraged loans to already highly indebted businesses, a growing number of emerging markets, and fintech and other financial institutions operating in the less regulated so-called shadow financial system. It is critical that the Fed raises rates high enough and fast enough to ease the wage and price pressures, but not so high and fast that it precipitates a financial crisis and recession. So far, so good, but...

The Week Ahead in the Global Economy

U.S.

Next week is a holiday shorted week but it will likely decide between a 50- or 75-basis point rate hike at the November meeting of the Federal Open Market Committee. The key will be the September consumer price index. The Fed wants concrete evidence that inflation is moving toward its target, but if inflation continues to deviate from the Fed's forecast, another aggressive rate hike is likely.

We also get new data on producer prices. The combination of the PPI and CPI will give us a really good idea what the PCE deflator, the Fed's preferred measure of inflation, did in September.

There will be new data on retail sales, import prices and business inventories. Retail sales and business inventories will be key to our high-frequency GDP model's tracking estimate of third-quarter GDP, which is now 2.2% at an annualized rate, though it is only 0.4% when excluding net exports. Initial claims for unemployment insurance benefits could jump because of Hurricane Ian.

Europe

The euro zone's industrial production likely recovered in part with a 0.8% m/m increase in August after a 2.3% contraction in July. The month's reading is being lifted up by a surprisingly strong performance out of France (a jump of 2.4% m/m). Recent months have been volatile given ongoing supply disruptions. The trend is downward, however, and we expect to see industrial output contract in the fourth quarter as high production costs and low demand cut into activity.

The euro zone's trade balance in goods, meanwhile, likely fell to a deficit of €36 billion in August from a surplus of €27.9 billion the same month a year earlier. The deficit in July was €34 billion. We expect to see that the value of imports outpace that of exports again in part due to the surge in natural gas prices during the month. Exports have also been struggling to grow quickly enough to keep up with imports because of supply issues that have held back industry.

In the U.K. we expect estimated GDP growth of 0.1% m/m for August, adding to a 0.2% rise in July. We expect to see

continued buoyancy in the country's services sector due to consumers enjoying their post-pandemic summer. But manufacturing output likely weakened, as reflected by the steep fall in the PMI in August, and this would keep overall GDP growth at a crawl. We forecast that the unemployment rate was unchanged in the three months to August at 3.6%. According to PMI data, firms slowed their rate of hiring from earlier this summer, but it still is strong compared with previous history.

Finally, we are not anticipating surprises in the finalized CPI releases next week. We expect that Germany CPI inflation rose to 10% y/y in September from 7.9% in August, that France's eased to 5.6% from 5.9%, and that Spain's CPI fell to 9% from 10.5%. Lower oil prices helped alleviate inflation rates, and price caps in Spain in France also kept a lid on upward pressures. Germany's inflation rate spiked following the expiration of some policies it had taken over the summer, such as its mega discount on public transportation.

Asia Pacific

China will release September consumer and producer price indexes and its September trade balance. We expect CPI to climb 2.6% from a year earlier, with core inflation remaining tepid in the absence of demand-driven inflation. Food prices could come in strong because of a shortage of pork and soybeans; pork makes up a significant part of the CPI basket. Producer prices are expected to have risen 2.5% since September 2021, a muted figure thanks to access to discounted Russian oil and gas. The trade surplus is likely to have fallen slightly on account of weakening exports.

The Bank of Korea is expected to raise its base rate by 50 basis points to 3%. A widening in the interest rate differential between South Korea and the U.S. has put pressure on the won. The currency has weakened 17.6% against the greenback so far this year; this is despite intervention by the BoK at the start of October to shore up the currency. Inflation expectations for the next 12 months came down in the latest consumer sentiment survey by 0.1 percentage point to 4.2%. Inflation is sitting well above that. Prices in September were 5.6% higher than a year earlier. Still, there is some scope for a smaller 25-basis point hike because the BoK must also consider high household debt.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
16-24-Oct	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
6-18-Nov	U.N.	U.N. Climate Change Conference 2022 (COP 27), hosted by Egypt	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	APAC	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
18-Jan	Japan	Bank of Japan monetary policy announcement	Medium	Low+A21:E36
7-Feb	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
8-Feb	India	Reserve Bank of India monetary policy announcement	Medium	Low
7-Mar	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
10-Mar	Japan	Bank of Japan monetary policy announcement	Medium	Low
2-Apr	Finland	General election	Medium	Low
4-Apr	Australia	Reserve Bank of Australia monetary policy announcement	Medium	Low
28-Apr	Japan	Bank of Japan monetary policy announcement	Medium	Low
April	Solomon Islands	General election	Low	Low
14-Sep	Malaysia	General election	Low	Low

No US\$-Denominated High-Yield Issuance in the Latest Week

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread widened by 5 basis points to 175 basis points over the past week. The spread is below September's 166 basis point average. The long-term average industrial corporate bond spread widened from 155 to 156 basis points. It averaged 150 basis points in September.

The ICE BofA BBB U.S. corporate option adjusted bond spread narrowed by 3 basis points to 199 basis points over the past week. Meanwhile, the ICE BofA U.S. high-yield option adjusted bond spread narrowed from 547 to 509 basis points. The Bloomberg Barclays high-yield option adjusted spread narrowed over the week from 548 to 509 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 is wider than implied by a VIX of 29.8. The VIX edged lower over the course of the past week.

DEFAULTS

The year-to-date default tally climbed to 59 through August, which surpasses the count of 55 for all of 2021. The construction sector remains the largest contributor to defaults, with 16. Banking followed with eight. By region, North America had 23 defaults (22 in the U.S. and one in Canada). The rest were from Europe (17), the Asia-Pacific region (16), and Latin America (three).

Moody's Credit Transition Model predicts that under our baseline scenario the global speculative-grade default rate will climb to 2.9% at the end of 2022 before rising to 3.8% in August 2023. If realized, these rates would still be lower than 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 fared 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 fared noticeably better in the third quarter.

Fourth-quarter 2021's worldwide offerings of corporate bonds fell 9.4% for investment grade. High-yield US\$ denominated high-yield corporate bond issuance fell from \$133 billion in the third quarter to \$92 billion in the final three months of 2021. December was a disappointment for high-yield corporate bond issuance, 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 September 30, there was no US\$-denominated high-yield issuance. This kept the year-to-date total at \$124.7 billion. Investment-grade bond issuance totaled \$2.7 billion in the same week, bringing its year-to-date total to \$1.107 trillion. Issuance is still tracking that seen in 2018 and 2019.

U.S. ECONOMIC OUTLOOK

We made some adjustments to the U.S. baseline forecast in September. Among the notable changes is monetary policy as the Federal Reserve has signaled that it will front-load rate hikes. Therefore, we pulled a rate hike from early next year and changed November from a 25- to 50-basis point rate hike. We don't anticipate the Fed cutting interest rates to return to the neutral rate until early 2025. This compares with the August baseline that had cuts starting in late 2023. Changes to the forecast for employment, inflation, unemployment rate and GDP were minor. The outlook for housing deteriorated as higher mortgage rates and rising prices cut into affordability.

Our baseline forecast is still for the Fed to engineer a soft landing and the economy to skirt a recession, while inflation, over time, returns to the central bank's target.

Fiscal assumptions

The September baseline forecast incorporates the effects of President Biden's announced changes to student loan relief. While the announcement made a big splash, the macroeconomic consequences are minimal. There are three principal avenues by which student loan forgiveness and the resumption of federal student loan repayments in January affect growth. First, the end to the student loan freeze after this year will reduce household cash flow and thus consumer spending. Second, debt cancellation will increase household net worth and thus consumer spending via a positive net wealth effect. Finally, the two policies will increase interest rates due to more federal government debt.

By itself, ending the student loan moratorium reduces real GDP growth in 2023 by an estimated 18 basis points, increases the unemployment rate by 8 basis points, and reduces inflation by 11 basis points. In isolation, debt forgiveness increases real GDP growth by 13 basis points, reduces the unemployment rate by 6 basis points, and increases inflation by 8 basis points. Ultimately, the net of the two policies is a wash in the near term.

Energy price forecast and assumptions

The baseline forecast assumes West Texas Intermediate crude oil prices peaked in the second quarter. The

September baseline forecast includes the recent slide in WTI crude oil prices, which are expected to average \$95.30 per barrel this quarter and \$98 in the final three months of the year.

Recession concerns, appreciation in the U.S. dollar, and a number of countries releasing some of their oil reserves have helped push global oil prices lower recently. Oil prices are still expected to steadily decline in 2023 and the first half of 2024. Oil prices bottom in 2024, a touch below \$65 per barrel. This is the same as in our August baseline.

There are a number of risks to the forecast. Prices could soar past our baseline projection if the EU quickly adopts a strict ban on Russian oil. Prices also would be higher if Russia has trouble replacing its European customers or if OPEC halts its production increases. On the downside, an Iranian nuclear deal would tank prices. A Russia-Ukraine cease-fire or a weaker Chinese rebound from its self-induced zero-COVID shuttering of population centers could also send prices lower.

Trimming the GDP forecast, but not for 2022

The September baseline incorporates the revisions to second-quarter GDP. Real GDP fell 0.6% at an annualized rate in the second quarter, the second consecutive decline. This is a smaller drop than in the government's advance estimate of second-quarter GDP, where it was shown to have fallen 0.9% at an annualized rate.

Though GDP has declined for two consecutive quarters—a rule of thumb for a recession—we don't have a recession in the baseline forecast. 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 on which the NBER relies 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.

The baseline forecast is for real GDP growth to increase in the second half of the year. The September forecast is for GDP to rise 1.3% at an annualized rate, which is less than our high-frequency GDP model's tracking estimate of 2%. Therefore, the risk bias, or the difference between our high-frequency GDP model's estimate of third-quarter GDP growth and our official forecast, is 0.7 of a percentage point. The forecast is for GDP to rise 0.6% at an annualized rate in the fourth quarter, less than the 1% at an annualized rate in the August baseline.

The forecast is for a 1.4% increase in real GDP next year, a touch lighter than the 1.5% in the August baseline. We also shaved 0.1 of a percentage point off GDP growth in 2024, as it is now expected to rise 2.6%.

Our baseline forecast for real GDP growth for next year is above the Bloomberg consensus of 1%. The forecast for 2024 is 0.9 percentage point higher than the Bloomberg consensus of 1.7%.

Business investment and housing

We didn't make any noticeable changes to the forecast for real business equipment spending this year. It is expected to increase 4.5% compared with the 4.6% gain in the prior baseline. We didn't change the forecast for real business equipment spending in either 2023 or 2024, since fundamentals didn't change appreciably between the update of the August and September baseline forecasts. Growth is expected to moderate as 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.

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 1.58 million compared with 1.64 million in the prior baseline. Housing starts are expected to total 1.55 million next year, down from 1.56 million in the August baseline. Housing starts are forecast to increase in 2024, totaling 1.63 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 5.89 million this year, less than the 6.27 million in the August baseline. We also cut the forecast for total home sales next year to 5.81 million, compared with 6.14 million in the prior baseline. Home sales will come under pressure from higher mortgage rates, which are contributing to the deterioration in housing affordability. New-home sales account for about 10% of total sales and existing-home sales make up the remainder.

There were revisions to the forecast for the FHFA All-Transactions House Price Index this year and the subsequent two years. The August baseline has it rising 15.9% this year compared with 12.9% in the prior baseline. The revision is

mostly attributable to incoming historical data. The forecasts for 2023 and 2024 are for house prices to decline 0.9% and 2.4% respectively. In the August baseline, we didn't have house prices falling in either 2023 or 2024.

Labor market

The U.S. labor market remains very strong, but job growth has moderated. Nonfarm employment increased by a net of 315,000 jobs, modestly stronger than either we or the consensus anticipated. The net revision to the prior two months was -107,000. The three-month moving average in nonfarm employment was 378,000 in August, a slight step down from 402,000 in July.

Goods-producing employment increased 45,000 in August following 66,000 in July. Within goods, mining and logging rose 7,000, in line with that seen over the prior two months. Construction employment continues to hold up even though it is interest rate-sensitive and residential investment has weakened recently. Construction employment added 16,000 in August after rising 24,000 in July.

Private services employment increased 263,000 in August, noticeably weaker than the 411,000 in July. Despite the shift from spending on goods to services, retail employment growth remained strong. It was up 44,000 in August following a 29,000 gain in July and 22,000 in June. Transportation and warehousing employment increased 5,000, while information rose 7,000.

Temporary help services employment was up 12,000 in August, compared with 9,000 in July. Temporary help is normally a leading indicator and declines ahead of recessions. Elsewhere, education and healthcare increased 68,000 after jumping 118,000 in July.

Household employment increased 442,000, while the number of unemployed rose 344,000. Duration of unemployment rose, as did the labor force. The labor force participation rate increased from 62.1% to 62.4%. The unemployment rate increased from 3.5% to 3.7%. Unemployment rates across demographic cohorts generally rose in August.

The August employment report didn't warrant significant changes to the baseline forecast. We have job growth averaging 371,000 per month this year before dropping to 103,000 in 2023 and then accelerating to 124,000 in 2024. Job growth next year is weaker than that needed to keep the unemployment rate stable.

The forecast is for the unemployment rate to average 3.7% in the fourth quarter of this year, identical to that in the

August baseline. The unemployment rate rises next year, averaging 4.1% in the final three months of the year, compared with 4% in the August baseline. The unemployment rate falls in 2024, averaging 3.8% in the fourth quarter.

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 balanced. On the downside, per Okun's law, a 1-percentage point deceleration in GDP growth over the course of a year would decrease employment growth by around 800,000 jobs per year. This would also increase the unemployment rate by about 0.5 percentage point. However, the Fed's latest Beige Book noted that employers continued to keep hiring even as growth slows because they have a ton of open positions and need to make up for lost work.

Dutch Inflation Confirmed at 14.5%

BY ROSS CIOFFI

The [Netherlands inflation](#) rate was confirmed 14.5% y/y in September, up from 12% a month earlier; the harmonized inflation rate, the measure used by Eurostat to compose the euro zone aggregate, soared to 17.1% from 13.7%. The story is centred on the effect of high natural gas and energy prices. The contribution of housing, water and energy items to the headline rate shot up to 8.8 percentage points. But it is not all about energy; food prices are also growing rapidly and became the second-largest driver of inflation this month, with a contribution of 1.6 percentage points to the headline inflation rate. Inflation will remain a significant issue for consumers in the Netherlands as wage growth will not keep up with price growth. This will lead households to spend less in the coming months.

[Euro zone retail down again](#)

[Retail sales](#) in the single-currency area decreased 0.3% m/m in August after a significant downward revision in the July reading that showed there was a 0.4% contraction (previously estimated as a 0.3% increase). Moreover, compared with August 2021, sales of all products except auto fuel contracted. Economic sentiment has plummeted to its lowest since November, while inflation keeps accelerating. On a monthly basis, spending increased marginally on nonfood products in August, while there was a significant spike in fuel consumption. Food sales led the decline, consistent with the fact that food inflation sped up considerably in August from July; similarly, gasoline prices declined. Ultimately, with sentiment low, price pressures

holding, and real incomes declining, we expect to see more pain for consumers through the rest of the year.

[Spain's industrial production rises in August](#)

Spain's [industrial production](#) partially recovered, rising 0.4% m/m in August after July's 1% decline. With supply shocks persisting, and domestic and foreign demand weakening, we do not think August's recovery will persist. Rather, there will be more losses before the year is over. Looking at the details, capital goods drove the month's print, jumping 5.3% from July. This outweighed contractions in intermediate goods and energy production and meagre growth of consumer goods.

[Sweden's industrial production recoils sharply](#)

The situation was even more jarring in Sweden. [Industrial production](#) plunged in August, by 7% m/m, nearly erasing an equally surprising, upwardly revised 7.8% jump in output during the previous month. The rapid deterioration in output was driven by worsening supply conditions. We suspect that inventories of semiconductors ran low again, while there was a simultaneous and rapid increase in electricity prices. The combined effects were most clear for the automotive industry, where output collapsed nearly 30% m/m. There were also signs of weak demand given a drop in new factory orders. September may bring a rebound in activity, but the outlook for Sweden's industrial sector and economy generally speaking remains grim.

Australia Central Bank Slows Hikes

BY ILLIANA JAIN

The Reserve Bank of [Australia](#) shifted gears, raising the cash rate target by 25 basis points to 2.6% at its October meeting. This contrasted with the string of 50-basis point hikes seen in the previous four meetings. The central bank said that the smaller hike, which puts the cash rate at around neutral, would give it time to "assesses the outlook for inflation and economic growth". The tone of the statement remained hawkish, though the bank put added emphasis on the importance of global growth to the outlook.

Room to think

The statement had a few notable changes. First, the RBA provided forward guidance early in the statement to ensure the reader did not confuse its smaller hike for dovishness. However, it said that further increases can be expected in the "period ahead", a change from the "months ahead" window outlined in September's statement. This gives the RBA room to slow down as it assesses economic conditions without losing credibility. Given the uncertain economic backdrop globally, this will be increasingly important.

The RBA also emphasised the global economic outlook as a "source of uncertainty"; this is in addition to household spending, which remains on its radar. In the statement's final paragraph, which typically contains forward guidance, the central bank said it would be "closely monitoring the global economy".

The bank said that further hikes will bring demand into line with capacity in Australia, helping to quell demand-driven inflation. This is an acknowledgement that monetary policy isn't a cure for supply-driven inflation. This view was underscored by Governor Phil Lowe in a speech given in September, in which he noted that there is little that central banks can do to about this type of inflation.

Our outlook remains unchanged—we expect two more 25-basis point hikes this year, bringing the cash rate target to 3.1%. However, there is certainly scope for the central bank to delay tightening to 2023 as it monitors how households respond to rising rates and the impact of the global slowdown on the domestic economy.

One slows, while another speeds ahead

The Reserve Bank of [New Zealand](#) stuck to its guns at its October meeting, raising the official cash rate by another 50 basis points to 3.5%. This continues a strategy that dates from April.

The minutes from its Monetary Policy Committee meeting revealed that a 75-basis point hike was considered. However, the larger hike was not pursued because of the degree of monetary tightening already delivered and the lag in monetary policy transmission. As to the latter point, the lag is partly a function of the strong funding positions of banks; this strength has meant that increases in the official cash rate haven't been fully passed on to customers. Another lag reflects the fact that most mortgage holders in New Zealand are on fixed term mortgages of two to three years. Those mortgages will be rolling off record low rates through 2023 and 2024. With average household debt servicing costs poised to increase, household spending stands to come under pressure.

The minutes also revealed growing concern over the tight labour market, which has been exacerbated by negative net migration—a problem that Australia shares, though to a lesser degree. A shortage of workers has fuelled exceptional wage growth, which could continue as prices skyrocket. The discussion of this issue signals that a wage-price spiral may be of concern to the central bank.

Last, the minutes suggested that more hikes are ahead on account of inflation expectations remain unanchored. We could see a record 75-basis point hike if inflation expectations data, released prior to the next meeting, come in hot. That being said, we expect the RBNZ to raise the official cash rate by 50 basis points to 4% at the November meeting.

Given the strong monetary tightening seen through 2022, a soft landing for the economy is becoming increasingly unlikely.

U.S. Corporate Credit Quality Improves

BY STEVEN SHIELDS

U.S.

U.S. corporate credit quality improved in the latest period. Upgrades accounted for five of the nine changes and nearly all the affected debt in the period. In the week, Moody's Investors Service upgraded JPMorgan Chase & Co.'s senior unsecured debt ratings to A1 from A2. All other ratings of JP Morgan were affirmed, and the ratings outlook for JPM is stable. The upgrade reflected Moody's assessment that the recently increased levels of holding company debt outstanding relative to JPM's total assets will be sustained. The increased debt levels would reduce the likely severity of loss given failure for JPM's senior unsecured creditors, improving the creditworthiness of this debt class.

Meanwhile, Moody's Investors Service upgraded Cheniere Energy Inc's Corporate Family Rating to Ba1 and its senior secured debt rating to Baa2 from Baa3. According to Moody's Senior Vice President Elena Nadtotchi, "Cheniere Energy is well positioned to continue to strengthen its balance sheet as it benefits from sustained strong demand and high pricing for US liquified natural gas exports. The holding company will continue to accrue additional cash flow in its marketing operations in 2023 and will maintain substantial financial flexibility and robust leverage profile as it funds the expansion of LNG capacity at its Corpus Christi facility."

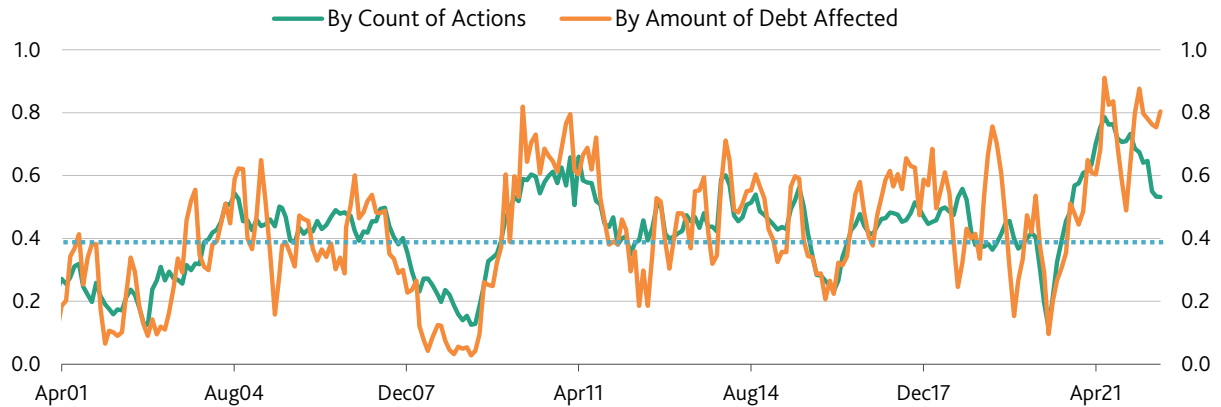
Europe

Activity was negative across Western Europe with downgrades accounting for all but one change. The largest change based on the amount of affected debt was issued to Telenor ASA, with Moody's Investors Service raising its senior unsecured ratings to Baa1 from A3. The downgrade reflects Moody's view that the company's leverage will remain at a level commensurate with a lower rating, reflecting lack of meaningful revenue growth and higher energy costs.

Moody's Investors Service also downgraded the senior unsecured ratings of German automotive parts supplier MAHLE GmbH to Ba2 from Ba1. Moody's reaffirmed the company's negative outlook, citing challenges for the company to improve its margins in the increasingly difficult macroeconomic environment.

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/S G
9/28/2022	DARLING INGREDIENTS INC.	Industrial	SrUnsec/SrSec/BCF/LTCFR/PDR	2004.521	U	Ba3	Ba2	SG
9/28/2022	MEDICAL DEPOT HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa3	Ca	SG
9/28/2022	PHOENIX SERVICES TOPCO, LLC-PHOENIX SERVICES MERGER SUB, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Ca	SG
9/29/2022	JPMORGAN CHASE & CO.	Financial	SrUnsec/LTIR/MTN	214203.3	U	A2	A1	IG
9/29/2022	CHENIERE ENERGY, INC.	Utility	SrSec/SrUnsec/LTCFR/PDR	19331.8	U	Baa3	Baa2	IG
9/29/2022	SHEA HOMES INC.-SHEA HOMES LIMITED PARTNERSHIP	Industrial	SrUnsec/LTCFR/PDR	750	U	B1	Ba3	SG
10/3/2022	BIG RIVERS ELECTRIC CORPORATION, KY	Utility	SrSec/BCF		U	Baa3	Baa2	IG
10/3/2022	PROVIDENT GROUP - EMU PROPERTIES LLC	Industrial	SrSec		D	B3	Caa1	SG
10/4/2022	LIFESCAN GLOBAL CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		D	B3	Caa1	SG

Source: Moody's

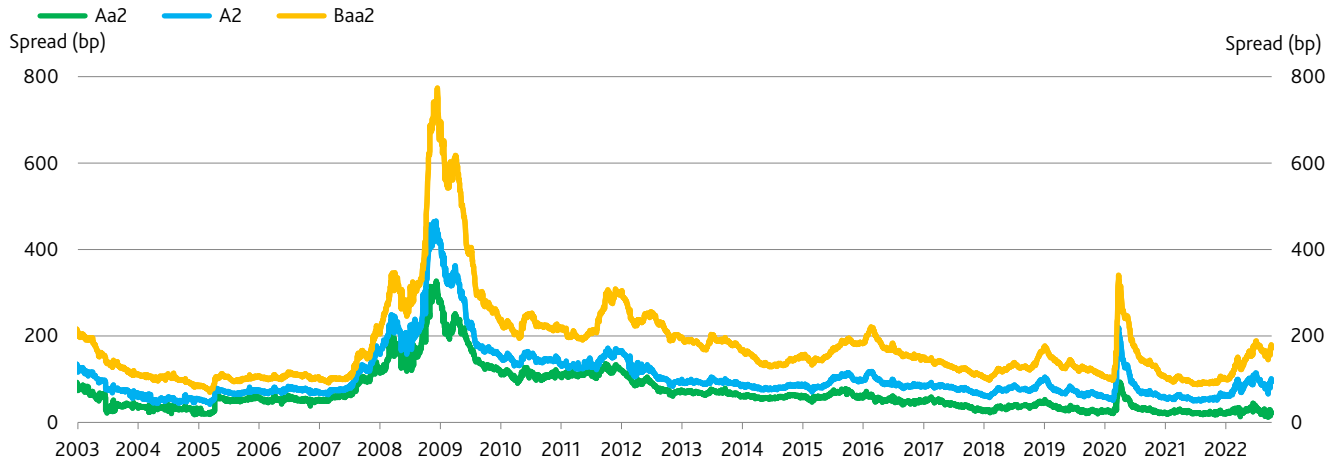
FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/Down	Old LTD Rating	New LTD Rating	IG/SG	Country
9/28/2022	L1R HB FINANCE LIMITED	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG	UNITED KINGDOM
9/28/2022	COOKIE INTERMEDIATE HOLDING II SAS	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	B3	SG	NETHERLANDS
9/28/2022	STAN HOLDING S.A.S.	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG	FRANCE
9/29/2022	COMPACT BIDCO BV	Industrial	SrSec/LTCFR/PDR	587.7916	D	B3	Caa1	SG	NETHERLANDS
9/29/2022	SCHUR FLEXIBLES GMBH	Industrial	LTCFR/PDR		U	Ca	Caa2	SG	GERMANY
9/30/2022	MAHLE GMBH	Industrial	SrUnsec/LTCFR/PDR/MTN	734.7395	D	Ba1	Ba2	SG	GERMANY
10/4/2022	TELENOR ASA	Industrial	SrUnsec/MTN	2949.566	D	A3	Baa1	IG	NORWAY

Source: Moody's

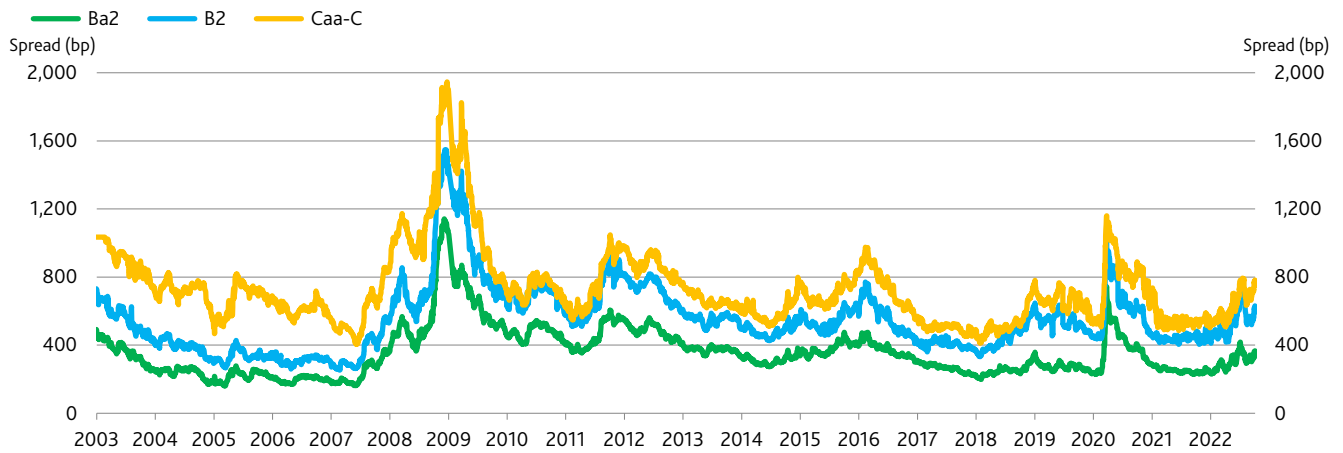
MARKET DATA

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 (September 28, 2022 – October 5, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Issuer			
Twitter, Inc.	Baa2	Ba1	Ba2
Campbell Soup Company	A1	A2	Baa2
Energy Transfer LP	Baa2	Baa3	Baa3
John Deere Capital Corporation	Aa3	A1	A2
McDonald's Corporation	Aa1	Aa2	Baa1
International Business Machines Corporation	A2	A3	A3
Walmart Inc.	Aa2	Aa3	Aa2
Bristol-Myers Squibb Company	Aa2	Aa3	A2
PepsiCo, Inc.	Aa1	Aa2	A1
Home Depot, Inc. (The)	Aa2	Aa3	A2

CDS Implied Rating Declines	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Issuer			
Emerson Electric Company	A2	Aa2	A2
Credit Suisse (USA), Inc.	B1	Ba1	A2
Carnival Corporation	C	Caa3	B3
Cummins, Inc.	A1	Aa2	A2
Goldman Sachs Group, Inc. (The)	Baa3	Baa2	A2
AT&T Inc.	Baa3	Baa2	Baa2
Verizon Communications Inc.	Baa3	Baa2	Baa1
T-Mobile USA, Inc.	Baa3	Baa2	Baa3
Caterpillar Financial Services Corporation	A1	Aa3	A2
Coca-Cola Company (The)	Aa3	Aa2	A1

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Issuer				
Rite Aid Corporation	Caa2	3,137	2,340	796
Carnival Corporation	B3	1,654	1,101	553
Credit Suisse (USA), Inc.	A2	435	263	173
Royal Caribbean Cruises Ltd.	B3	1,057	920	137
Domtar Corporation	Ba3	920	792	128
Terex Corporation	B2	342	265	77
Anywhere Real Estate Group LLC	B2	991	939	53
Wendy's International, LLC	Caa2	289	245	44
SITE Centers Corp.	Baa3	234	198	36
Essential Utilities, Inc.	Baa2	160	127	33

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Issuer				
Pitney Bowes Inc.	B3	1,656	1,793	-137
Gap, Inc. (The)	Ba3	631	736	-105
United Airlines, Inc.	Ba3	819	915	-96
SLM Corporation	Ba1	609	703	-94
Nabors Industries, Inc.	Caa2	683	775	-92
Twitter, Inc.	Ba2	123	209	-85
United Airlines Holdings, Inc.	Ba3	828	913	-84
United States Steel Corporation	B1	632	712	-81
Glatfelter Corporation	B2	801	871	-70
Macy's, Inc.	Ba2	486	551	-64

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (September 28, 2022 – October 5, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Issuer			
Proximus SA de droit public	A2	Baa1	A1
Erste Group Bank AG	A3	Baa1	A2
Mercedes-Benz Group AG	Baa2	Baa3	A3
ENGIE SA	A3	Baa1	Baa1
Volkswagen Aktiengesellschaft	Baa3	Ba1	A3
Norddeutsche Landesbank GZ	A2	A3	A3
Danone	A1	A2	Baa1
BASF (SE)	Baa2	Baa3	A3
National Grid Electricity Transmission plc	A3	Baa1	Baa1
Vivendi SE	Baa2	Baa3	Baa2

CDS Implied Rating Declines	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Issuer			
Credit Suisse Group AG	Ba3	Ba1	Baa2
Credit Suisse AG	Ba2	Baa3	A2
Carnival plc	C	Caa3	B3
BPCE	A2	A1	A1
Nordea Bank Abp	A1	Aa3	Aa3
Landesbank Baden-Wuerttemberg	Aa3	Aa2	Aa3
Credit Agricole Corporate and Investment Bank	A3	A2	Aa3
Svenska Handelsbanken AB	A2	A1	Aa2
Swedbank AB	A2	A1	Aa3
Landesbank Hessen-Thuringen GZ	A2	A1	Aa3

CDS Spread Increases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Issuer				
Carnival plc	B3	1,567	1,044	524
Casino Guichard-Perrachon SA	Caa1	3,915	3,674	242
CECONOMY AG	Ba3	1,658	1,434	224
Credit Suisse Group AG	Baa2	374	223	151
United Group B.V.	Caa1	1,204	1,059	145
Credit Suisse AG	A2	308	184	124
Piraeus Financial Holdings S.A.	Caa1	538	480	58
Permanent tsb p.l.c.	A2	294	236	58
Sappi Papier Holding GmbH	Ba2	464	415	49
National Bank of Greece S.A.	B1	427	381	46

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Issuer				
Wienerberger AG	Ba1	210	343	-134
Jaguar Land Rover Automotive Plc	B1	1,086	1,189	-103
Picard Bondco S.A.	Caa1	909	988	-79
Trinseo Materials Operating S.C.A.	B2	731	795	-64
ZF Europe Finance B.V.	Ba1	479	541	-62
Stena AB	B2	617	675	-58
Boparan Finance plc	Caa3	2,609	2,665	-56
Ardagh Packaging Finance plc	Caa1	1,147	1,194	-46
Liquid Telecommunications Financing plc	B3	571	616	-45
Rolls-Royce plc	Ba3	445	488	-43

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (September 28, 2022 – October 5, 2022)

CDS Implied Rating Rises	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Indian Railway Finance Corporation Limited	Baa2	Baa3	Baa3
Coca-Cola Amatil Limited	Aa3	A1	Baa1
Japan, Government of	Aaa	Aaa	A1
China, Government of	Baa1	Baa1	A1
Australia, Government of	Aaa	Aaa	Aaa
Korea, Government of	Aa3	Aa3	Aa2
India, Government of	Baa3	Baa3	Baa3
Indonesia, Government of	Baa3	Baa3	Baa2
Mitsubishi UFJ Financial Group, Inc.	Aa3	Aa3	A1
Sumitomo Mitsui Banking Corporation	Aa3	Aa3	A1

CDS Implied Rating Declines	CDS Implied Ratings		
	Oct. 5	Sep. 28	Senior Ratings
Adani Green Energy Limited	Caa2	B1	B2
Korea Gas Corporation	Baa1	A1	Aa2
BDO Unibank, Inc.	A2	Aa2	Baa2
China Development Bank	Baa2	Baa1	A1
Commonwealth Bank of Australia	A2	A1	Aa3
Korea Development Bank	Aa3	Aa2	Aa2
Australia and New Zealand Banking Grp. Ltd.	A2	A1	Aa3
Development Bank of Japan Inc.	A2	A1	A1
Macquarie Bank Limited	A3	A2	A2
Singapore, Government of	Aa1	Aaa	Aaa

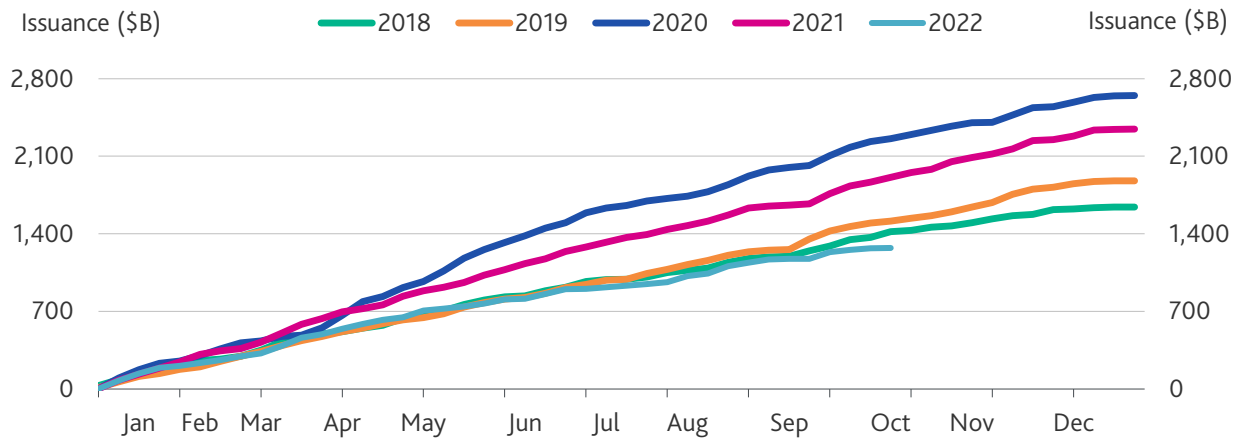
CDS Spread Increases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Adani Green Energy Limited	B2	871	458	412
Vanke Real Estate (Hong Kong) Company Limited	Baa2	383	312	70
GMR Hyderabad International Airport Limited	Ba3	390	330	60
Korea Gas Corporation	Aa2	96	62	34
Boral Limited	Baa2	159	131	28
SK Innovation Co. Ltd.	Baa3	189	160	28
BDO Unibank, Inc.	Baa2	73	47	25
Takeda Pharmaceutical Company Limited	Baa2	76	62	14
Tenaga Nasional Berhad	A3	117	103	14
Halyk Savings Bank of Kazakhstan	Ba2	490	476	14

CDS Spread Decreases	Senior Ratings	CDS Spreads		
		Oct. 5	Sep. 28	Spread Diff
Indian Railway Finance Corporation Limited	Baa3	130	156	-27
Tata Motors Limited	B1	337	355	-19
SoftBank Group Corp.	Ba3	505	521	-16
Vietnam, Government of	Ba2	163	178	-15
Coca-Cola Amatil Limited	Baa1	54	66	-12
CITIC Group Corporation	A3	154	166	-12
Aurizon Network Pty Ltd	Baa1	119	130	-11
Transurban Finance Company Pty Ltd	Baa2	127	136	-9
Chorus Limited	Baa2	82	91	-9
Philippines, Government of	Baa2	131	138	-8

Source: Moody's, CMA

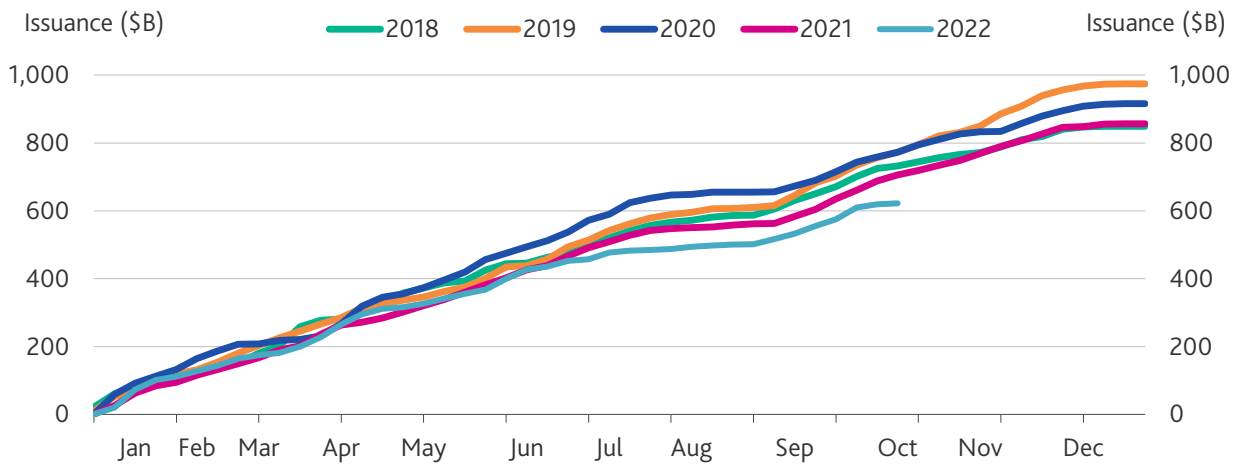
ISSUANCE

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



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

ISSUANCE

Figure 8. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	2.699	0.000	3.202
Year-to-Date	1,106.849	124.664	1,272.719

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	2.752	0.485	3.383
Year-to-Date	578.065	32.908	622.497

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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