MOODY'S

WEEKLY MARKET OUTLOOK

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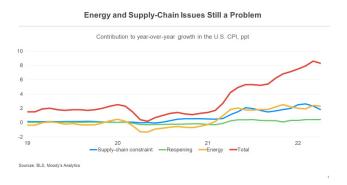
Did Inflation Peak? Doesn't Matter to the Fed

The Federal Reserve is not going to abandon its plan to aggressively remove monetary policy accommodation even if inflation has peaked. The CPI increased 0.3% in April, in line with our forecast and a touch stronger than the consensus expectation. Energy prices dropped 2.7% in April after jumping 11% in March. Excluding energy, the CPI was up 0.6% in April, stronger than the 0.4% gain in March. The CPI for food/beverages continued to post solid gains, as it was up 0.8% after rising 1% in each of the prior two months.

Excluding food and energy, the CPI rose more than anticipated, adding 0.6% in April compared with 0.3% in March. On a year-ago basis, the headline and core CPIs were up 8.3% and 6.2%, respectively, not seasonally adjusted.

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Though the gain was in line with our forecast, there was a little more uncertainty in the forecast because the Bureau of Labor Statistics altered how it measures new-vehicle prices. Previously, it surveyed dealerships, but it will now use transaction data.



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

Turning back to monetary policy, the odds of the Fed engineering a soft landing are declining. The Fed is behind the curve on inflation and the labor market is extremely tight. Therefore, tightening monetary policy to tame inflation without causing the unemployment rate to increase will be extremely difficult. There has never been an increase in the unemployment rate of more than 30 basis points on a three-month moving average basis that wasn't associated with a recession.

Once the labor market overshoots full employment, it is extremely difficult for the Fed to pull off a soft landing. Also, inflation expectations are climbing; inflation at a seasonally adjusted 8.2% on a year-ago basis, compared with the 2.1% average growth in 2018 and 2019, is costing the average household an extra \$311.78 per month to purchase the

same basket of goods and services as last year. This is a little less than last month but still a noticeable burden on households.

The Fed could face a situation where higher consumer prices begin to weigh on consumer spending, reducing GDP growth. The pandemic has not repealed the law of demand, which states that, all else equal, a higher price of a good or service reduces the quantity demanded.

The Fed could be faced with a Hobson's choice: Push the economy into a mild recession, similar to our scenario, to tame inflation or wait and possibly cause a more significant recession, since a stagflation scenario is possible next year if the Fed isn't aggressive enough.

TOP OF MIND

U.S. Regional Recession Odds Rise

BY ADAM KAMINS

Fears of a U.S. recession have intensified dramatically in recent months. The domino effect of the Russian invasion of Ukraine, causing inflation to intensify and driving the Federal Reserve to go all-in on fighting inflation, has spooked consumers, businesses and investors alike. As a result, the probability of the U.S. economy falling into recession in the next year—less than 10% late last year—is about one in three and quickly rising.

Those odds, however, are distributed unevenly across states and metro areas. After falling for most of the past year, the share of metro areas that are either late in their expansion or at imminent risk of falling into recession is again on the rise. Meanwhile, a revamped model for predicting the probability of recession for individual states and metro areas in 12 months suggests that some places have far more to worry about than others.

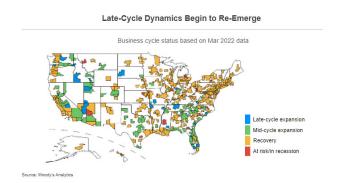
Getting late early

The COVID-19 pandemic required a temporary overhaul to how Moody's Analytics classifies <u>regional business cycles</u>. Traditionally volatile series that were typically smoothed using moving averages and year-over-year growth rates suddenly became irrelevant amid unprecedented monthly volatility. This required a reliance on monthly labor market metrics, with a focus on standing relative to early 2020 and recent growth rates.

Until very recently, most regional economies fell neatly into two categories: recovering from the pandemic-induced recession or into mid-cycle expansion. But with nearly one in three metro areas now above their prior payroll peak and more than half expected to get there by year's end, one can no longer paint all expanding economies with the same broad brush.

In order to address this, we have reintroduced the late-cycle expansion category for the first time since before the pandemic. Economies that are late in their cycle show some combination of slowing job growth, a leveling off of the unemployment rate, elevated prices and wages, and/or pronounced worker shortages.

Based on these criteria, 25 metro areas are considered late in their cycle as of March 2022. For context, more than half received that classification in late 2019 and early 2020, so late-cycle pressures remain isolated. But there are some clear patterns surrounding where they can be found.



Not surprisingly, fast-growing areas dominate the list since their relatively rapid ascent has caused them to run up against capacity. Nashville is the largest metro area to fit this description, with payroll employment far above its prior peak and joblessness leveling off. These dynamics are creating immense upward pressure on wages, which, combined with demographics, are driving very rapid house price gains.

Florida retiree havens, including West Palm Beach, are also high on the list. A wave of retirements and the movement of remote workers to a warm climate have begun to give rise to shortages of workers and homes. Meanwhile, Salt Lake City and Boise—superstar performers over the past two years—are late in their cycles as well, having completed recoveries far sooner than the rest of the nation and now slowing a bit.

Recession probabilities

Understanding where late-cycle patterns have taken hold or weakness may be creeping into the data can help to quantify the risk of an economy falling into recession. In order to determine this, we estimated a probit model in which state and metro area recession statuses a year out were compared to a series of economic variables. This was done using data through 2019 since the COVID-19 recession was brought about by an exogenous shock that no model would have anticipated.

The variables examined span three broad categories. The first involves a measure of the broader environment by using U.S. odds and, in the case of metro areas, state recession probabilities. The second covers the labor market, looking at both payroll employment and the unemployment rate, while the third reflects housing based on where prices are relative to the past few decades and how recent growth and

expectations for the coming months stack up against the historical average.

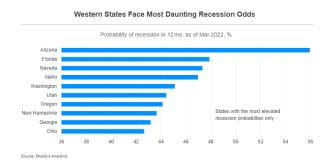
Each of these variables is compared with its historical mean using <u>K-means clustering</u>, which allows for seemingly subtle shifts to be picked up. For example, a deceleration in house price growth or leveling off of the unemployment rate would suggest increasing recession risk. So too do home prices that appear out of line with national growth rates or broader fundamentals.

These measures are used to calculate initial probabilities, which are then calibrated further to ensure alignment with the national figure. Additionally, those places that have already been classified as being at heightened near-term risk of recession may be adjusted in order to incorporate the information gleaned from another model and the relevant regional analyst.

Sun Belt blues?

The states with the most to worry about in the next year are no strangers to cyclicality with popular Sun Belt tourist and retiree destinations most at risk of falling into recession. Arizona is the only state with a greater than 50% chance of going into recession by next spring. This reflects a somewhat overvalued housing market, but one in which prices are starting to level off along with job growth. Nevada and Florida are also near the top of the list as their oncestratospheric rise begins to slow. In each of these states, strong house price growth over the past year is partially offset by pronounced overvaluation and historical volatility.

Other fast-growing states are near the top of the list as well. Idaho and Utah lapped the field in returning to prior heights. But the same relative slowdown that has pushed each state into late-cycle expansion suggests heightened recession risks. This is most evident in reduced job growth in Utah and the severe overvaluation of Idaho's housing market.



On the flip side, commodity producers are well-positioned. Texas is still enjoying robust house price growth, fueled by continued in-migration. And while this is not explicitly accounted for in the model, elevated oil prices should power

growth for one of the Lone Star State's key drivers. Similarly, other energy states such as North Dakota, Oklahoma and Wyoming are also in the bottom 10 for probability of recession.

Agriculture states including lowa, Nebraska and South Dakota are also relatively insulated. Crosscurrents for farmers may help many to benefit from a sustained food-price shock, and many of those states have generally experienced slow but steady improvement over the past year, meaning that key metrics are not conveying the same degree of deceleration seen elsewhere.

Vulnerable metro areas

The metro areas and divisions with the most worrisome recession odds share many of the same characteristics of states with elevated probabilities. A broad slowdown in the labor market alongside decelerating house price gains are a pattern driving heightened risk in a few economies. The two suburban divisions of Miami—Fort Lauderdale and West Palm Beach—are among the most vulnerable to a recession based on these characteristics. In fact, Florida metro areas represent more than a quarter of the places with at least even odds of falling into recession by early next year, four times the state's share of the nation's metro areas.



This largely reflects the rapid gains experienced by retiree havens, many of which are now encountering significant late-cycle challenges. That narrative extends to popular western destinations for seniors, including Phoenix and Prescott AZ, California's wine country, and southern Oregon. All are among the most vulnerable to a recession in the near term.

Elsewhere, numerous metro areas that are further along in their cycle are a bit more vulnerable due to softening labor market fundamentals. While still robust, job growth or the change in joblessness has leveled off not just in Boise, but in places such as Tampa FL, Riverside CA and Phoenix.

Suburban markets also appear a bit more exposed. While Miami's suburbs are easily the most at risk of recession, Orange County CA and Long Island NY have slowed

appreciably of late. Both may be giving back some ground following a pandemic-driven boom in suburban demand.

These probabilities provide some guidance around where risk is elevated, but they should be treated cautiously. Because they are model-determined and sensitive to small fluctuations in the data, they can overstate the case in a few metro areas. These include Yuma AZ and El Centro CA,

where the unemployment rate is structurally high and a seemingly small increase in unemployment looks worse when using differences. Similarly, the model may overestimate recession risks for some energy-dependent metro areas, particularly those where short-term house price declines are anticipated.

The Week Ahead in the Global Economy

U.S.

Retail sales for April will be among the key data in a busy week on the U.S. economic calendar. Retail sales will help assess the strength of the consumer early this quarter. Industrial production for April also will be released. Manufacturing output likely posted a modest gain, while mining continued to climb in response to higher energy prices. Initial claims for unemployment insurance benefits take on added importance, since the new data will include the May payroll reference period. On housing, we get the NAHB housing market index along with housing starts and existing-home sales.

Europe

Final estimates will likely confirm that the harmonized index of consumer prices grew 7.5% y/y in April. Energy prices may have eased slightly, but core pressures picked up from the previous month. CPI inflation in the U.K., meanwhile, likely popped to 8.9% y/y in April. This will happen as the country's price cap on electricity and gas was revised upward by 54%. At the same time, food and core prices likely continued to grow as production costs continue to be pushed up by global shortages of commodities and inputs.

U.K. retail sales likely contracted again in April, by 0.7% m/m deepening a 1.4% decline in March. Darkening consumer confidence and rising prices likely squelched demand for retail goods. We also expect there is a substitution effect, whereby consumers spend more on services now that the pandemic is abating. Supporting our view is the fact that the U.K. CBI distributive trades retail survey plunged in April.

The U.K.'s unemployment rate, meanwhile, likely remained at 3.8% in the three months to March. The labor market has been tight as firms continue to struggle finding workers. Brexit cut into labor supply at the same time that the restarting of the economy following the pandemic has increased demand for workers. However, with the recovery slowing, we expect unemployment to begin inching up in the second half of the year.

Finally, the euro zone's external trade balance likely remained in negative territory this March. We expect the deficit slumped to €10 billion in nonseasonally adjusted

terms. Europe continued importing energy commodities from Russia and abroad at the same time that most exports to Russia halted and demand from China slumped due to the tightening of lockdowns in the country. There are some upsides, for example, the continued easing of social distancing measures in Europe likely stimulated trade within the euro zone, particularly of consumer goods. Ultimately, though, we fear the downside pressures won out.

Following the temporary suspension of the Russian Federation's merchandise trade monthly publication by the Central Bank of Russia starting April 11, the Russian Federal Statistical Office did not publish the respective monthly series as planned on April 27. No further information is currently available, although neither the CBR nor Rosstat has changed their official publication schedules. Therefore, we are adding a forecast for both February and March. We expect the balance rose to \$22.5 billion in February and then paired back to \$19.5 billion March. Despite sanctions, trade of energy commodities, Russia's most important export, has continued. A decline in imports may even support the balance.

Asia-Pacific

Japan's first-quarter performance will be the highlight on the economic calendar. We expect the economy to have contracted 0.5% q/q after its 1.1% expansion in the prior quarter. The spread of the Omicron variant of COVID-19 dented consumer confidence and kept domestic spending on the back foot in the initial months of the year. Although an accelerated rollout of booster doses partially mitigated this outbreak towards the close of the quarter, industrial production has largely lacked momentum, weighed down by weakness in auto manufacturing. Soft domestic demand and a widening trade deficit (arising from costlier energy imports) will drive the economic contraction in the March quarter.

China's factory and consumer activity data for April will likely make for disappointing reading. We expect industrial growth to slow to less than 1% y/y in April; retail sales are likely to have dropped for a consecutive month in April, and fixed-asset investment growth is likely to have moderated to 7% y/y. Combined, the indicators will give a clearer read on how COVID-19 shutdowns have disrupted production and consumer spending.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
12-13-May	U.S.	U.SASEAN summit	Medium	Low
21-May	Australia	Federal election	Low	Low
22-26-May	Switzerland	World Economic Forum annual meeting	Medium	Low
29-May	Colombia	Presidential election	Medium	Low
29-30-Jun	NATO	NATO Summit, hosted by Madrid	Medium	Medium
Jun/Jul	PNG	National general election	Low	Low
2-Oct	Brazil	Presidential and congressional elections	High	Medium
Oct	Indonesia	G20	Medium	Low
Oct/Nov	China	National Party Congress	High	Medium
7-Nov	U.N.	U.N. Climate Change Conference 2022 (COP 27)	Medium	Low

THE LONG VIEW: U.S.

Key Adjustments to Our Baseline Forecast

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 157 basis points, 6 bps wider than at this time last week. It is also wider than the 142 bps average in April. The long-term average industrial corporate bond spread widened 4 bps to 142. It averaged 129 bps in April.

The recent ICE BofA U.S. high-yield option adjusted bond spread widened 45 basis points over the past week to 455 bps. This is the widest since late 2020. The Bloomberg Barclays high-yield option adjusted spread widened from 390 bps to 437 bps this week. The high-yield option adjusted bond spreads approximate what is suggested by the accompanying long-term Baa industrial company bond yield spread and that implied by a VIX of 33.

Defaults

The trailing 12-month global speculative-grade default rate was 2.0% at the end of March, unchanged from the prior month. This default rate calculation does not include those defaulting and non-defaulting Russian issuers whose ratings were withdrawn by Moody's in March. The March default rate would have been 3.1% if we had included those issuers. However, including these issuers in the default rate calculations would be misleading because Moody's no longer can obtain adequate information to ascertain their default status.

Two factors will be critical in driving near-term default trends: spillover severity of the Russia-Ukraine military conflict and the aggressiveness of monetary tightening in major economies. If the military conflict extends and international sanctions escalate, the higher the chances of a global recession and the greater the credit risks it introduces. Under our baseline scenario, however, we are not forecasting a global recession. One reason is that although the invasion of Ukraine is unambiguously negative for consumer confidence and economic activity, the crisis hit when the global economy was at cruising altitude. This is consistent with what high-yield spreads are indicating; they have widened in Europe and the U.S., but they remain near or below their historical averages for now.

Against this backdrop, Moody's Credit Transition Model predicts that the global speculative-grade corporate default rate will edge lower to 1.9% for April, May and June before rising to 2.9% in March 2023. That rate, if realized, would still be below the long-term average of 4.1%. Our baseline forecasts assume that the U.S. high-yield spread will widen to 497 bps over the next four quarters from about 350 bps now. This will be partially offset by a slight improvement in

the U.S. unemployment rate, which we expect to edge lower to 3.5% by the end of March 2023 from the current rate of 3.6%.

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 week ended May 6, US\$-denominated high-yield issuance totaled \$0.5 billion. This brings the year-to-date total to \$78.6 billion. Investment-grade bond issuance rose \$19.4 billion in the week ended May 6, bringing its year-to-date total to \$644.8 billion. Total US\$-denominated issuance is currently tracking that seen in 2018 and 2019.

U.S. ECONOMIC OUTLOOK

There were some noticeable adjustments to our U.S. baseline forecast in May because of changes to our fiscal policy assumptions, the tightening in financial market conditions, and the increasing economic costs of Russia's invasion of Ukraine.

Financial market conditions have tightened noticeably between the updates of the April and May baseline forecast. The cumulative decline in the S&P 500 since the beginning of the year is around 19%. Separately, year-to-date returns on the S&P 500 are down around 15%. This is coupled with the more than 150-basis point increase in the 10-year Treasury yield since the beginning of the year.

We're seeing evidence that this is affecting corporate bond spreads. Our past work has shown that a stock market correction and jump in 10-year Treasury yields bode ill for high-yield corporate bond spreads and issuance. Inflation fears have caused rates across the yield curve to jump, particularly at the long end of the yield curve. Meanwhile, volatility in the equity and bond market has caused high-yield corporate bond spreads to widen. It has been a rough year for high-yield corporate bond spreads as returns are -9% year to date. High-yield corporate bond issuance has not started this slowly in a long time.

It's time to make a change

In the May baseline, we removed our assumption that Democrats would pass a slimmed-down reconciliation package that invested \$560 billion in clean-energy and climate resilience and was paid for by more than \$700 billion in higher taxes on well-to-do households and prescription drug savings. Though our assumption around reconciliation was consistent with what Senator Joe Manchin had said he would support, Democrats do not even seem to be on track to agree on a loose reconciliation framework by Memorial Day. After May, it will be nearly impossible for Democrats to agree to and act on a

reconciliation bill, as the midterm elections will be fast approaching.

The removal of the reconciliation package barely has an impact in 2022. All else being equal, its absence reduces annual real GDP growth by 5 to 7 basis points in the next three years, such that the jobless rate is 0.1 percentage point higher by mid-decade.

COVID-19 assumptions

Changes to our epidemiological assumptions were larger than last month. Total confirmed COVID-19 cases in the U.S. will be 88.5 million compared with the 81.35 million in the April baseline. The number of assumed cases is still well above that assumed before the Omicron variant. The sevenday moving average of daily confirmed cases has been steadily rising since the April baseline and is now 74,000, more than double that seen when we updated the April baseline forecast

We're sticking with the concept of "effective immunity," which is a rolling number of infections plus vaccinations to account for the fact that immunity is not permanent. The forecast still assumes that COVID-19 will be endemic and seasonal. However, each passing wave is assumed to have a diminishing economic effect.

Energy price assumptions

Our assumption is that the oil supply disruption from Russia's invasion of Ukraine will be between 2 million and 3 million barrels per day. However, the EU is proposing a dramatic restructuring of global energy markets, and the global economic fallout could be significant. The EU has declared that Russia is no longer a reliable energy supplier, and it proposes that its member states cease purchasing Russian oil and processed fuels by the end of 2022. This would displace approximately 4% of the global oil supply and half of Russia's oil exports. Europe will look to the Middle East, Africa and the Americas for suppliers, and Russia will look east, where it will not be able to fill the hole created by Europe's retreat. The EU ban could precipitate the most substantial reshuffling of global oil supply in history.

The baseline forecast assumes that this doesn't occur. However, in the worst-case scenario, oil prices could rise as high as \$150 per barrel. Each \$10 increase in oil prices shaves about 0.1% from U.S. GDP growth, and even more for European economies with greater oil import bills.

Nudging GDP lower

The May baseline factors in increasing costs of higher global energy prices and tighter financial market conditions on the U.S. economy. We now expect real GDP to rise 2.8% this year, compared with 3.2% in the April baseline. We have cut

our forecast for U.S. GDP growth this year by a total of 70 basis points over the past couple of months. We kept the forecast for GDP growth in 2023 at 2.7%. The economy is still expected to grow above its potential, which is likely between 2% and 2.5%.

Some of the revision to GDP this year is attributed to the disappointment in first-quarter GDP, which is misleading even as it fell 1.4% at an annualized rate.

Net exports were an enormous weight on first-quarter GDP, subtracting 3.2 percentage points. Trade has been a consistent weight on GDP growth as demand for consumer goods has been robust. The U.S. consumer is buying a ton of goods and the majority of these are imported. Another drag was inventories, which reduced first-quarter GDP by 0.8 percentage point. Inventories rose \$158.7 billion at an annualized rate, a sizable increase but failed to keep pace with the \$193.2 billion inventory build in the fourth quarter. For GDP, it's the change in the change in inventories that matters. Neither inventories nor trade tell us where the economy is headed.

Declines in GDP during economic expansions have happened before. The three contractions in GDP occurring between the global financial crisis and the COVID-19 pandemic occurred because of some combination of a widened trade deficit and the quarterly oscillations of the inventory build. Consumption, the largest component of GDP, did not contract in those instances or in the first quarter of 2022. Consumption, particularly on services, accelerated in the quarter.

What matters is the strength of the domestic economy, and real final sales to private domestic purchasers were up 3.7% at an annualized rate in the first quarter, an acceleration from the 2.6% gain in the prior three months and the strongest gain since the second quarter of last year. Real consumer spending rose 2.7% at an annualized rate in the first quarter, compared with the 2.5% gain in the prior three months. Business investment was solid in the first quarter as real equipment spending jumped 15.3% at an annualized rate following a 2.8% gain in the fourth quarter of last year. Real residential investment rose 2.1% at an annualized rate, the second quarter that growth was around 2%.

There were some notable changes to the forecast for GDP growth by quarter this year. We now have second-quarter GDP rising 3.6% at an annualized rate, compared with 3.4% in the April baseline. The biggest change is to the third quarter, as GDP then is now expected to rise 2.9% at an annualized rate, compared with 1.6% in the April baseline. We nudged the forecast higher for GDP growth in the fourth quarter of this year.

Our baseline forecast for real GDP growth this year is lower than the Bloomberg consensus of 3.1%. The forecast for next year is 0.5 percentage point stronger than the Bloomberg consensus of 2.1%.

Business investment and housing

We have real business equipment spending rising 7% this year, compared with 6% in the April baseline. The forecast is for real business equipment spending to increase 3.9% in 2023, weaker than the prior baseline's 4.6%.

A good chunk of the revision is attributable to mining exploration, shafts and wells. The Bureau of Economic Analysis uses the American Petroleum Institute's weighted average of footage drilled along with rotary rig counts from Baker Hughes in its current-quarter estimate of private fixed investment in mining exploration, shafts and wells. This segment now accounts for more than 10% of nominal private fixed investment in nonresidential structures. Therefore, a rise in energy prices is increasing the number of active rotary rigs. Rig counts have risen but are still lower than pre-pandemic and less than implied by global oil prices.

Revisions to housing starts were small. Housing starts are expected to be 1.83 million, compared with 1.82 million in the April baseline. There were no revisions to housing starts next year. 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. We cut the forecasts for new- and existing-home sales this year. They are expected to total 6.86 million, a touch lighter than the 6.9 million in the prior forecast. Revisions to sales in 2023 were larger. New- and existing-home sales are expected to be 6.73 million, weaker than the 7.1 million in the April baseline.

There were minor tweaks to the forecast for the FHFA All-Transactions House Price Index this year and next. The May baseline has it rising 12.2% this year, compared with 12% in the prior baseline. The forecast for next year continues to expect little house price appreciation. Rising mortgage rates are cutting into the housing market, but the initial impact is more noticeable on refinancing activity than either demand for new/existing homes or residential investment. The hit on the latter is coming.

Labor market

We have job growth averaging 372,000 per month this year compared with the April baseline forecast of 376,000. Job growth has averaged around 550,000 per month over the past six months. If sustained, it would take nine months to close the employment gap, or the difference between the actual level of employment and where it would have been if

the recession hadn't occurred and prerecession job growth was maintained.

There were no material changes to the forecast for the unemployment rate. It is still expected to average 3.3% in the final three months of this year and 3.7% in the final three months of next year. We assume a full-employment economy is one with 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%. All of these conditions will be met this summer.

Fast and furious

The front-loading of interest rate hikes by the Federal Open Market Committee has begun, and May's increase won't be the last aggressive hike by the central bank, since it is behind the curve on inflation. As widely expected, the FOMC raised the target range for the fed funds rate by 50 basis points to 0.75% to 1%—the first 50-basis point rate hike since May 2000.

There were some changes to the latest FOMC post-meeting statement. What stood out is the phrase that Fed policymakers are highly attentive to inflation risks. That is hawkish. There is a long list of inflation risks, including lockdowns in China, Russia's invasion of Ukraine, and the invasion's impact on energy and food prices. Also, the U.S. labor market is tight.

The FOMC also announced the runoff of its balance beginning on June 1. The initial runoff pace is \$47.5 billion

per month, but after three months it will increase to \$95 billion. That won't be a gradual increase; rather it will be a sudden increase in September. To start, the runoff is \$30 billion monthly for Treasuries and \$17.5 billion for mortgage-backed securities. The Fed has a ton of Treasury securities maturing over the next several months, giving it the opportunity to be more aggressive on the balance sheet reduction.

If the Fed sticks with its current plan, its balance sheet will decline by about \$520 billion this year. This may sound like a lot, but the balance sheet will still be massive, around 37% of nominal GDP. It was less than 20% of nominal GDP before the pandemic. Also, there wasn't a mention of MBS sales.

The outcome of the FOMC meeting was in line with our expectations. Therefore, we didn't make any changes to our assumptions around monetary policy. However, given the recent increases in the 10-year Treasury yield we have revised our forecast higher for long-term rates through the rest of this year; they will now average 3.16% in the final three months, 19 basis points higher than in the prior baseline forecast. We still have the 10-year Treasury yield averaging 3.25% in the fourth quarter of next year, identical to the April baseline. The May baseline forecast incorporates the recent drop in equity prices, which is the reason for the revision to the forecast. Equity prices are expected to bottom in the first quarter of next year and will resume rising in the second quarter.

EU Proposal Would Jolt Global Energy Market

BY CHRIS LAFAKIS

The <u>European Union</u> is proposing a dramatic restructuring of global energy markets, and the global economic fallout could be significant. An agreement could be clinched within days. The EU has declared that Russia is no longer a reliable energy supplier, and it proposes that its member states cease purchases of Russian oil and processed fuels by the end of 2022. This would displace approximately 4% of global oil supply and half of Russia's oil exports. Europe will look to the Middle East, Africa and the Americas for suppliers, and <u>Russia</u> will look east, where it will not be able to fill the hole created by Europe's retreat. The EU ban could precipitate the most substantial reshuffling of global oil supply in history.

Russian Oil and Product Exports by Source				
Oil exports by type, mil bpd, 2021				
	Mil bpd			
Crude oil and condensate	4.8			
Naphtha	0.5			
Gas oil	1.0			
Vacuum gas oil	0.3			
Fuel oil	0.7			
Other	0.3			
Total oil and product exports	7.5			
Sources: IEA, Moody's Analytics				

The oil market has been gradually adjusting to post-invasion reality. The U.S. banned Russian oil imports in early March, and Western energy companies and trading firms have been self-sanctioning ever since. Contracts are also winding down, and after May 15 the EU has required that European companies cease oil purchases from Russian state-backed enterprises such as Rosneft. Our baseline forecast calls for the amount of displaced Russian crude oil to rise from 1.5 million barrels per day in April to 3 million bpd, but if the ban is agreed upon in full, even more Russian barrels would be displaced.

The economy

Banning Russian oil would be a very strong statement from the EU in support of Ukraine, but it would also raise the risk of recession. In the worst-case scenario, oil prices could rise as high as \$150 per barrel. Each \$10 increase in oil prices shaves about 0.1% from U.S. GDP growth, and even more for European economies with greater oil import bills. The global economy is already fragile; we estimate the risk of recession as one in three as central banks rush to tighten interest rates in response to elevated inflation. Recent declines in asset prices make the global economy even more fragile.

Russian output will fall

How much Russian oil could go off line and how would it be replaced? While we've already discussed the macroeconomic implications of the oil shock, let's now focus on the inner workings of the global oil market. In addition to our baseline forecast, we consider six alternative scenarios, each with different assumptions on how the invasion of Ukraine will reshape global energy markets. Less Russian oil is available to the global market in all of the scenarios. There are three principal channels through which Russian oil supply is curtailed.

Moody's Analytics Scenario	S0	S1	BL	S2	S3	S4	S
Scenario Narrative	Fewer sanctions	Fewer sanctions	No EU ban	No EU ban	No EU ban	EU ban	Full Allied bar
Lost oil supplies	1.0	1.6	2.0	2.7	2.9	3.3	3.
Lost Russian oil	1.4	2.2	3.0	3.9	4.3	5.2	5.
Import bans	0.4	0.6	8.0	0.8	0.8	4.4	4.
Self-sanctioning	1	1.5	2.0	2.8	3.1	0.0	
Russian capacity loss	0	0.1	0.2	0.3	0.4	0.8	
Mitigation	-0.4	-0.7	-1.0	-1.2	-1.4	-1.9	-2.
Demand destruction	-0.2	-0.35	-0.5	-0.6	-0.7	-1.0	-1.
Rerouted Russian exports	-0.2	-0.3	-0.5	-0.6	-0.7	-0.9	
Sources of oil supplies	1.0	1.6	2.0	2.7	2.9	3.3	3.
U.S.	0.1	0.2	0.2	0.3	0.3	0.4	0.
Saudi Arabia	0.2	0.3	0.4	0.4	0.5	0.6	0.
UAE	0.1	0.2	0.2	0.2	0.2	0.3	0.
Inventory depletion	0.6	1.0	1.2	1.9	2.0	2.1	2.
Notes: Includes both crude oil and refined Rerouted exports are mostly to Chi Demand destruction reflects less of Sources: EIA. EA. Moody's Analytics	na and India.		ice.				

The first channel is through explicit export bans. The U.S., U.K., Australia and Canada have banned Russian energy imports, reducing demand for Russian oil by approximately 900,000 bpd. The EU's proposal would increase the amount to a whopping 4.4 million bpd. While Russian oil accounted for just 8% of U.S. oil and product imports before the invasion, a third of Europe's oil and 40% of its natural gas came from Russia. The U.S. is quickly stepping up its capacity to export liquefied natural gas; it became the largest LNG exporter in the world in January, and two-thirds of these cargoes arrive in Europe, but the U.S.'s displacement of Russia cannot happen overnight.

Even though the EU has yet to formally adopt a ban on Russian imports, much of its private sector has been

effectively "self-sanctioning." This is the second channel. Companies are deciding that they do not want to assume reputational risk by buying Russian oil. When Shell announced a large purchase of Russian oil, it faced a public backlash that caused the company to reverse course and cancel the purchase.

The third channel is to reduce Russia's capacity to produce oil and gas. BP, Shell, Exxon and Total are among the Western oil giants that have exited Russian investments or canceled joint ventures with Russian energy companies. These decisions, coupled with severe financial sanctions levied upon Russia, such as barring most of its banks from the SWIFT financial network, will choke Russian energy companies. Without financing, Russian energy companies will not be able to invest in new wells needed to offset depletion of their existing wells. Moreover, Europe has banned export of refinery products that are produced only in Europe; Russia needs these products to refine its oil. A lack of financing and critical imports will reduce Russia's capacity to even produce oil and oil products, let alone export them.

We estimate that in the baseline scenario, 3 million bpd of Russia's 7.2 million bpd of oil and refined product exports would be displaced. Oil prices fall from their current levels to \$87 per barrel by the end of the year. In our \$4 scenario, we assume an EU ban on Russian oil that raises the amount of displaced Russian oil to 4.4 million bpd. Hungary, Slovakia and the Czech Republic are assumed to be effectively exempted from the EU ban, due to logistical and political considerations. Our \$6 scenario assumes that an oil ban is adopted by all allied countries, displacing 4.6 million bpd of Russian oil. This loss of supply would be offset by three primary factors:

- 1. Lower global oil demand;
- 2. Russian exports rerouted from Europe to emerging economies: and
- 3. Increased production outside of Russia.

These offsets would help to limit the fallout on oil prices. However, an EU ban on Russian oil without OPEC offsets (including Iran), could lead to \$150 oil that would imperil global economic expansion. In all scenarios, the world would need more oil.

222212000000000000000000000000000000000		20 2000	
2021 - Pre-invasion	Moody's Analytics baseline	S4 - EU ban	S6 - Allied ban
0.7	0.0	0.0	0.0
3.8	1.8	0.3	0.0
0.3	0.3	0.3	0.0
4.7	2.0	0.5	0.0
0.1	0.5	0.7	0.8
1.6	1.7	1.9	2.1
1.1	1.2	1.3	1.3
7.5	5.4	4.4	4.2
	3.8 0.3 4.7 0.1 1.6 1.1	0.7 0.0 3.8 1.8 0.3 0.3 4.7 2.0 0.1 0.5 1.6 1.7 1.1 1.2	baseline 0.7 0.0 0.0 3.8 1.8 0.3 0.3 0.3 0.3 4.7 2.0 0.5 0.1 0.5 0.7 1.6 1.7 1.9 1.1 1.2 1.3

All of the oil that Russia sells to Europe cannot be diverted to Asia, as rewiring global supply chains can't happen overnight. Although China and Russia declared in February that their friendship had no limits, this didn't apply to China's appetite for Russian crude. There are many reasons for this. The main concern is logistics; Russian oil would have to be loaded onto Aframax tankers in the Gulf of Finland and transferred onto very large crude carriers off the coast of Denmark. The VLCCs would have to then complete a four-month, round-trip voyage to make delivery. China faces no such constraints with its Middle Eastern suppliers with whom it already has contracts. Moreover, sanctions have complicated transactions with Russia, insurance is less available, and there is also political risk; Chinese refineries do not want to run afoul of U.S. secondary sanctions.

India has been more aggressive in importing Russian crude oil, as India has fewer logistical challenges to importing Russian crude, and Indian commercial entities have been more willing to accept political risk. We assume that up to 400,000 bpd of Russian crude would be rerouted to emerging market economies. However, that is inadequate to offset the 3.5 million-bpd hole in Russian exports from an EU ban.

Where will the oil come from?

In all scenarios, the withdrawal of Russian barrels from the international market would be met by a combination of inventory depletion and increased production by the U.S., Saudi Arabia and the UAE. No producer can increase production faster than OPEC, and Saudi Arabia and the UAE hold 82% of the cartel's immediate spare capacity. The U.S. has the fastest capacity to respond outside of OPEC, and it is also the world's marginal producer. The greater price signal in the two adverse scenarios elicits a greater supply response from the three countries.

Still, should the invasion drag into 2023, there is a good chance that the world will have to dip into its oil reserves to satisfy demand. The good news is that inventories are sturdy enough to hold up even in the Lengthy Conflict scenario. There are approximately 3.7 billion barrels of commercial crude oil stored across the world, about 2.3 billion barrels in global strategic petroleum reserves, and another 2 billion barrels of oil product inventories. Even if the world were to run a deficit of 2 million bpd this year, as it did in 2021 when the global economy recovered from the pandemic, global oil inventories would only fall from 8 billion to 7 billion barrels.

Trump card

After playing a long and delicate geopolitical dance with the U.S., Iran might be willing to re-enter into a nuclear deal that has been the subject of negotiation since the start of the Biden administration. Iran has already adjusted to economic sanctions and is now at a crossroads. If it were to strike a deal, it would risk another painful adjustment should a Republican president unilaterally cancel the resurrected

deal. If Iran does strike a deal, however, the country would enjoy a collapse in inflation and access to abundant capital.

Striking a deal with Iran would deliver the U.S. a trump card that would substantially offset the rise in oil prices caused by Russia's invasion of Ukraine. Saudi Arabia has already begun to signal its displeasure, but it would be difficult to envision the Kingdom withholding barrels as Iran came on

line, as it would be effectively surrendering market share. If a deal is struck soon, Iranian barrels would start hitting the market in the third quarter. Iran is capable of exporting up to 2.5 million bpd of oil and products. It is the only producer that could come close to filling the void of Russia's withdrawal. The alternative, should Putin decide not to back down, would be inventory depletion, \$100 oil, and a global economy on red alert.

THE LONG VIEW: ASIA-PACIFIC

Malaysia Raises Rates, Cites Inflation Pressures

BY DENISE CHEOK and SHAHANA MUKHERJEE

In a surprise move, Bank Negara Malaysia raised its overnight policy rate by 25 basis points to 2% from 1.75%. The central bank cited rising inflation pressures as the key reason. The Russian invasion of Ukraine, together with China's zero-COVID policy, has caused supply-chain disruptions and an uptick in global commodity prices. BNM noted several central banks are expected to adjust monetary policy settings "at a faster pace," hinting at concerns over capital outflows and the weakening ringgit.

In March, the central bank said that rising inflation would be partly contained by slack in the economy and the labour market. Given the country's borders fully reopened on 1 April, BNM now expects the economy to strengthen. Domestic COVID-19 restrictions have also largely gone, allowing consumer and investor spending to pick up.

Inflation remains relatively subdued, and this renders the central bank's move largely preemptive. Higher food and

fuel prices pushed the consumer price index to 2.2% y/y in March. In comparison, consumer prices in neighbouring Singapore, Thailand and the Philippines rose between 4.5% and 5.5% in April. Malaysia is a net exporter of oil and can afford to subsidise domestic prices; in doing so, it insulates the population from high global oil prices. Nonetheless, the country is subjected to rising food prices, which have been exacerbated by the Russian invasion of Ukraine. Prices for food and nonalcoholic beverages surged by 4% y/y in March, on par with the rest of the region.

BNM's move puts it in line with other Asia-Pacific central banks such as the Monetary Authority of Singapore, the Bank of Korea, and the Reserve Bank of India; all have tightened monetary policy to quell mounting inflation. Malaysia's first-quarter GDP is due on May 13; a robust growth reading will raise the odds of more rate hikes this year.

RATINGS ROUNDUP

Upgrades Dominate Latest U.S. Changes

BY MICHAEL FERLEZ

U.S.

U.S. rating changes activity remained credit positive in the latest period, with upgrades accounting for two-thirds of the week's rating changes and nearly all the affected debt. While upgrades were concentrated mostly to speculative-grade companies, two investment-grade companies headlined the week's list of upgrades. Downgrades were made exclusively to speculative-grade companies, with the broad business services sector accounting for two of the week's four downgrades.

The most notable upgrade in terms of amount of affected debt was The AES Corporation, which saw its senior unsecured rating upgraded to Baa3 from Ba1. Concurrently, Moody's Investors Service withdrew AES' Ba1 corporate family, Ba1-PD probability of default rating, and SGL-2 Speculative Grade Liquidity rating. In the rating action, Moody's Investors Service Vice President—Senior Analyst Natividad Martel was quoted saying, "The upgrade of AES to Baa3 reflects the company's improved credit metrics and our view that they will remain supportive of an investment grade rating, including a ratio of CFO pre-W/C to net debt

above 14%." The upgrade impacted \$4.4 billion of the firm's outstanding senior unsecured debt.

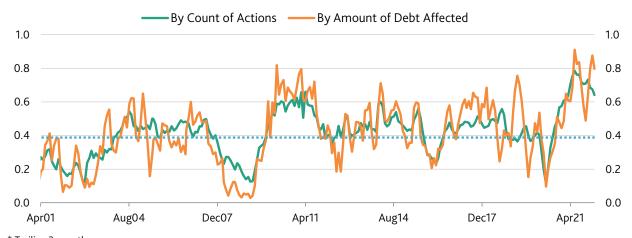
Europe

Western European rating changes were credit negative for the week ended May 10, with downgrades accounting for just over half the rating change activity and all the affected debt. Geographically, rating changes were concentrated mostly in the U.K., which saw four firms receive rating changes.

The most notable change was made to U.K.-based Boparan Holdings Limited. On May 6, Moody's Investors Service downgraded the firm's corporate family rating and probability of default rating to Caa1 and Caa1-PD, respectively. As part of the rating action, Moody's Investors Service also downgraded two sets of senior secured notes issued by Boparan Finance plc to Caa1. In the rating action, Moody's Investors Service cited increased challenges to improving Boparan's weak credit metrics as a rationale for the downgrade. In total, the downgrade impacted approximately \$720 million in outstanding debt.

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
5/4/2022	STEELCASE INC.	Industrial	SrUnsec	450.00	D	Baa3	Ba2	IG
5/4/2022	OCEANEERING INTERNATIONAL, INC.	Industrial	LTCFR/PDR		U	B1	Ba3	SG
5/4/2022	QUIKRETE HOLDINGS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		U	Ba3	Ba2	SG
5/4/2022	WAHOO FITNESS INTERMEDIATE HOLDINGS I L.L.CWAHOO FITNESS ACQUISITION L.L.C.	Industrial	SrSec/BCF/LTCFR/PDR		D	B2	В3	SG
5/5/2022	AES CORPORATION (THE)	Utility	SrUnsec/PS/LTCFR	4443.05	U	Ba1	Baa3	SG
5/5/2022	CHAMPIONX CORPORATION	Industrial	SrUnsec/LTCFR/PDR	277.04	U	B2	B1	SG
5/5/2022	ENVISION HEALTHCARE CORPORATION	Industrial	SrSec/BCF/LTCFR/PDR		D	Caa1	Caa3	SG
5/5/2022	PARK RIVER HOLDINGS, INC.	Industrial	SrSec/BCF		D	B1	B2	SG
5/6/2022	ISTAR INC.	Financial	SrUnsec/LTCFR/Sub/PS	2280.00	U	Ba3	Ba2	SG
5/6/2022	MOSAIC COMPANY (THE)	Industrial	SrUnsec	3697.10	U	Baa3	Baa2	IG
5/6/2022	SOUND INPATIENT PHYSICIANS, INC.	Industrial	SrSec/BCF/LTCFR/PDR		D	Ba3	B2	SG
5/9/2022	CHENIERE ENERGY, INC.	Industrial	LTCFR/PDR		U	Ba3	Ba2	SG
5/10/2022	AXA FINANCIAL, INC.	Financial	SrUnsec		U	Baa2	Baa1	IG
5/10/2022	LAKELAND TOURS, LLC	Industrial	SrSec/BCF		U	Caa2	В3	SG
5/10/2022	Equitable Holdings, Inc.	Financial	SrSec/SrUnsec/Sub/JrSub/ IFSR		U	A2	A1	IG

Source: Moody's

FIGURE 4
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
5/5/2022	INSPIRED EDUCATION (SOUTH LANARKSHIRE) PLC	Industrial	SrSec	485.14	D	A2	A3	IG	UNITED KINGDOM
5/5/2022	AIRTANKER FINANCE LIMITED	Industrial	SrSec/BCF		U	А3	A2	IG	UNITED KINGDOM
5/5/2022	WALSALL HOSPITAL COMPANY PLC	Industrial	SrSec	220.84	D	A3	Baa1	IG	UNITED KINGDOM
5/6/2022	ASSICURAZIONI GENERALI S.P.A	Financial	SrUnsec/SrSub/JrSub/ MTN/IFSR/PS		U	Baa2	Baa1	IG	ITALY
5/6/2022	DTEK ENERGY B.V.	Utility	LTCFR/PDR		D	Caa3	Ca	SG	NETHERLANDS
5/6/2022	BOPARAN HOLDINGS LIMITED	Industrial	SrSec/LTCFR/PDR	720.28	D	В3	Caa1	SG	UNITED KINGDOM
5/10/2022	STRATEGIC BANKING CORPORATION OF IRELAND	Financial	LTIR		U	A2	A1	IG	IRELAND

Source: Moody's

MARKET DATA

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

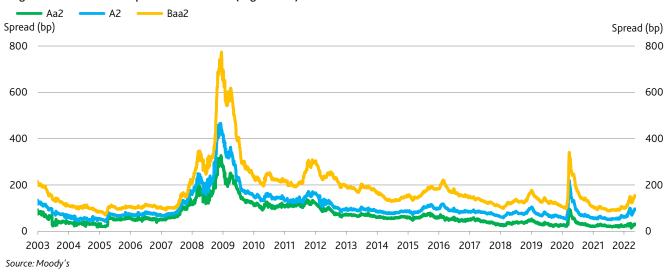
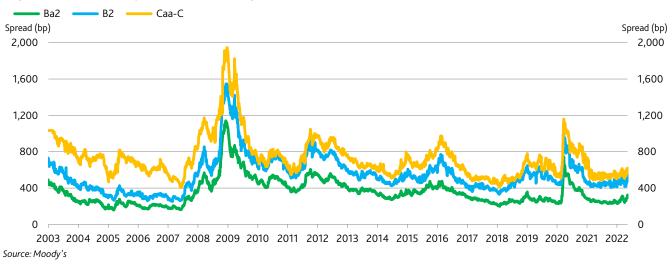


Figure 2: 5-Year Median Spreads-Global Data (High Yield)



CDS MOVERS

Figure 3. CDS Movers - US (May 4, 2022 – May 11, 2022)

CDS Implied Rating Rises	CDS Impli	ed Ratings	_
Issuer	May. 11	May. 4	Senior Ratings
Charles Schwab Corporation (The)	A3	Baa1	A2
Chevron Corporation	Aa1	Aa2	Aa2
Crown Castle International Corp.	Baa2	Baa3	Baa3
NRG Energy, Inc.	Ba2	Ba3	Ba2
Welltower OP Inc.	Baa1	Baa2	Baa1
Archer-Daniels-Midland Company	A2	A3	A2
AvalonBay Communities, Inc.	A2	A3	A3
Kimberly-Clark Corporation	A1	A2	A2
Kimco Realty Corporation	A1	A2	Baa1
Baker Hughes Holdings LLC	Baa1	Baa2	A3

CDS Implied Rating Declines	CDS Impli	ed Ratings	_
Issuer	May. 11	May. 4	Senior Ratings
CenterPoint Energy, Inc.	Baa2	A3	Baa2
PepsiCo, Inc.	A2	A1	A1
Philip Morris International Inc.	A2	A1	A2
General Electric Company	Baa3	Baa2	Baa1
Eli Lilly and Company	Aa2	Aa1	A2
FirstEnergy Corp.	Baa3	Baa2	Ba1
Emerson Electric Company	Baa1	A3	A2
Danaher Corporation	A3	A2	Baa1
Archer-Daniels-Midland Company	A2	A1	A2
United Rentals (North America), Inc.	Ba2	Ba1	Ba2

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
Rite Aid Corporation	Caa2	2,966	2,162	804
Dish DBS Corporation	B3	1,066	650	416
Liberty Interactive LLC	B2	1,135	828	307
American Airlines Group Inc.	Caa1	1,249	959	291
Staples, Inc.	Caa2	1,436	1,214	222
DPL Inc.	Ba1	301	152	149
Carnival Corporation	B2	723	581	142
United Airlines Holdings, Inc.	Ba3	708	588	120
Service Properties Trust	B1	434	321	114
Nabors Industries, Inc.	Caa2	649	535	114

CDS Spread Decreases	_			
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
International Game Technology	B2	363	395	-32
ONEOK, Inc.	Baa3	89	101	-12
ONEOK Partners, L.P.	Baa3	88	100	-12
Welltower OP Inc.	Baa1	73	82	-9
SITE Centers Corp.	Baa3	140	149	-9
Ralph Lauren Corporation	A3	51	60	-9
TJX Companies, Inc. (The)	A2	48	56	-8
AvalonBay Communities, Inc.	A3	62	69	-7
Baker Hughes Holdings LLC	A3	83	90	-7
Alliant Energy Corporation	Baa2	76	84	-7

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (May 4, 2022 – May 11, 2022)

CDS Implied Rating Rises	CDS Impli	ed Ratings	
Issuer	May. 11	May. 4	Senior Ratings
Proximus SA de droit public	Aa3	A2	A1
ING Bank N.V.	Aa2	Aa3	A1
DZ BANK AG	Aa3	A1	Aa2
SEB AB	Aa3	A1	Aa3
Casino Guichard-Perrachon SA	Caa3	Ca	Caa1
Renault S.A.	Ba3	B1	Ba2
Jaguar Land Rover Automotive Plc	Caa1	Caa2	B1
Smiths Group plc	A3	Baa1	Baa2
BAE SYSTEMS plc	A1	A2	Baa2
Alstom	Baa3	Ba1	Baa2

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings	
Issuer	May. 11	May. 4	Senior Ratings
ABN AMRO Bank N.V.	A2	A1	A1
CaixaBank, S.A.	A3	A2	Baa1
Banque Federative du Credit Mutuel	A1	Aa3	Aa3
UniCredit Bank AG	Baa2	Baa1	A2
NatWest Group plc	Baa2	Baa1	Baa1
Orange	A2	A1	Baa1
DNB Bank ASA	Aa3	Aa2	Aa2
UniCredit Bank Austria AG	Baa1	A3	Baa1
Equinor ASA	Aa2	Aa1	Aa2
EDP - Energias de Portugal, S.A.	Baa3	Baa2	Baa3

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
Iceland Bondco plc	Caa2	875	626	249
Boparan Finance plc	Caa3	2,263	2,038	225
Ardagh Packaging Finance plc	Caa1	570	483	87
Piraeus Financial Holdings S.A.	Caa1	877	794	83
Jaguar Land Rover Automotive Plc	B1	724	674	50
CECONOMY AG	Ba1	370	333	37
Premier Foods Finance plc	В3	378	342	35
Telecom Italia S.p.A.	Ba3	400	366	33
Marks & Spencer p.l.c.	Ba1	318	287	31
FCE Bank plc	Baa3	250	220	30

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
Casino Guichard-Perrachon SA	Caa1	1,225	1,254	-29
UPC Holding B.V.	В3	303	325	-21
Proximus SA de droit public	A1	45	57	-13
CMA CGM S.A.	B2	438	451	-13
thyssenkrupp AG	B1	390	396	-6
UniCredit S.p.A.	Baa1	121	126	-4
Norddeutsche Landesbank GZ	A3	65	69	-4
SKF AB	Baa1	58	62	-4
HSBC Holdings plc	A3	79	81	-2
Airbus SE	A2	98	100	-2

Source: Moody's, CMA

CDS Movers

Figure 5. CDS Movers - APAC (May 4, 2022 – May 11, 2022)

CDS Implied Rating Rises	CDS Impli	ed Ratings	
Issuer	May. 11	May. 4	Senior Ratings
Korea, Government of	Aa2	Aa3	Aa2
Sumitomo Mitsui Banking Corporation	Aa2	Aa3	A1
MTR Corporation Limited	Aa2	Aa3	Aa3
SP PowerAssets Limited	Aa2	Aa3	Aa1
Samsung Electronics Co., Ltd.	Aa2	Aa3	Aa3
Japan, Government of	Aaa	Aaa	A1
China, Government of	Baa1	Baa1	A1
Australia, Government of	Aaa	Aaa	Aaa
India, Government of	Baa3	Baa3	Baa3
Commonwealth Bank of Australia	A1	A1	Aa3

CDS Implied Rating Declines	CDS Impli	CDS Implied Ratings	
Issuer	May. 11	May. 4	Senior Ratings
Westpac Banking Corporation	A2	A1	Aa3
Korea Development Bank	Aa3	Aa2	Aa2
Australia and New Zealand Banking Grp. Ltd.	A1	Aa3	Aa3
Mitsubishi Corporation	Aa1	Aaa	A2
Malayan Banking Berhad	Baa3	Baa2	A3
SoftBank Group Corp.	B2	B1	Ba3
Export-Import Bank of India	Baa3	Baa2	Baa3
JFE Holdings, Inc.	A1	Aa3	Baa3
Toyota Motor Corporation	Aa1	Aaa	A1
Kyoto, City of	Aa1	Aaa	A1

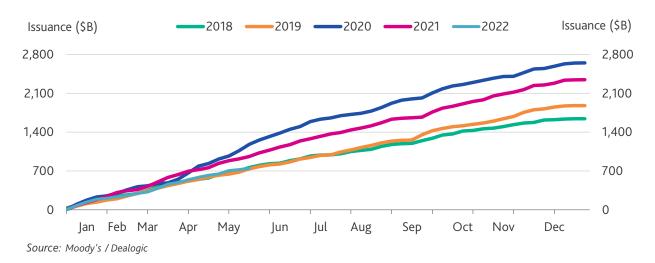
CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
Pakistan, Government of	В3	869	773	96
SoftBank Group Corp.	Ba3	457	404	54
Development Bank of Kazakhstan	Baa2	261	216	45
Halyk Savings Bank of Kazakhstan	Ba2	393	373	20
Nissan Motor Co., Ltd.	Baa3	193	176	17
JFE Holdings, Inc.	Baa3	55	41	14
NIPPON STEEL CORPORATION	Baa2	45	33	12
SK Hynix Inc.	Baa2	99	87	12
Kazakhstan, Government of	Baa2	207	196	11
Tenaga Nasional Berhad	A3	93	83	10

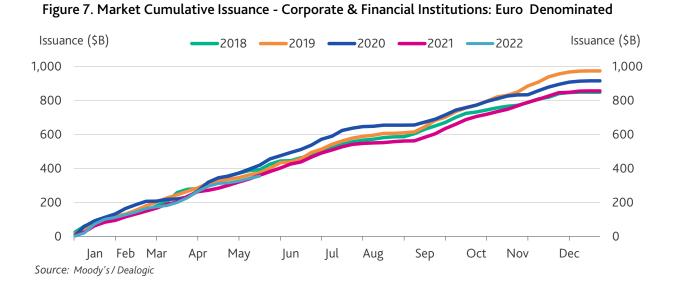
CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	May. 11	May. 4	Spread Diff
Korea, Government of	Aa2	40	40	-1
Korea Expressway Corporation	Aa2	51	52	-1
Telstra Corporation Limited	A2	51	51	0
Hong Kong SAR, China, Government of	Aa3	34	34	0
Mitsubishi Estate Co., Ltd.	A2	19	19	0
MTR Corporation Limited	Aa3	40	40	0
SP PowerAssets Limited	Aa1	40	40	0
Nomura Securities Co., Ltd.	A3	75	75	0
Tokyo Gas Co., Ltd.	A1	28	28	0
Sumitomo Mitsui Banking Corporation	A1	41	40	1

Source: Moody's, CMA

ISSUANCE

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





ISSUANCE

Figure 8. Issuance: Corporate & Financial Institutions

		USD Denominated		
	Investment-Grade	Investment-Grade High-Yield		
	Amount \$B	Amount \$B	Amount \$B	
Weekly	19.381	0.500	20.362	
Year-to-Date	644.756	78.601	743.893	

	Euro Denominated				
	Investment-Grade	Investment-Grade High-Yield		ent-Grade High-Yield	
	Amount \$B	Amount \$B	Amount \$B		
Weekly	14.753	0.000	14.816		
Year-to-Date	328.391	20.956	355.843		

^{*} Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

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