MOODY'S ANALYTICS

WEEKLY MARKET OUTLOOK
NOVEMBER 11, 2021

Lead Authors

Ryan Sweet
Senior Director-Economic Research

Adam Kamins
Director

Asia-Pacific

Katrina Ell
Senior Economist

Christina Zhu
Economist

Shahana Mukherjee
Economist

Europe

Ross Cioffi
Economist

Evan Karson
Economist

U.S.

Steven Shields
Economist

Ryan Kelly
Data Specialist

Podcast

Under Pressure

The U.S. consumer price index came in hotter than expected in October, dialing up the pressure on the Federal Reserve to defend its view that inflationary pressures are transitory. The CPI rose 0.9% in the month, more than our forecast for a 0.7% gain and the consensus for a 0.6% increase. The range of forecasts in the Bloomberg consensus was 0.4% to 0.7%. The CPI for energy jumped 4.8%, but fluctuations in energy prices normally have a temporary effect on inflation. Food prices were up 0.8% after rising 0.9% in September.

Excluding food and energy, the CPI was up 0.6%, compared with the 0.2% gain in September and the largest since June. Within the core CPI, used-car and truck prices were up 2.5% after falling in each of the prior two months. New-vehicle prices increased 1.4% in October. Used- and new-vehicle prices are being boosted by lean inventories.

Table of Contents

Top of Mind 4

Week Ahead in Global Economy .. 6

Geopolitical Risks 7

The Long View
- U.S. 8
- Europe 13
- Asia-Pacific 15

Ratings Roundup........................... 16

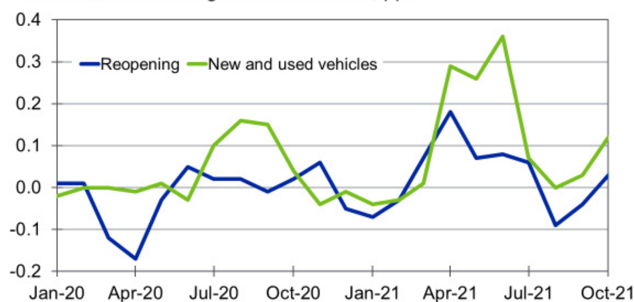
Market Data 19

CDS Movers 20

Issuance 22

Price Pressures Broaden Out

Contribution to m/m growth in U.S. CPI, ppt



Sources: Bloomberg LP, Moody's Analytics

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

The issue for the Fed is that inflationary pressures have broadened. Our reopening CPI, which includes rental car prices, lodging away from home, admission prices, and others, didn't contribute anything to the increase in the CPI in October. Also, new- and used-car prices, which are rising because of supply-chain issues, added only 0.1 percentage point.

The volatile food and energy prices boosted the headline CPI by 0.3 percentage point. Stripping out these prices along with reopening components and vehicles would still have left the CPI up 0.5% in October.

The CPI for owners' equivalent rents rose 0.4% for the second consecutive month. This is stronger than the recent trend. The CPI for rent of primary residence moderated, increasing 0.4% after gaining 0.5% in September. Rents are normally fairly sticky. Lodging away from home increased 1.4%. Rental inflation is going to be a bigger issue next year, when it could add 0.5 to 1 percentage point to year-over-year growth in the headline CPI.

Risks are clearly shifting toward U.S. inflation remaining elevated longer than previously thought, but that doesn't mean that it's permanent. Fundamentals don't support an extended period of inflation running well above the Federal Reserve's 2% objective.

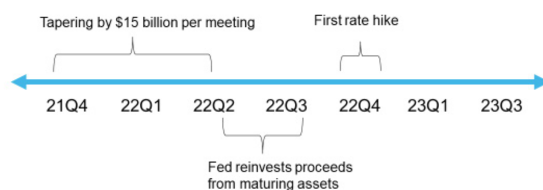
Fed will feel the heat but should keep cool

The Fed is in a bind. Its assessment that accelerating inflation is transitory is correct, but it is lasting longer than previously expected. The Fed will remain patient in raising the target range for the fed funds rate, as it knows tightening prematurely will delay the economy's return to full employment.

Therefore, the first course of action for the Fed is to accelerate the tapering of its $120 billion in monthly asset purchases. The November Federal Open Market Committee post-meeting statement said that the central bank is prepared to adjust the pace of purchases if warranted by changes in the economic outlook. The Fed's near-term forecast for inflation has likely changed, and that would allow it to accelerate the tapering, increasing it in December from $15 billion monthly to $20 billion. This will likely be the new norm, and tapering by $20 billion per month would wrap the process up in March or mid-April, a few months earlier than previously thought.

Accelerating the tapering could help take some of the pressure off the Fed to act to address inflation, and it will show the bank is not ignoring the acceleration in inflation. Also, ending tapering sooner gives the Fed the ability to raise interest rates in the second half of next year. Recently, we brought forward the first rate increase in the target range for the fed funds rate from early 2023 to the fourth quarter of 2022. This caused an approximately 25-basis point level shift in the path of the effective fed funds rate over the next several years. The fed funds rate now reaches its equilibrium rate in the first half of 2025 at a touch above 2.5%. Odds are rising that the first rate hike occurs a little sooner. Fed funds futures are fully pricing in the first hike to occur next September, but they assign an 80% probability that it occurs in July.

New Fed Timeline



Sources: Federal Reserve, Moody's Analytics

We will listen to comments by Democratic lawmakers to gauge if the acceleration in inflation gives them pause about supporting legislation around President Biden's Build Back Better agenda. We're no longer assuming Democrats pass $2.5 trillion in new spending and tax breaks via budget reconciliation to fund an array of social initiatives. Rather, we anticipate $1.75 trillion in the November baseline. On Wednesday, Senator Joe Manchin sounded the alarm about inflation.

CPI dings Q4 U.S. GDP tracking estimate

The October U.S. consumer price index and September wholesale inventories were mixed for third- and fourth-quarter GDP growth. Wholesale inventories were up 1.4% in September after rising 1.3% in August. The increase in September was larger than that implied by the assumptions in the Bureau of Economic Analysis' advance estimate of third-quarter GDP growth. Inventories are now adding more than initially thought to third-quarter GDP growth, raising our tracking estimate from 2.2% to 2.4% at an annualized rate.

The October CPI came in hot and lowered our high-frequency GDP model's estimate of fourth-quarter GDP growth from 7.7% to 7.2% at an annualized rate. Real consumer spending is now on track to rise 5.6% at an annualized rate, compared with the 6% before the October CPI. Our estimate of real consumer spending feels a little light even with inflation accelerating. Most signs point toward a strong increase in retail sales in October, even after

adjusting for price effects. Also, spending on services should be solid this quarter thanks to the fading impact of the Delta variant of COVID-19. Wholesale inventories reduced our estimate of the inventory build this quarter, but they are still going to add more than 3 percentage points to fourth-quarter GDP growth.

TOP OF MIND

Good News for Many U.S. Tourist Hubs

BY ADAM KAMINS

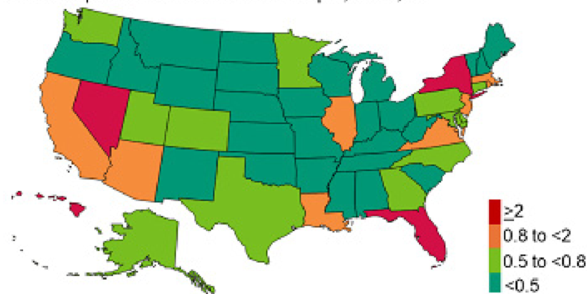
While international trade remains handcuffed by pervasive supply-chain issues, the outlook has brightened considerably for a different kind of export. With the U.S. reopening the border to vaccinated individuals from nearly three dozen countries, travel exports are poised to pick up again.

While this is hardly a surprising development, it should nonetheless provide a major boost to a handful of states and metro areas. Understanding the potential beneficiaries and knowing the extent to which still-struggling areas will be helped can shed light on the regional prospects for consumer industries.

Who benefits?

The recovery for tourist destinations remains largely incomplete, particularly in areas that depend on visitors from overseas. To best understand where those places are, it is worth revisiting estimated travel exports as a share of GDP, which remains an important component of the Moody's Analytics COVID-19 exposure rankings.

Not surprisingly, Hawaii stands to benefit most as international restrictions are lifted. The Aloha State is not only the most dependent on travelers from abroad, but it is the only state in which dependence on travel exports as a share of total output exceeds reliance on vulnerable tourism-related industries like restaurants and performing arts.



Nevada, Florida and New York round out the list of states that depend most heavily on foreign visitors to drive economic activity. Each boasts at least one major destination for international tourists, with Las Vegas, Miami, Orlando, and New York City all among the most popular destinations for both domestic visitors and those from overseas. With restrictions dramatically reduced, the pool of potential visitors to those areas' attractions has expanded materially. Not only that, but with international tourists apt to spend more and remain in an area longer, there is significant "bang for the buck" associated with the likely pickup.

Miami-Dade County is especially likely to benefit as the only metro area or division in which more than half of the population is foreign-born. A pickup in visits from family members and friends may not provide the same lift to hotels as a surge in leisure travelers, but this should support additional consumer spending. Beyond Miami, much of California, including the immigrant-heavy Bay Area and Los Angeles, should also benefit, as could border towns. Metro areas with a large international airport, such as Atlanta, could also receive a boost as international passenger volume rises.

College towns will also be helped as international travel restrictions ease. Students have generally not been subject to limitations, but their families and friends have. Now parents of international students, for example, will have the ability to visit more freely, in many cases bringing significant purchasing power to areas that have struggled since the pandemic began. This dynamic also benefits larger areas with an outsize university presence, including Northeast educational hubs such as Boston and Philadelphia.

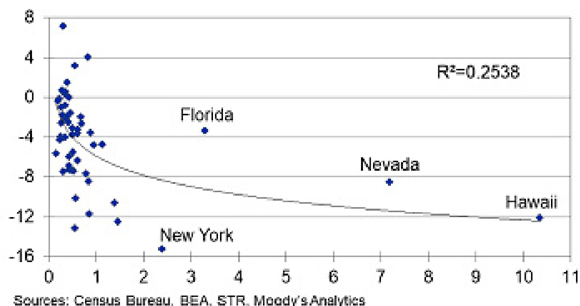
How much does it matter?

While the reinvigorated international travel is a welcome relief, it does not fundamentally alter the outlook. The return of visitors from overseas was expected around the time the Delta wave receded, meaning that the forecast for the states and metro areas described in the previous section already accounted for this development.

More broadly, it is worth remembering that the resumption of international travel will not lift struggling tourism sectors by itself in most places. While this is strongly correlated with the decline in each state's hotel occupancy from the summer of 2019 to this year, business travel matters more for measures like occupancy and revenue per available room.

Because large cities tend to draw not just international tourists but a large number of business travelers, opening up international travel is only a partial solution to their issues. Even a complete recovery for leisure travel leaves a highly lucrative segment facing an uncertain future as the cost

savings and convenience associated with virtual gatherings replace an as-yet undetermined share of face-to-face meetings and in-person events. This will further compound the impact of increased remote work on big cities and complicate their recoveries.



Other considerations also suggest that expectations should be tempered as international travel picks back up. Despite very high travel export reliance, Miami and Orlando have fared well this year in the face of border restrictions. Some of their success likely owes to pent-up demand for vacations from domestic visitors. This would suggest that recent growth may have been somewhat inflated, and that the return of overseas visitors could simply sustain recent gains, not unleash a much more favorable trajectory.

Finally, it is worth remembering that the U.S. does not dictate the terms of international travel. In many European nations, for example, a quarantine period is required after returning from another country, which will hold back trans-Atlantic movement. And in some cases, a significant unvaccinated share of the population—whether by choice or due to insufficient supply—means that many residents still cannot visit the U.S. Even among those who are vaccinated, there may still be some concern about acquiring a breakthrough infection while traveling, holding back demand.

All of these factors suggest that while this week's news is an important first step, there remains a long road ahead for tourist hubs. Ultimately, a full recovery will be difficult to achieve until the pandemic has been better contained both at home and abroad.

The Week Ahead in the Global Economy

U.S.

The U.S. economic calendar gets busier next week. Among the key data to be released will be October retail sales, industrial production, and housing starts. Nominal retail sales should be strong for the month, boosted by higher prices and the potential for early holiday shopping. Industrial production should bounce back after Hurricane Ida was a big weight in September.

New data on initial claims for unemployment insurance benefits take on added importance as they will include the November payroll reference period. Plugging in the data on initial claims since the October payroll survey period, our monthly employment models would have nonfarm employment rising around 625,000 to 675,000 in November, and this is without an adjustment for the potential boost to retail or transportation employment from the earlier seasonal hiring.

In addition, we'll get another look at U.S. inflation with the release of October import prices.

Europe

Final CPI estimates will top next week's headlines. That said, we do not expect surprises differing from preliminary estimates released earlier this month. The euro zone's headline inflation rate likely rose to 4.1% y/y in October from 3.4% in September. Energy prices will drive the release with a significant pick up in the contribution from gas and electricity prices being featured. We expect to see similar results in the national estimates for France and Italy also out next week. The U.K.'s inflation estimate, meanwhile, also will have picked up, but we expect that the acceleration was more moderate, to just 3.4% y/y from 3.1%. This is because price caps on electricity prices are slowing the price gains. However, price caps are always just palliative. Already they have had to be hiked since they were set in April. That said, core prices will remain stronger in the U.K. than in the euro zone due also to the even worse supply disruptions facing the U.K. economy.

Supply disruptions, nonetheless, will have negatively affected the euro zone's trade balance in September. We expect the euro zone's surplus slid to €20.7 billion from €23.9 billion a year earlier. Delays on factory lines are delaying export fulfillments as well. Furthermore, the bloc was in a desperate rush to fill up its natural gas reserves, and we will likely see a pickup in import growth as a result. Finally, we expect retail sales to have rebounded 0.2% m/m in the U.K. during October. This will come after the previous five months of declines. Declining retail sales are in line with the normalization of consumption patterns away from goods and into services. That said, a bid to stockpile auto fuels likely boosted overall sales. Unemployment was likely unchanged at 4.5% in the three months to September. The country's short-time work scheme wrapped up during the month, but we expect the effects will be modest.

Asia-Pacific

China's October activity data will be the highlight on the Asia-Pacific economic calendar. We forecast China's industrial production, retail trade, and fixed asset investment to decelerate in annual terms from September as the economy faces challenges on several fronts. Industrial production likely cooled to 2.9% y/y in October from 3.1% previously. The deceleration has been fuelled by curbs on property development, energy disruptions and semiconductor shortages. Meanwhile, retail trade likely cooled to 3.7% y/y in October as the slowing property market coupled with the energy shortage crimp discretionary spending.

Thailand's GDP growth will cool to 0.3% y/y in the September quarter, from 7.6% in the June stanza. Seasonally adjusted, we estimate that the economy contracted 1.1% q/q. Thailand's economic recovery struggled through the third quarter as daily infection numbers surged and movement controls increased. Heading into 2022 economic conditions in Thailand have brightened. Thailand's economy will enjoy a boost from its important international tourism sector reopening this month.

Geopolitical Calendar

Date	Country	Event	Economic Importance	Financial Market Risk
Oct/Nov	UN	UN Climate Change Conference COP26	Medium	Low
Nov	Asia-Pacific	Asia-Pacific Economic Cooperation forum	Medium	Low
8-Nov	China	Sixth plenary session of the Central Committee	Medium	Low
Nov	G-20	G-20 Summit	Medium	Low
7-Nov	Nicaragua	Presidential, congressional elections	Low	Low
14-Nov	Argentina	Legislative elections	Medium	Low
21-Nov	Chile	Presidential elections	Medium	Low
21-Nov	Venezuela	Regional and municipal elections	Low	Low
28-Nov	Honduras	Presidential, congressional and municipal elections	Low	Low
19-Dec	Hong Kong	Legislative Council elections	Low	Medium
1-Jan	APAC	Regional Comprehensive Economic Partnership enters into force	Medium	Low
17-Jan	Switzerland	World Economic Forum annual meeting	Medium	Low
9-Mar	South Korea	Presidential election	Medium	Medium
27-Mar	Hong Kong	Chief Executive election	Low	Low
10-Apr-22	France	General elections	Medium	Medium
9-May-22	Philippines	Presidential election	Low	Low
29-May	Colombia	Presidential elections	Medium	Low
2-Oct	Brazil	Presidential and congressional elections	High	Medium
Oct/Nov-22	China	National Party Congress	High	Medium

High-Yield Spreads Tighten as Banks Ease Lending Standards

BY RYAN SWEET

CREDIT SPREADS

Moody's long-term average corporate bond spread is 101 basis points, 5 bps wider than at this time last week. This is below its high over the past 12 months of 105 bps and just above its lowest over the past year of 95 bps. This spread may be no wider than 115 bps by year-end 2021, but the potential for a partial government shutdown and debt-limit crisis could cause some volatility in financial markets at the end of the year. The long-term average industrial corporate bond spread widened from 86 bps last week to 91. This is above the low of 86 bps over the last 12 months.

The long-term investment grade corporate bond spread was 132 basis points, compared with 128 bps at this time last week. The spread is well below its recent high of 150 bps. Investment-grade industrial corporate bond spreads widened 5 bps to 130.

The recent ICE BofA U.S. high-yield option adjusted bond spread of 308 basis points is 10 bps tighter than at this point last week. The Bloomberg Barclays high-yield option adjusted spread tightened 11 bps to 280 bps, keeping it within the range seen since the beginning of the second quarter and among the tightest since 2007. The high-yield option adjusted bond spread approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread but is tighter than that implied by the VIX, which is around 17.7.

We modified our model of the high-yield corporate bond spread, swapping the VIX for the MOVE Index to assess if spreads are better aligned with those implied by the VIX or MOVE Index. The high-yield corporate bond spread is noticeably tighter than that implied by the VIX and more closely aligned with that implied by the MOVE Index.

The VIX appears to be the outlier. The Barclays Bloomberg high-yield option-adjusted spread also tracks the net percent of U.S. banks tightening lending standards on commercial and industrial loans to large and small businesses. Recently banks have been loosening lending standards on C&I loans. Lending standards are determined from a quarterly Fed survey.

In order to gauge the willingness of banks to supply credit to businesses, the lending officers are asked whether they have tightened business lending standards and whether they have increased interest rate spreads on loans to businesses. The easing in lending standards is consistent with the fairly tight high-yield corporate bond spread.

In fact, in the latest survey, nearly one in five banks surveyed reported loosening standards on C&I lending to large and medium businesses during the second quarter. The percentage of banks reporting unchanged lending standards was 81.8%, while none of the respondents claimed to have tightened credit standards. Banks expect demand for C&I loans to strengthen. Approximately 11.1% of banks reported loosening standards on C&I lending to small businesses. The percentage of banks reporting unchanged lending standards was 88.9%. For the second consecutive quarter no lenders tightened standards.

Lending standards can suddenly shift but barring this they suggest our forecast for some widening in the high-yield corporate bond spread through the remainder of this year will be less noticeable than assumed in our baseline forecast.

Defaults

Not only is issuance strong, but defaults remain very low. The latest Moody's monthly default report showed the trailing 12-month global speculative-grade default rate came in at 2.14% at the end of October, down from 2.51% in September and the lowest since 2015. The trailing 12-month global speculative-grade default rate fell from 2.59% in September to 2.31% in October.

In light of our expectation of a continued economic recovery and accommodative funding conditions in the coming year, Moody's Credit Transition Model projects that the global default rate will fall to 1.7% at the end of this year. Our model further indicates that the global rate will then stabilize in the 1.6%-1.8% range in the first half of 2022 and gradually rise thereafter, reaching 2.2% by the end of October 2022.

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.

U.S. dollar denominated investment-grade issuance moderated this week, totaling $23.95 billion in the week ended Wednesday and bringing the year-to-date total to $1.479 trillion. High-yield corporate bond issuance totaled $9.3 billion, bringing the year-to-date total to $576 billion.

U.S. ECONOMIC OUTLOOK

We made some changes to our November U.S. baseline forecast with the key adjustments including an earlier rate hike by the Fed, a smaller budget reconciliation package, and the assumption that future waves of COVID-19 cut less into growth because of vaccines for those 5 to 11 years old being approved.

Besides the bipartisan infrastructure deal, we're no longer assuming Democrats pass $2.5 trillion in new spending and tax breaks via budget reconciliation to fund an array of social initiatives. Rather, we anticipate $1.75 trillion in the November baseline forecast. Of this lower amount, $555 billion will be for clean-energy funding and climate-change mitigation; $400 billion in childcare and preschool investments; $315 billion in healthcare funding; and $150 billion in housing investments, among others. The reconciliation package will be fully paid for by higher taxes on corporations and wealthy households, as well as the repeal of the Trump administration's prescription drug rebate rule.

Real GDP growth would average 3.2% per annum during Biden's term and 2.2% over the next decade, compared with less than 2.8% and 2.1% per annum if the bipartisan infrastructure deal and the $1.75 trillion package fail to become law. In terms of employment, under the infrastructure deal and reconciliation package, there are 2.4 million more jobs at the peak of the employment impact by mid-decade, and unemployment is a full percentage point lower. Labor force participation is also higher, although the full boost to participation occurs after the 10-year budget horizon. Finally, consumer price inflation is a few tenths of a percentage point higher next year and in 2023 because of the stronger growth and faster return to full employment. But inflation quickly settles near the Federal Reserve's target of just over 2% per annum.

COVID-19 assumptions

We adjusted our epidemiological assumptions to anticipate that total confirmed COVID-19 cases in the U.S. will be 49.12 million, compared with 47.49 million in the October baseline. The seven-day moving average of daily confirmed cases has stabilized recently, which has contributed to the rise in our estimate of confirmed cases.

The date for abatement of the pandemic changed slightly and is now December 19, around a month later than in the prior baseline. Herd resiliency, which is a 65%-or-greater share of the adult population being fully vaccinated or previously infected, was achieved on August 30. The forecast assumes that COVID-19 will be endemic and seasonal.

There has been some good news recently regarding vaccinations for children, and the discovery of effective therapies that can either prevent or cure infection should further weaken the linkage between COVID-19 infections, consumer confidence, and economic activity. This will likely reduce the future economic costs from waves of COVID-19.

Getting its groove back

The Delta variant of COVID-19 weighed more on the economy in the third quarter than previously anticipated, but the economy has begun to bounce back and will end this year on a positive note. The October baseline forecast includes the Bureau of Economic Analysis advance estimate of third-quarter GDP growth, which showed a 2% annualized rate. This was weaker than the 3.4% in the baseline forecast. It was clear that the Delta variant played a significant role along with supply-chain issues. Vehicles subtracted 2 percentage points from third-quarter GDP.

In the November baseline, we nudged our forecast of fourth-quarter GDP growth higher, and we now look for it to rise 6.6% at an annualized rate, compared with 6.2% in the prior baseline. Risk bias, or the difference between our high-frequency GDP model's estimate of fourth-quarter GDP growth and our official forecast, is 1.1 percentage points. Therefore, the risks are that fourth-quarter GDP growth comes in better than we expect.

We finalized the November baseline the same day that the U.S. relaxed its travel restrictions. The relaxed travel restrictions will help services spending and U.S. employment. Employment in scheduled air transportation is still 14% below its pre-pandemic peak. This includes both passenger and freight air transportation.

However, the biggest impact will be in net travel services, and the impact could be immediate because of the release of pent-up demand. Net travel services, or the difference between exports and imported travel, ran a deficit for the first time since the inception of the data in 1999. The deficit occurred as the increase in U.S. travelers abroad noticeably exceeded the inflow of foreign travelers. This gap should close fairly quickly and return to a net surplus early next year.

The relaxing of travel restrictions doesn't alter our near-term forecast for U.S. GDP growth, but it lends a little upside. Returning to a surplus in net travel services would add a few tenths of a percentage point to GDP growth, but it is unlikely that the surplus will return to its pre-pandemic level any time soon.

For all of 2021, we now look for GDP to rise 5.6%, a little better than the 5.8% in the October baseline and in line with the Bloomberg consensus of 5.7%. We look for GDP to rise 4.6% in 2022, up from 4.3% in the October baseline and stronger than the Bloomberg consensus of 4%. GDP growth will continue to moderate in 2023, rising 2.8%. This is stronger than the 2.4% forecast for 2023 in the prior baseline and identical to the consensus expectation.

Global supply-chain issues remain a downside risk to the near-term forecast. There haven't been signs of improvement, according to our U.S. Supply-Chain Stress Index. The SCSI increased to 135.9 in August from July's reading of 131.1. Early indications point to a subsequent rise in September, driven by a sharp rise in the cost components of the SCSI. Therefore, it looks like there will be little improvement in the index soon. Separately, in the Fed's October Beige Book, "supply chain" was mentioned 37 times, compared with 33 times in September and 28 in July.

Easing of the supply-chain bottlenecks are key to our near-term forecast for U.S. manufacturing production, inventory replenishing, and easing of inflationary pressures. Volatility in prices and supply-chain issues could lead to mistakes either in over- or under-building inventories. We looked at the five-year rolling correlation between the contribution of each component to GDP and total GDP growth. This is then multiplied by the five-year rolling standard deviation of the components' contribution to GDP divided by the rolling standard deviation in GDP growth. This would imply that inventories are contributing little to the volatility in GDP growth. But, if we cut the sample down to the past two years to include the pandemic, inventories are contributing more to the volatility of GDP growth. This isn't surprising, but as we learned in the third quarter, inventories can make the difference between a positive, flat or negative GDP print.

Inventories will add more than 3 percentage points to fourth-quarter GDP growth and around 1 percentage point in the first three months of next year. Inventories are forecast to subtract modestly from GDP growth in the second half of next year and in 2023.

Business investment and housing

There was a small downward revision to the forecast for real business equipment investment this year, but it is still booming. We now look for real business equipment spending to increase 13.4% this year, compared with 14.5% in the October baseline. Growth in equipment spending was revised a touch lower next year to 9.3%, 0.3 percentage point lower than the September baseline. Equipment spending will remain strong in 2023, forecast to increase 4.4%.

Risks are roughly balanced to the forecast. Fundamentals, including supportive financial market conditions and better after-tax corporate profits as a share of nominal GDP, should continue to spur investment through the rest of this year and into next. Also, banks are easing lending standards and corporate credit spreads are very tight, supporting investment-grade and high-yield corporate bond issuance.

Another favorable development for business investment is that the rate of new-business formations remains strong. The biggest downside risk is a sudden tightening in financial market conditions or a sudden and significant bout of economic policy uncertainty in the fourth quarter because of the threat of a partial government shutdown and decision about the debt ceiling.

The real nonresidential structures forecast was revised higher this year. It is forecast to drop 7.1%, more than the 6.2% decline in the October baseline. The revision is mostly attributed to the new historical data. We expect double-digit growth in real nonresidential structures investment in each of the next two years. There were not any material

changes to the forecast for the commercial price index this year or in either 2022 or 2023.

New data for September and revisions to prior months led us to revise lower the forecast for housing starts. Housing starts are now forecast to rise 13.8% this year, compared with 14.2% in the October baseline. We revised the forecast higher for growth in housing starts next year by 0.5 percentage point to 9.9%. We didn't make big revisions to the forecast for new-home sales as they are still forecast to decline modestly this year before growth in excess of 20% next year as additional supply hits the market. This year will be a decent one for existing-home sales. They are now forecast to rise 7.7%, compared with 6.9% in the prior baseline. Existing-home sales will dip next year, since inventory is a bigger problem and there doesn't seem to be significant relief in the pipeline.

We had been steadily revising our forecast higher for house prices over the past several months, but we did not do so in November. We stuck with the forecast for the FHFA All-Transactions Home Price Index to increase 10.6% this year but look for it to moderate over the next two years, rising in the high-single digits in 2022 and low single-digits in 2023.

Consumers will do their part

Consumer spending needed to get off to a good start this quarter, and it appears it will. Vehicle sales increased from 12.18 million annualized units in September to 12.99 million in October, noticeably better than either we or the consensus anticipated. This leaves vehicle sales 3% (not annualized) below their third-quarter average. Odds are that vehicles will be noticeably less of a drag on GDP this quarter than last, when they shaved around 2 percentage points off growth. Also, October retail sales should be strong, supported by early holiday shopping. The forecast is for real consumer spending to rise 5.1% at an annualized rate in the fourth quarter.

One change to the baseline forecast is a more gradual normalization in the composition of consumer spending. Nominal services spending, as a share of total consumption, will gradually increase over the next several years but won't return to the level seen pre-pandemic, 69%, until late 2025.

Job growth bounces back

The November baseline forecast incorporates the October employment report. Nonfarm employment was up 531,000, on net, in October—better than the 442,000 average during the prior three months. Once again, the revisions were significant and positive; the net revision over the prior two months was 235,000. Revisions often don't garner too much attention from financial markets, but they have been significant recently. Therefore, job growth in the third quarter was stronger than in the prior baseline. We look for around 530,000 average monthly job growth this year. Average monthly job growth next year is 340,000 and in 2023 it is 150,000, both little changed from the prior baseline.

The unemployment rate is forecast to average 4.5% in the fourth quarter of this year, compared with 4.6% in the prior baseline. The unemployment rate returns to that seen pre-pandemic in the third quarter of 2023, three months earlier than previously forecast. This doesn't mean the economy is back at full employment from the Fed's perspective. The Fed is putting more emphasis on the prime-age employment-to-population ratio. Our rule of thumb is that a prime-age employment-to-population ratio of 80% is consistent with an economy at full employment and our back-of-the-envelope forecast would have the economy hitting that threshold in the fourth quarter of next year.

Labor-supply issues remain binding but are set to ease, lending upside risk to the forecast for job growth. In October, 3.8 million people reported that they had been unable to work because their employer closed or lost business due to the pandemic; that is, they did not work at all or worked fewer hours at some point in the four weeks preceding the survey due to the pandemic. This measure is down from 5 million in September.

The number of people moving from not in the labor force to employment increased in October. However, those moving from not in the labor force to unemployed only ticked higher. Elsewhere, COVID-19 is still an issue for the labor supply. The number of people who are not in the labor force but want a job remains elevated. By reason of not being in the labor force, own illness fell only modestly in October. Another area where COVID-19 is clearly affecting the job market is in the number of people who are employed but not at work because of their own illness, which was around 1.4 million in October. This has been north of 1 million since the pandemic began. The potential for long COVID-19 is emerging as a growing downside risk to our forecast, since it could take people a longer time to fully recover and delay returns to work.

Inflation and the Fed

There were not any material changes to the forecast for growth in the core PCE deflator. The baseline still has it peaking this quarter, up 4% on a year-ago basis before moderating through next year and settling just above the Fed's 2% objective and consistent with its average flexible inflation targeting. However, risks are weighted toward transitory inflation peaking higher and lingering longer than anticipated because of the supply-chain issues and recent jump in energy prices, which will bleed into core prices via higher transportation costs.

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. This is playing out now and it is most visible in vehicles. The CPIs for new and used vehicles have surged this year as the global semiconductor shortage reduced production, depleted inventories, and caused prices to surge.

Demand for vehicles is elastic, meaning there is a significant change in quantity demanded when prices change. With prices soaring, quantity demand for vehicles has plunged. Unit vehicle sales peaked this year just north of 18 million annualized units but have since plunged to around 12 million. Vehicles are the prime example now, but demand for other elastic goods could suffer over the next several months as stress in U.S. supply chains remains significant.

Turning to monetary policy, as widely expected, the Federal Open Market Committee announced its plans to taper its monthly asset purchases by $15 billion later this month and again in December. The Fed maintained flexibility as its post-FOMC-meeting statement noted that the central bank is prepared to adjust the pace of purchases if warranted by changes in the economic outlook. This creates a little uncertainty, as it is unclear what conditions would cause the Fed to either accelerate or slow its monthly asset purchases. We assume the Fed reduces its monthly asset purchases by $15 billion per month, wrapping up the tapering process by mid-2022. After that the Fed will reinvest the proceeds from maturing assets to prevent its balance sheet from declining. The Fed isn't going to sell the assets on its balance sheet and its balance sheet, as a share of GDP, will be permanently higher.

We brought forward the first rate increase in the target range for the fed funds rate from early 2023 to the fourth quarter of 2022. This caused roughly a 25-basis point level shift in the path of the effective fed funds rate over the next several years. The fed funds rate now reaches its equilibrium rate in the first half of 2025, a touch above 2.5%. This is three months earlier than in the October baseline. Markets have adjusted their expectations for the pace of tightening, but their expectations are still more gradual than our baseline or that implied by the Fed's so-called dot plot.

The October baseline also incorporates the recent declines in the 10-year Treasury yield, which puts it around 1.4%. Overall, the path of the 10-year Treasury yield didn't change appreciably between the October and November baselines. The recent decline in the 10-year appears to be driven by the potential shakeup in the Fed's leadership.

President Biden's decision about whether or not to renominate Fed Chairman Jerome Powell is key along with who he picks to fill the three open positions on the Federal Reserve Board. Powell deserves another term as Fed chair for his handling of the central bank's response to the pandemic. Also, there is some importance to financial markets in continuity. Keeping Powell would limit the amount of uncertainty about how the Fed views inflation and the timing of the first increase in the target range for the fed funds rate. This may not sway Biden much; former President Donald Trump replaced Janet Yellen with Powell after her first term. However, with the strong case for Powell to be reappointed, if he isn't, it may be seen as an effort to politicize the central bank. We assume that Powell is reappointed.

The forecast is that the Dow Jones Industrial Average increases this quarter and peaks in early 2022. However, the rest of the contours of the forecast didn't change as we expect the DJIA to steadily decline throughout 2022, but because it will now peak later than previously thought, the level of the DJIA will be higher at the end of next year and over the near-term forecast.

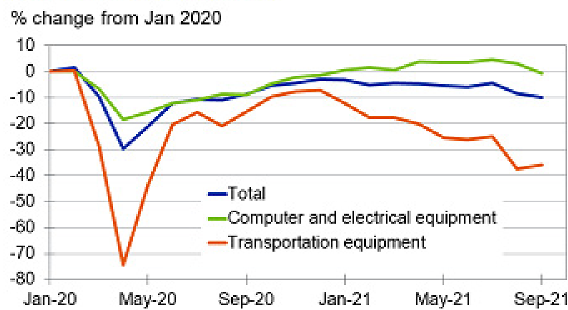
Six Charts About German Supply Chains

BY EVAN KARSON

Few economies face more risk from supply-chain disruptions than Germany's. Bottlenecks in trade pushed German factory output lower in September, with the nation's industrial production index dropping 1.1% m/m. This marked the fifth time in the last six months that industrial production decreased.

Industrial Production

% change from Jan 2020

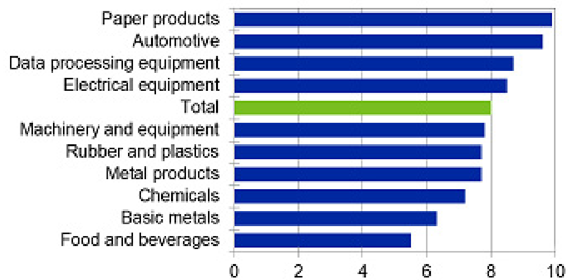


Sources: National Statistics Office, Moody's Analytics

Industrial output also came in 0.8% below year-ago levels in September, the first year-over-year contraction since November 2020. Production has fallen especially quickly in Germany's key auto sector (-24.3% y/y), where semiconductor shortages have hit hard.

Most Industries Will Battle Thru Mid-2022

Avg estimated duration of supply bottlenecks, mo



Sources: Ifo Institute, Moody's Analytics

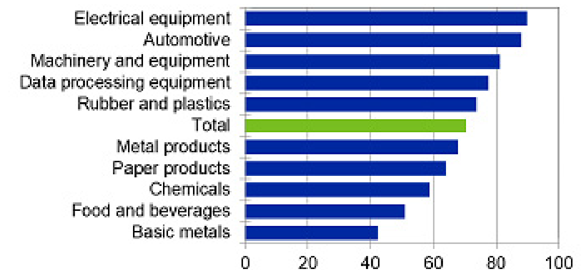
Note: Chart includes 10 largest manufacturing activities by employment

When will bottlenecks ease? An October survey of manufacturers conducted by the Ifo Institute pins the average estimate at eight months, and most industries expect that disruptions will last six to 10 months on average.

Factories producing technologically intensive products (for example, vehicles, data processing equipment) generally anticipate longer delays.

Feeling the Pinch From Semiconductors

% of manufacturers citing material shortages



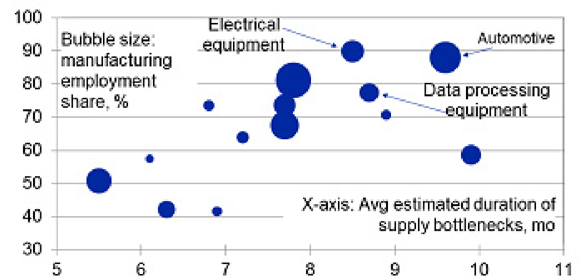
Sources: Ifo Institute, Moody's Analytics

Note: Chart includes 10 largest manufacturing activities by employment

How pervasive are supply disruptions? The same Ifo Institute survey found that 70.4% of manufacturers reported problems acquiring materials in October. Again, industries reliant on high-tech inputs such as semiconductors reported wider issues sourcing inputs. Nearly 90% of German automakers faced supply-chain issues in October.

High-Tech Manufacturers Deeply Impaired

Y-axis: % of manufacturers citing material shortages



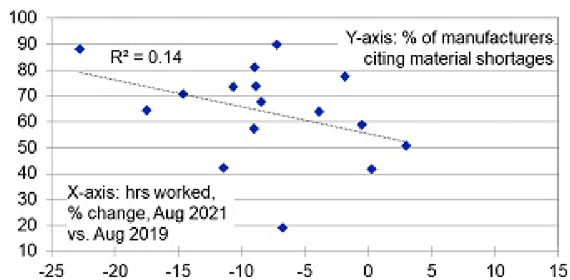
Sources: Ifo Institute, National Statistics Office, Moody's Analytics

We define deeply impaired industries as those fitting the following criteria: (1) more than 75% of manufacturers reporting supply disruptions and (2) disruptions expected to persist for at least eight months. Based on these criteria, 25% of manufacturing employees work in deeply impaired industries, including workers engaged in the production of

automotive equipment, data processing equipment, and electrical equipment. Unfortunately, these three areas also stand out as high-paying industries. This increases the knock-on effects that would come with any job cuts.

Weak Link From Disruptions to Work Hours

Scatterplot points=manufacturing industries



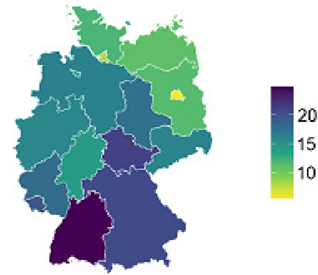
Sources: Ifo Institute, National Statistics Office, Moody's Analytics

How has the labor market fared so far? Data released through October bear only weak evidence that supply disruptions correlate with employment and hours worked. Industrial output has undoubtedly suffered, but headcounts in manufacturing have wavered little thanks to Germany's Kurzarbeit system.

The reduced-hours furlough scheme allows manufacturers to dial back working hours broadly rather than laying off employees altogether. Workers who see their hours reduced this way receive partial compensation from the government for lost wages. Kurzarbeit represents an important economic stabilizer that prevents weakness in the factory sector from spilling over to consumer-driven industries.

Where is Germany Vulnerable?

Manufacturing share of total employment, %



Sources: Eurostat, National Statistics Office, Moody's Analytics

Where will disruptions hit hardest? Economic pain will skew toward factory-heavy states in the south, where manufacturing accounts for about one in five jobs. Manufacturing's share of total employment ranks highest in Baden-Württemberg (24.7%), Thüringen (21.1%) and Bavaria (20.4%).

Encouragingly, sentiment among manufacturers remained solid through September. Even for hard-hit automakers, the Ifo Institute's business climate diffusion index is holding above the neutral watermark of zero. Demand looks strong, and order books are full. Indeed, new factory orders for transportation equipment rose 9.6% m/m in September. This reinforces our expectation that industrial production will expand at a rapid clip once bottlenecks ease and factories work through backlogged orders.

Energy Prices Lift China's CPI

BY CHRISTINA ZHU and SHAHANA MUKHERJEE

China's inflation surprised on the upside, as consumer prices grew 1.5% in yearly terms in October on the back of strong gains in food and energy prices. Over the month, prices rose 0.7%, marking the steepest increase since February. The causal factors were extreme weather, surging fuel prices, elevated input costs, and recent COVID-19 flare-ups across two-thirds of the country's provincial regions.

Vegetable prices soared on account of supply shortages and higher production and transportation costs. Heavy rains and an early start to winter disrupted the harvest season while surging energy prices pushed up the operational costs of greenhouses and transportation prices. The virus resurgence and ensuing lockdowns delayed deliveries and reduced supplies of vegetables due to shelf life limitations. Also, panic buying triggered by the Commerce Ministry's notice to local governments and households to stock up on necessities, including vegetables, in the lead-up to winter likely drove prices temporarily higher.

Transportation costs increased 1% over the month, driven by a 4.7% rise in the petroleum price and 5.2% price rise for diesel. The country's energy crunch has led to not only power blackouts but also diesel rationing in some regions. Surging energy prices have also driven up living costs through utility bills. The government lifted the cap on electricity prices to incentivise more power generation, but users will have to bear higher costs, particularly industrial users. Core inflation and services prices remained soft as lingering virus outbreaks and the government's stringent "zero-COVID" policy suppressed demand.

China's top-line inflation will move higher in the near term as energy prices and input costs show no signs of cooling. This will prompt more producers to share the burden with consumers. Overall, inflation will remain modest in 2021. Consumption hasn't gotten back to its precrisis trend, and China's macro policy will continue to focus on boosting consumer confidence and encouraging spending.

China's accelerating producer prices

In other developments, China's producer prices beat our expectations, climbing 13.5% in yearly terms in October to build on the already-high 10.5% increase in September. This marked the highest yearly rate increase in more than 20 years. Producer prices accelerated over the month, rising 2.5% on the heels of the 1.2% increase in September. As expected, the coal shortage and rising raw material prices contributed to this increase.

October saw raw material prices rising 25.7% in yearly terms, mining prices surge 66.5% and ferrous metal material prices increase by a sizeable 22.6%. With winter approaching, the demand for coal will climb, though the shortfall can potentially be reduced if producers ramp up supply. Either way, higher energy prices will contribute to rising power costs. Combined with other supply disruptions, this could see production costs head north through the remainder of the year.

RATINGS ROUNDUP

A Mix of Changes in U.S. Activity

BY STEVEN SHIELDS

U.S. rating change activity was mixed in the latest period. For the week ended November 10, upgrades accounted for nearly 80% of total changes, but only 46% of the affected debt. All four downgrades were confined to speculative-grade companies. The most notable was issued to Dish Network Corp. with Moody's Investors Service lowering the firms' senior unsecured credit and corporate family rating to B3 from B2. The downgrade reflects Moody's expectations that debt and leverage will increase following DISH DBS Corp.'s proposed $4 billion in senior secured notes.

Meanwhile Moody's Investor's Service upgraded JBS USA Lux S.A.'s senior unsecured debt rating to Baa3 from Baa1. The upgrade of JBS's ratings is supported by the continued strong operating performance, and better than anticipated results in 2021, which supports strong cash flow generation and allows the company to pursue its strategy of acquisitions, shareholder remuneration and share buyback with no material impact on leverage and liquidity. The change affected approximately $6.8 billion in rated securities.

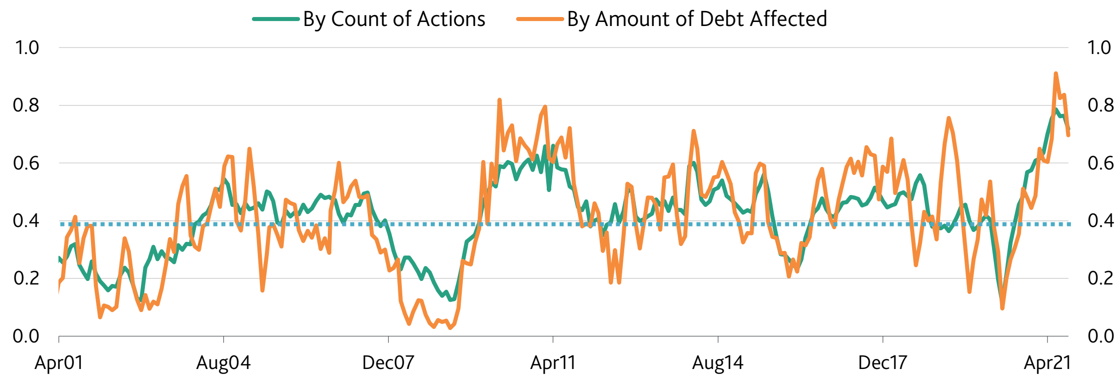
Continental Resources Inc. received the second largest upgrade in terms of debt affected in the period with its senior unsecured ratings lifted to Ba1 from Baa3 following Continental's agreement to purchase oil and gas producing assets in the Delaware Basin in Texas for a $3.25 billion cash consideration from Pioneer Natural Resources Co.

Europe

Ratings activity was particularly light across Europe with only one change occurring in the period. The lone change, a downgrade, was made to Saipem S.p.A. with its corporate family rating and senior unsecured rating lowered to Ba3 from Ba2. The change impacted approximately $2.9 billion in outstanding debt and reflects Moody's revised expectation that the restoration of Saipem's credit profile comfortably in line with a Ba2 CFR is likely to take longer than 12-18 months. Moody's now expects that both the company's gross and net debt will further increase in 2022, contrary to previous expectations, because still-weak earnings are unlikely to fully cover Saipem's capital investments and working capital needs. The company's outlook was also revised to stable from negative.

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
11/3/2021	BOOZ ALLEN HAMILTON INC.	Industrial	SrUnsec/SrSec/BCF	1200.0	U	Ba2	Baa3	SG
11/3/2021	CHG PPC INTM II LLC-CHG PPC PARENT LLC	Industrial	SrSec/BCF		U	B2	B1	SG
11/4/2021	CONTINENTAL RESOURCES, INC.	Industrial	SrUnsec	4900.0	U	Ba1	Baa3	SG
11/4/2021	S&S ACTIVEWEAR, LLC AND AFFILIATE-S&S HOLDINGS, LLC	Industrial	LTCFR/PDR		U	B3	B2	SG
11/4/2021	VINE ENERGY INC.-VINE ENERGY HOLDINGS LLC	Industrial	SrUnsec	950.0	U	B3	B1	SG
11/4/2021	KOBE US MIDCO 2, INC.-ARUBA INVESTMENTS HOLDINGS, LLC	Industrial	SrSec/BCF/LTCFR/PDR		D	B1	B2	SG
11/5/2021	POLYMER HOLDINGS LLC-KRATON CORPORATION	Industrial	LTCFR/PDR		U	B1	Ba3	SG
11/5/2021	GRUPO FRIBOI-JBS USA LUX S.A.	Industrial	SrUnsec/SrSec/BCF	6800.0	U	Ba1	Baa3	SG
11/5/2021	VEREIT, INC.-VEREIT OPERATING PARTNERSHIP, L.P.	Industrial	SrUnsec	4650.0	U	Baa2	A3	IG
11/5/2021	GEMINI HDPE LLC	Industrial	SrSec/BCF		U	Ba3	Ba2	SG
11/5/2021	SPECTACLE GARY, LLC-SPECTACLE GARY HOLDINGS, LLC	Industrial	LTCFR/PDR		U	Caa1	B3	SG
11/8/2021	DISH NETWORK CORPORATION	Industrial	SrUnsec/LTCFR/PDR	26000.0	D	B2	B3	SG
11/8/2021	PLASTIPAK HOLDINGS, INC.	Industrial	LTCFR/PDR		U	B1	Ba3	SG
11/8/2021	ENPRO INDUSTRIES, INC.	Industrial	SrUnsec	350.0	D	B1	B2	SG
11/8/2021	RYERSON HOLDING CORPORATION-JOSEPH T. RYERSON & SON	Industrial	SrSec/LTCFR/PDR	500.0	U	B3	B2	SG
11/8/2021	LANNETT COMPANY, INC.	Industrial	SrSec/LTCFR	700.0	D	B1	B3	SG
11/8/2021	SHINGLE ACQUISITION HOLDINGS, INC.-SRS DISTRIBUTION INC.	Industrial	SrSec/BCF	1100.0	U	B3	B2	SG
11/9/2021	US FOODS, INC.	Industrial	SrSec/SrUnsec/SrSec/BCF/LTCFR/PDR	2800.0	U	B3	B1	SG
11/9/2021	KONTOOR BRANDS, INC.	Industrial	SrSec/BCF/PDR		U	Ba2	Ba1	SG

Source: Moody's

FIGURE 4

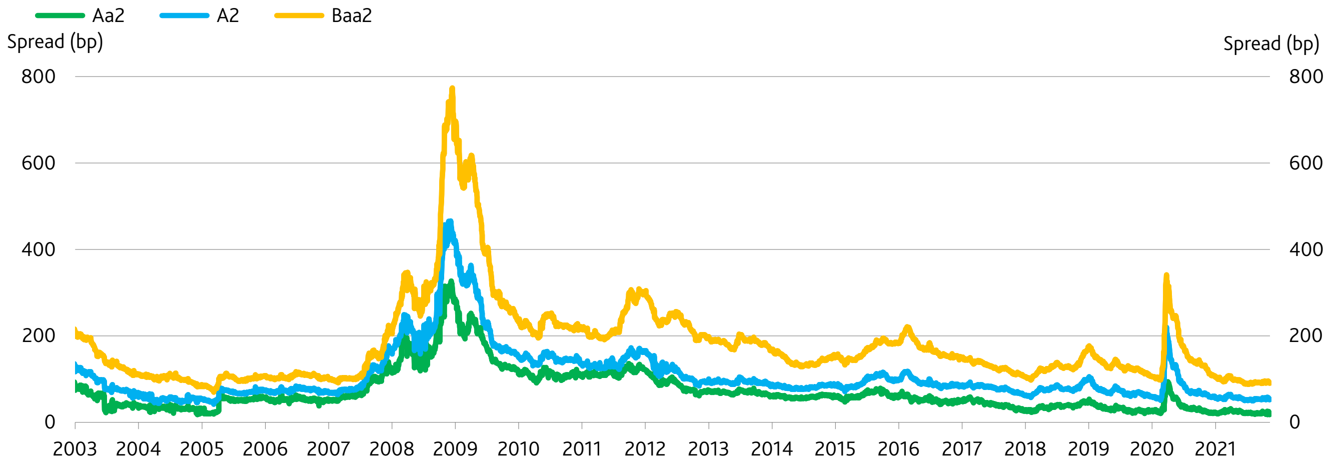
Rating Changes: Corporate & Financial Institutions - Europe

Date	Company	Sector	Rating	Amount ($ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
11/4/2021	SAIPEM S.P.A.	Industrial	SrUnsec/LTCFR/PDR/MTN	2911.6	D	Ba2	Ba3	SG	ITALY

Source: Moody's

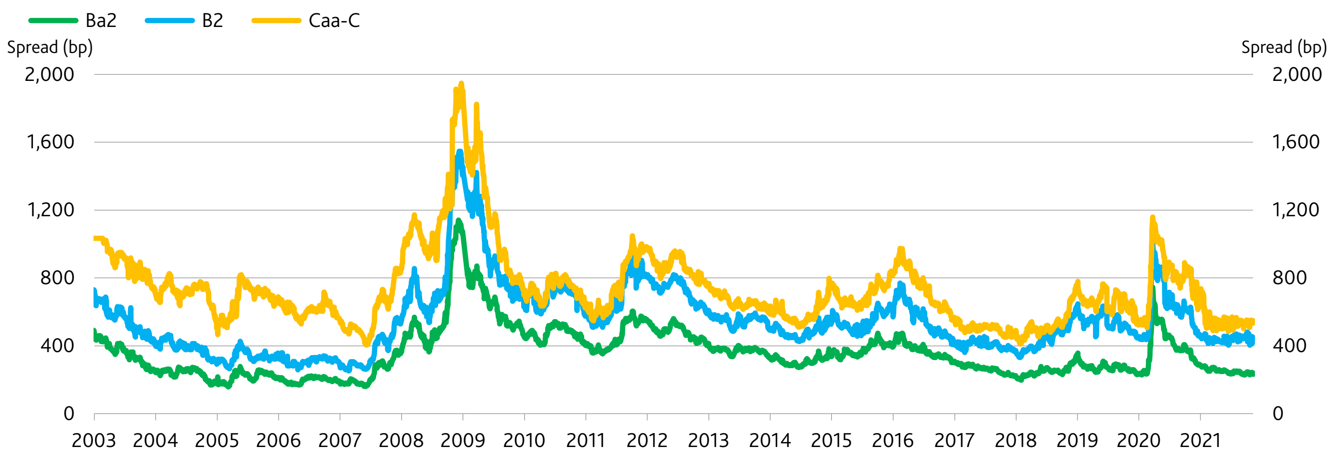
MARKET DATA

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 (November 3, 2021 – November 10, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	Nov. 10	Nov. 3	Senior Ratings
Delhaize America, LLC	Aa3	A2	Baa1
International Business Machines Corporation	A2	A3	A3
Lowe's Companies, Inc.	Aa2	Aa3	Baa1
Carnival Corporation	B2	B3	B2
Eli Lilly and Company	Aa1	Aa2	A2
PNC Financial Services Group, Inc.	A1	A2	A3
Sysco Corporation	Baa1	Baa2	Baa1
Deere & Company	Aa3	A1	A2
Danaher Corporation	A1	A2	Baa1
Colgate-Palmolive Company	Baa1	Baa2	Aa3

CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	Nov. 10	Nov. 3	Senior Ratings
Kimberly-Clark Corporation	A1	Aa2	A2
AT&T Inc.	Baa3	Baa2	Baa2
Verizon Communications Inc.	Baa2	Baa1	Baa1
HCA Inc.	Ba1	Baa3	Baa3
Philip Morris International Inc.	A3	A2	A2
Bank of New York Mellon Corporation (The)	Baa1	A3	A1
Becton, Dickinson and Company	Baa2	Baa1	Baa3
Dish DBS Corporation	Caa1	B3	B3
NRG Energy, Inc.	B1	Ba3	Ba2
Conagra Brands, Inc.	Baa3	Baa2	Baa3

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Nov. 10	Nov. 3	Spread Diff
Dish DBS Corporation	B3	476	374	102
Travel + Leisure Co.	B1	170	152	19
Rite Aid Corporation	Caa2	907	889	18
Liberty Interactive LLC	B2	419	404	15
Avis Budget Car Rental, LLC	B3	213	202	11
Dover Corporation	Baa1	66	57	10
NRG Energy, Inc.	Ba2	223	215	8
DPL Inc.	Ba1	169	162	8
Iron Mountain Incorporated	Ba3	176	169	7
Unisys Corporation	B3	268	261	7

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Nov. 10	Nov. 3	Spread Diff
R.R. Donnelley & Sons Company	B3	254	342	-88
United Airlines, Inc.	Ba3	377	427	-50
American Airlines Group Inc.	Caa1	624	671	-48
Carnival Corporation	B2	343	388	-45
United Airlines Holdings, Inc.	Ba3	382	416	-34
K. Hovnanian Enterprises, Inc.	Caa3	831	859	-28
Macy's Retail Holdings, LLC	Ba3	216	242	-26
Ford Motor Credit Company LLC	Ba2	132	156	-23
Ford Motor Company	Ba2	151	174	-23
Calpine Corporation	B2	336	358	-22

Source: Moody's, CMA

CDS Movers

Figure 4. CDS Movers - Europe (November 3, 2021 – November 10, 2021)

CDS Implied Rating Rises	CDS Implied Ratings		
Issuer	Nov. 10	Nov. 3	Senior Ratings
Societe Generale	Aa2	Aa3	A1
Banque Federative du Credit Mutuel	Aa1	Aa2	Aa3
Commerzbank AG	A2	A3	A1
Danske Bank A/S	Aa2	Aa3	A3
Norddeutsche Landesbank GZ	Baa2	Baa3	A3
Bayerische Motoren Werke Aktiengesellschaft	A2	A3	A2
Nationwide Building Society	A2	A3	A1
ENGIE SA	Aa3	A1	Baa1
E.ON SE	A1	A2	Baa2
BNP Paribas Fortis SA/NV	Aa2	Aa3	A2

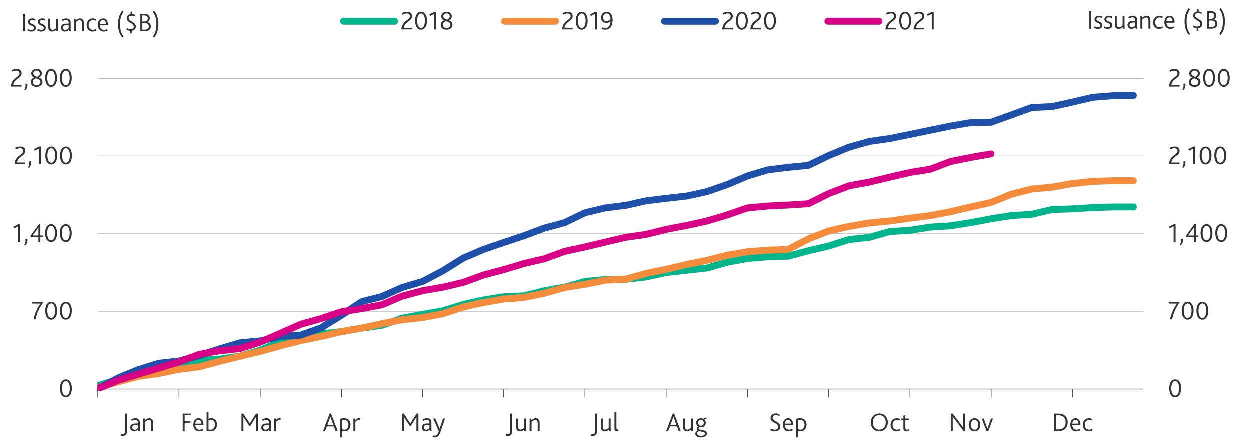
CDS Implied Rating Declines	CDS Implied Ratings		
Issuer	Nov. 10	Nov. 3	Senior Ratings
ABN AMRO Bank N.V.	Aa3	Aa1	A1
Barclays Bank PLC	Baa1	A3	A1
UniCredit Bank AG	Aa1	Aaa	A2
NatWest Group plc	Baa1	A3	Baa1
NatWest Markets Plc	Baa1	A3	A2
Standard Chartered Bank	A1	Aa3	A1
Vodafone Group Plc	Baa2	Baa1	Baa2
Piraeus Financial Holdings S.A.	Caa2	Caa1	Caa2
Banco Comercial Portugues, S.A.	Ba3	Ba2	Ba1
KBC Bank N.V.	A1	Aa3	A1

CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Nov. 10	Nov. 3	Spread Diff
Vedanta Resources Limited	B3	804	724	80
Sappi Papier Holding GmbH	Ba2	325	307	18
ABN AMRO Bank N.V.	A1	33	24	10
Banco Comercial Portugues, S.A.	Ba1	190	180	10
Boparan Finance plc	Caa1	1,232	1,223	9
Avon Products, Inc.	Ba3	241	234	7
Deutsche Lufthansa Aktiengesellschaft	Ba2	218	212	6
Greece, Government of	Ba3	86	81	5
Virgin Media Finance PLC	B2	244	239	5
Permanent tsb p.l.c.	Baa2	220	215	5

CDS Spread Decreases		CDS Spreads		
Issuer	Senior Ratings	Nov. 10	Nov. 3	Spread Diff
Casino Guichard-Perrachon SA	Caa1	608	660	-52
Marks & Spencer p.l.c.	Ba1	143	164	-21
Stena AB	Caa1	400	421	-21
FCE Bank plc	Baa3	108	127	-19
Piraeus Financial Holdings S.A.	Caa2	521	539	-18
Novafives S.A.S.	Caa2	722	738	-16
Rolls-Royce plc	Ba3	151	164	-14
Jaguar Land Rover Automotive Plc	B1	344	359	-14
Vue International Bidco plc	Ca	594	608	-13
Renault S.A.	Ba2	167	178	-11

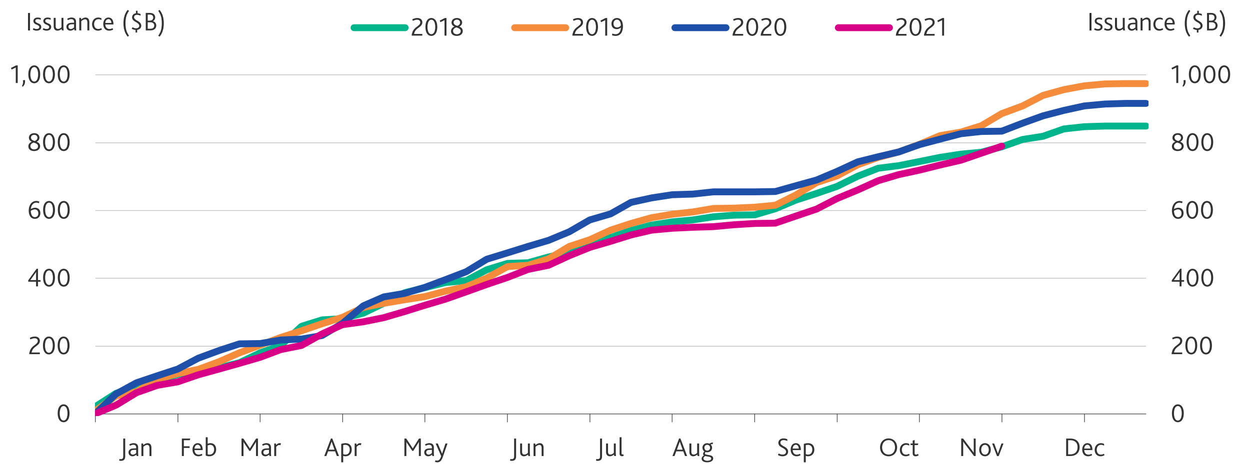
Source: Moody's, CMA

Figure 5. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated



Source: Moody's / Dealogic

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



Source: Moody's / Dealogic

Figure 7. Issuance: Corporate & Financial Institutions

	USD Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	23.950	9.304	33.824
Year-to-Date	1,479.192	575.996	2,120.660

	Euro Denominated		
	Investment-Grade	High-Yield	Total*
	Amount $B	Amount $B	Amount $B
Weekly	13.320	6.892	20.212
Year-to-Date	623.294	146.135	789.603

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

To order reprints of this report (100 copies minimum), please call 212.553.1658.

Report Number: 1310595

Editor
Reid Kanaley
help@economy.com

Contact Us
Americas
+1.212.553.1658
clientservices@moodys.com

Europe
+44.20.7772.5454
clientservices.emea@moodys.com

Asia (Excluding Japan)
+85 2 2916 1121
clientservices.asia@moodys.com

Japan
+81 3 5408 4100
clientservices.japan@moodys.com

© 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from $1,000 to approximately $5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.