# MOODY'S ANALYTICS

# WEEKLY MARKET OUTLOOK

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Credit Markets Review and Outlook by Ryan Sweet

Hot Start for High-Yield

## Moody's Analytics Research

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# The Week Ahead

We preview economic reports and forecasts from the U.S., Europe and Asia/Pacific regions.

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**The Long View** 

Full updated stories and key credit market metrics: The bulk of the funds from high-yield bonds are going toward refinancing outstanding debt.

Credit Spreads	Investment Grade: Year-end 2021's average investment grade bond spread may top its recent 95 basis points. High Yield: Even with a booming economy, a composite high-yield spread may be slightly higher than its recent 325 bp by year-end 2021.
Defaults	<u>US HY default rate</u> : According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped from March 2020's 4.9% to March 2021's 7.5% but may average only 4.1% for 2021's final quarter.
Issuance	For 2019's offerings of US\$-denominated corporate bonds, IG bond issuance rose 2.6% to \$1.309 trillion, while high-yield bond issuance surged by 58% to \$440 billion.  In 2020, US\$-denominated corporate bond issuance soared 54% for IG to a record \$2.012 trillion, while high-yield advanced 30% to a record-high \$570 billion.  For 2021, US\$-denominated corporate bond offerings may decline 16% (to \$1.684 trillion) for IG and increase 7% (to \$607 billion) for high-yield, where both forecasts top their respective annual averages for the five years ended 2020 of \$1.494 trillion for IG and \$410 billion for high-yield.

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### **Ratings Round-Up**

U.S. Corporate Credit Quality on the Rise

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### **Market Data**

Credit spreads, CDS movers, issuance.

FULL STORY PAGE 18

### Moody's Capital Markets Research recent publications

Links to commentaries on: Leverage, stimulus, inflation, GDP, Treasury yields, rising prices, core profits, yield spreads, virus, Congress, misery, issuance boom, default rate, volatility, credit quality, record savings rates, demographic change, high tech, complacency, Fed intervention, speculation, risk, credit stress, optimism, corporate credit, VIX.

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### Credit Markets Review and Outlook

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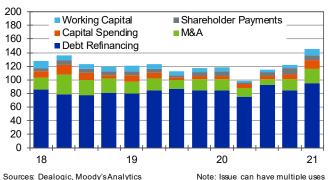
By Ryan Sweet, Senior Director-Economic Research

# Hot Start for High-Yield

High-yield corporate bond issuance had a strong start to the year, due to growing expectations for the U.S. economy to take off coupled with tight credit spreads and less perceived credit risk. US\$-denominated high-yield bond issuance totaled \$76 billion in the March compared with the \$55 billion in February and \$83 billion in January. Issuance in March was 70% above its prior five-year average, but this includes last March when the pandemic caused high-yield issuance essentially to dry up. If we adjust for the pandemic, March was still very strong; high-yield issuance was 67% above is average between 2015 and 2019.

## Refinancing Continues to Dominate





The bulk of the funds from high-yield bonds are going toward refinancing outstanding debt. For the most part, this has benefited credit quality by extending maturities, which lessens refinancing risks, and by lowering interest expense, which boosts cash flow. In addition, the funding of M&A was the second-most referenced use of funds. The buildup of liquidity, or working capital, and capital spending accounted for a smaller share. However, the share of mentions of capital spending and working capital increased between the fourth quarter of 2020 and the first quarter of this year.

### Could spreads suddenly reverse course?

Yes, but odds are low. The narrowing in high-yield option adjusted spreads has provided a big boost to issuance over the past few months. Currently, the high-yield corporate bond spread is 296 basis points, compared with its historical average of 540 bp. Considering the potential strength of the U.S. economy this year and next, spreads should remain tight.

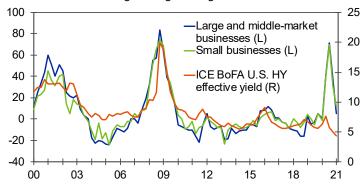
We have been consistently revising our forecast higher for GDP this year because of changes to our fiscal policy assumptions. We now look for real GDP to rise 6.4% this year, compared with the 5.7% in the March and 4.9% in the February baselines. The higher corporate tax rate will bite a little bit into the economy next year, but its drag is in basis points, not percentage points. We revised the forecast higher for GDP growth in both 2024 and 2025 because of the proposed federal infrastructure package.

The consensus has begun to catch up with our forecast for this year, but we remain higher. The Bloomberg consensus is for real GDP to rise 5.8% this year. The range of forecasts for GDP growth this year is 2.2% to 7.5%. Our April baseline also has GDP growth stronger than the consensus. The median estimate is for GDP to rise 4% in 2022, 1.3 percentage points below our baseline. The consensus is still for very strong GDP growth over the next couple of years, making it difficult to see spreads widening. The key risk is a repeat of the 2013 taper tantrum.

### Credit Markets Review and Outlook

## Banks Tighten, Bond Market Ease

Net % of U.S. banks tightening lending standards on...



Sources: Federal Reserve, Moody's Analytics

With a booming economy, banks will loosen lending standards on businesses. This should limit any upward pressure on high-yield effective yields. The effective yield of the ICE BofA US High Yield Index tracks the performance of U.S.\$-denominated below investment grade rated corporate debt publicly issued in the U.S. When banks significantly tighten lending standards to small and middle/large businesses, the effective yield of the ICE BofA US High Yield Index normally jumps. This occurred during the Great Recession but didn't during the pandemic, even though lending standards tightened noticeably. The reason was the aggressive policy response by the Fed, which quickly cut interest rates to the effective zero lower bound and launched a large number of emergency credit facilities, including the Secondary Market Corporate Credit Facility. This facility supported market liquidity by purchasing in the secondary market corporate bonds issued by investment grade U.S. companies or certain U.S. companies that were investment grade. Though they didn't directly target the high-yield market, preventing stress in the investment grade market spilled over into the high-yield market. With banks set to begin loosening lending standards, it is hard to see the effective yield of the ICE BofA US High Yield Index jumping.

### But if the hypothetical becomes reality

Lofty U.S. stock prices have been a plus for the economy during the pandemic, but expectations for a noticeable acceleration in inflation and GDP have boosted long-term interest rates and, if this continues, could threaten to turn a richly valued stock market into a headwind for the economy. Perceptions that equity markets are in a bubble remain debatable, but there is some evidence of bubble characteristics, particularly as there is a ton of liquidity out there. The M2 measure of the money supply is up over 20% on a year-ago basis and additional fiscal stimulus is set to hit the economy. Yet, as the saying goes, an overvalued market can stay that way longer than an investor betting against it can stay solvent. Historical evidence suggests that there is a tendency for an excessive valuation to eventually correct, and when it does, it is often abrupt.

Corrections are normal and have on average occurred once every two years since the 1970s. Moreover, pullbacks in stock prices don't necessarily translate into setbacks for the real economy. To illustrate this fact, we looked at the high-frequency Aruoba-Diebold-Scotti business conditions index, which is based on six economic data series: initial jobless claims, nonfarm payrolls, industrial production, personal income excluding transfer payments, manufacturing and trade sales, and real GDP. The higher the ADS index, the better underlying economic conditions are, and vice versa. Since the 1970s, the ADS index has increased during four out of 10 corrections. Last decade's record-long expansion faced seven corrections, and underlying economic conditions only worsened in one of those instances.

Though the catalyst for the next stock market correction isn't clear yet, one potential trigger is a spike in long-term interest rates sparked by the advent of trillion-dollar stimulus packages, news about the nation's vaccination campaign, and Fed rhetoric about the potential timing of the tapering of their monthly asset purchase, currently \$120 billion.

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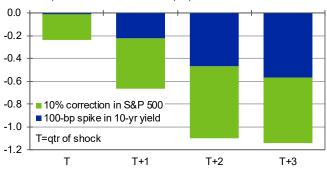
### Credit Markets Review and Outlook

To assess what such a market shock would mean for the economy, Moody's Analytics ran through our U.S. macroeconomic model three scenarios in which the S&P 500 faces 10%, 15% and 20% corrections while the 10-year Treasury yield surges by 100 basis points. In such a way, we are able to compare these three scenarios to our baseline forecast of the U.S. economy. In crafting these three scenarios, we assume that the financial market shocks are isolated to a single quarter and that the S&P 500 and the 10-year yield converge to the baseline forecast within a year.

Corrections are declines of 10% or more, while bear markets are characterized by declines of 20% or more. Meanwhile, the 100-bp increase is consistent with movements in the 10-year yield during the 2013 so-called taper tantrum, when then-Fed Chairman Ben Bernanke sought to prepare markets for the tapering of the bank's bond purchases.

## Packing Less of a Punch Now...

Real GDP, deviation from baseline, %, due to...

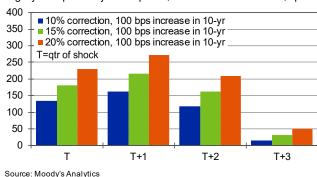


Source: Moody's Analytics

The results reveal that the one-two punch of lower stock prices and higher long-term rates would weigh on the economy. Coupled with a 100-basis point spike in 10-year yields, a 10% correction would lower annual real GDP by over 1 percentage point. The costs increase with a larger decline in stock prices.

### ...But Spreads Still Widen Noticeably

High-yield option adjusted spread, deviation from baseline, bps



The hit to GDP when the economy is growing 5%, 6% or 7% as it will this year and next is less concerning. However, there will be negative implications for corporate bond spreads and issuance. We ran three scenarios, all include a 100-bp increase in the 10-year Treasury yield but have declines in the S&P 500 of 10%, 15% and 20%. Under each of these scenarios, the high-year option adjusted corporate bond spread deviates noticeably from the baseline. This isn't surprising, but it would bode ill for high-yield and leveraged loan issuance. Issuance of leveraged loans is off to a hot start this year along with high-yield corporate bonds, but a correction in the stock market and a communication error by the Fed could bring that to an end quickly.

# The Week Ahead – U.S., Europe, Asia-Pacific

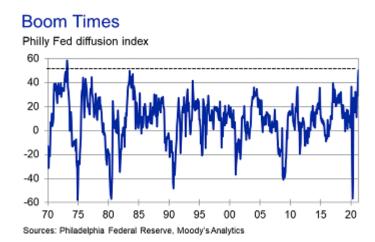
### THE U.S.

By Mark Zandi, Chief Economist of Moody's Analytics

# Big Gains Ahead for the Economy

The U.S. economy is booming. March 2021 was arguably its strongest month in decades aside from May 2020, when the economy was restarting after the futile six-week shutdown meant to contain the COVID-19 pandemic. The economic data have been uniformly gangbusters in recent weeks. Here are the most notable statistics:

- Nonfarm employment increased by over 900,000 jobs in March, and unemployment declined to 6% even with a meaningful increase in labor force participation.
- The job opening rate surged to a record high with lots of openings in manufacturing, transportation and warehousing, professional and business services, healthcare, and education as schools returned to in-person learning.
- Retail sales surged by almost 10%, with gains across all spending categories, including at
  restaurants, which reopened in much of the country. Vehicle sales jumped to 17.7 million
  units, about as big a monthly sales number as seen historically except for a few months that
  benefited from outsize discounts and 0% financing. The strong retail numbers pushed up our
  tracking estimate for annualized real GDP in the first quarter to well over 7%.
- The panoply of surveys of business activity conducted by trade groups and the Federal Reserve
  is about as strong as it has ever been. The prescient Philadelphia Federal Reserve survey that
  has been conducted since the late 1960s is telling. It posted its second highest reading ever in
  March. Only the reading in March 1973, just prior to the start of the OPEC oil embargo and a
  deep recession, was higher.



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### The Week Ahead

• Construction starts on new single- and multifamily homes in March happened at an annualized rate of well over 1.7 million units. This is the highest rate of housing starts since the waning days of the housing bubble in the mid-2000s. Of course, the bubble was plagued by substantial overbuilding, while today there is a severe shortage of affordable new homes.

While the March data were extraordinary—with an extra boost from weather as it rebounded from miserable winter weather that had largely shut down Texas for a week in February—the economy is set to post big gains through this time next year. What will power the growth? Continued business reopenings as the pandemic steadily winds down, the massive fiscal support already in train with more likely to come, and the prodigious amount of pent-up demand and excess savings built up over the past year by generally higher-income households.

Excess saving is the extra saving that households have done as many sheltered in place and curtailed their spending and others benefited from extraordinary government support. This excess saving is on top of what households would have saved if the pandemic had not occurred and their saving behavior had been the same as in 2019, before the pandemic.

Many more well-to-do households across the globe have been sheltering in place since the pandemic, building up pent-up demand and excess saving. As of the first quarter of 2021, we estimate the excess saving across the globe to equal more than 6% of global GDP. The U.S. has the world's most excess saving, equal to 12% of GDP, with the U.K. a close runner-up at 10% of GDP. Broadly speaking, excess saving is highest in the developed economies in North America and Europe, where sheltering in place and government support have been most significant. Several Middle Eastern countries, where government support has been generous, also have significant excess saving. There is in general less excess saving in Asia, where the pandemic has been well-contained and the impact on household behavior less pronounced, and South America and Eastern Europe, which have been ravaged by the pandemic, but government support less forthcoming.

### The Week Ahead

	GDP	Excess househo	ld saving	s
	\$ bil	of disposable income	\$ bil	of GDP
World	83,235	8.4	5,398.2	6.
United States	21,872	13.8	2,623.2	12.0
United Kingdom	2,942	14.8	306.4	10.
Kuwait	115	4.7	11.4	9.
Canada	1,862	16.6	180.9	9.
Latvia	37	14.9	3.1	8.
Spain	1,387	13.3	114.7	8.
Qatar	167	26.0	13.6	8.
Israel	445	10.3	35.7	8.
Belaium	554	12.7	39.5	7
Australia	1,590	10.5	110.9	7.
Portugal	252	10.5	17.6	7.
Bahrain	37	13.6	2.5	6.3
Netherlands	985	13.3	62.4	6.3
Italu	2,026	9.8	126.3	6.
Switzerland	784	10.3	48.3	6.
Germany	4,081	10.3	251.0	6.
France	2,838	9.1	156.2	5.
Austria	458	9.0	24.8	5.
Norwau	423	12.0	22.8	5.
Czechia	272	8.8	12.5	4.
Finland	292	7.7	12.0	4
Hungary	176	7.9	7.1	4.1
Ireland	440	12.9	17.6	4.0
Japan	5.183	6.9	206.3	4.
Russian Federation	1,581	6.7	57.5	3.
Sweden	600	6.9	21.5	3.
Chile	296	5.4	10.5	3.
India	3,022	4.6	104.3	3.
Brazil	1,403	4.9	48.3	3.
Cyprus	26	5.5	0.9	3.
South Korea	1,760	6.5	59.3	3.
Egypt	368	3.5	11.7	3.
Greece	195	4.7	5.9	3.
Poland	621	4.8	18.3	2.
Luxembourg	78	6.7	1.8	2.
China	16,918	3.8	388.5	2.
Onina Philippines	394	3.1	8.9	2.
Philippines Mexico	1,238	3.2	26.9	2.
Croatia	61	3.3	1.2	1.
Croatia Slovak Republic	115	2.9	2.0	1.
Siovak mepublic Estonia	32	3.1	0.5	1.
Esconia South Africa	360	2.5	5.3	1.
South Africa Taiwan (Province of China	737	2.3	9.5	1.
Thailand	519	1.8	5.6	1
i naliano Lithuania	60	1.0	0.4	0.
Licnuania Romania	268	1.1	1.7	0.
Homania New Zealand	241	1.0	1.4	0.
ivew zealand Malausia	369	0.7	1.7	0.
ivialaysia Peru	225	0.1	0.2	0.
	378	0.2	0.2	Ö
Denmark		0.2 than counterfactual based on gr		

The combination of an unleashing of significant pent-up demand and overflowing excess saving will drive a surge in consumer spending across the globe as countries approach herd immunity and open up. We expect approximately one-third of the global excess saving will be spent this year, adding just over 2 percentage points to global GDP. We expect global real GDP to grow 5.5% in 2021. And another close to one-third of the excess saving will be spent next year, adding 2 percentage points to expected real GDP of 4.5% in 2022.

Limiting an even bigger consumer boom is that much of the excess saving has been by high-income, high net worth households who are likely to treat the saving more like wealth than income, and will thus spend much less of it, at least quickly. This can be seen most clearly in the U.S., where nearly two-thirds of the excess savings is by households in the top decile of the income distribution, and three-fourths by those in the top quintile of the distribution. We estimate the wealth effect in the U.S.—the dollar change in consumer spending due to a dollar change in wealth—to be no more than a nickel. As such, we expect only one-fifth of the excess saving in the U.S. to be spent this year, adding 2.4 percentage points to real GDP for 2021, which we expect to be 6.4%. Another one-fifth of the excess savings will be spent next year, adding 2.4 percentage points to real GDP of 5.3% in 2022.

As an FYI, the excess saving in the U.S. is also concentrated across more than income. Nearly three-fourths is by households with at least a college degree. Those with no more than a high school degree

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### The Week Ahead

hold just over one-tenth of the excess saving. Those 55 and older have more than 60% of the excess saving and those 45 and older have over 80% of the saving. Baby boomers account for about half of the excess saving, Generation X and Millennials 40%, and the Silent Generation less 10%. Homeowners hold 90% of the excess saving, and renters the remaining 10%. None of this is too surprising, but it is a reminder of how hard the pandemic has been on the finances of young, low-income renters with less education, and how gracefully older, high-income, educated homeowners have navigated financially.

Of course, consumer behavior is fickle and extraordinarily so given how the pandemic has upended the ways people across the globe live and work. It would not be surprising if consumers let loose more than we are anticipating, and more quickly. They certainly have the financial firepower to do so. But it would also not be too surprising if consumers are more cautious than we expect as the pandemic takes longer to wind down globally, and consumers are slower to come out of their proverbial bunkers and begin spending again.

### **Next Week**

A first look at U.S. GDP for the first quarter will come from the Bureau of Economic Analysis next Thursday. The BEA's take on the final quarter of 2020 showed growth slowing dramatically as increased COVID-19 infections took their toll. But the first quarter should see renewed vigor as strong March data have moved our U.S. high-frequency GDP model's estimate up to 7.1% for first-quarter growth. We are now expecting real GDP to rise 6.4% this year, compared with the 5.7% in our March and 4.9% in our February baselines. In housing, we'll get a look at home price indexes froom S&P CoreLogic and the Federal Housing Finance Agency plus data on pending home sales. The Federal Open Market Committee meets Tuesday and Wednesday. And durable goods numbers and the Texas manufacturing and service sector surveys are on tap.

### The Week Ahead

### **EUROPE**

By Ross Cioffi of Moody's Analytics

### **Consumer Price Inflation Accelerates**

Three important euro zone release are due next week. We will see preliminary estimates for the April consumer price index, a preliminary estimate for first-quarter GDP, and the March unemployment rate. These will be accompanied by retail sales and unemployment data for individual euro zone countries and the April reading of euro zone business and consumer sentiment.

Our April baseline forecast has penciled in a 0.2% q/q contraction in the first quarter of 2021. Declining household consumption and net exports will cause the euro zone economy to contract, though government consumption and investments will offer upsides. There are two main issues in the first quarter: COVID-19 lockdowns persisted across the euro zone, and supply-side issues, such as the global semiconductor shortage or the after-effects of post-Brexit trade barriers, disrupted production and trade

Lockdowns have throttled the consumer economy, but consumer price inflation has sped up since the start of the year. We are now expecting a 1.7% y/y increase in April. The higher inflation rate won't be a result of stronger demand, but of base effects, particularly regarding energy and fuel prices. As was the case in March, oil prices are soaring above year-ago levels, which translates into equivalently high growth rates in fuel prices in the consumer basket. Inflation rates will rise even further as lockdowns ease and demand-push inflation kicks in.

Meanwhile, the unemployment rate was likely stable at 8.4% in March. Unemployment figures have been steady thanks to short-time work schemes in place around Europe. Yet, these same schemes make it difficult to read too much into the employment figures. Furloughed workers are still counted as employed under these schemes, as typically their condition is meant to be temporary. Labor forces have also been drawn down as workers temporarily put job searches on hold or go back to school during lockdowns.

Finally, we expect that the Economic Sentiment Index, which measures business and consumer confidence in the euro zone, improved to a reading of 101.1 in April from 101 in March. We suspect the gain was all on the back of the manufacturing sector, which has benefitted from recovering global demand. Services and retailers likely lost some of their cheer from the previous month as lockdown measures continued. Once measures ease, sentiment will jump, accompanying a post-pandemic spending spree that will jump start the recovery. We have been expecting the first round of easing to come in May, but we might soon be forced to push back our expectations once again.

	Key indicators	Units	Moody's Analytics	Last
Tues @ 12:00 p.m.	France: Job Seekers for March	mil, SA	3.61	3.58
Thur @ 9:55 a.m.	Germany: Unemployment for April	%	5.9	6.0
Thur @ 10:00 a.m.	Spain: Unemployment for Q1	%	16.2	16.1
Thur @ 11:00 a.m.	Euro Zone: Business and Consumer Sentiment for April	index	101.1	101.0
Fri @ 8:45 a.m.	France: Household Consumption Survey for March	% change	-0.4	0.0
Fri @ 9:00 a.m.	Spain: Retail Sales for March	% change	1.0	4.2
Fri @ 9:00 a.m.	Italy: Unemployment for March	%	10.2	10.2
Fri @ 11:00 a.m.	Euro Zone: Preliminary Consumer Price Index for April	% change	1.7	1.3
Fri @ 11:00 a.m.	Euro Zone: Unemployment for March	%	8.4	8.4
Fri @ 11:00 a.m.	Euro Zone: Preliminary GDP for Q1	% change	-0.2	-0.7
	,			

### The Week Ahead

### **Asia-Pacific**

By Katrina Ell and Shahana Mukherjee of Moody's Analytics

## Exports keep South Korea's economy on track

South Korea's March-quarter GDP will be the highlight on the economic calendar. We expect GDP to have grown by 0.8% over the March quarter, following a 1.2% increase in the December quarter. This is expected to have translated into yearly growth of around 1% in the March quarter, following a 1.2% decline in the prior quarter.

A strong revival in exports powered South Korea's rebound through the second half of 2020. While this trend has largely held up through early 2021, domestic demand came under pressure as renewed restrictions weighed on the labour market and eroded consumer sentiment. Overall, a net trade surplus is still expected to have driven another quarter of growth, but the aggregate gains were likely moderated by subdued domestic consumption.

China's manufacturing PMI is likely to have settled at 52 in April, reflecting little change from the 51.9 reading in March. China's recent manufacturing activity reflected broad-based gains across key segments, including new export orders. We expect largely favourable overseas, as well as domestic, demand conditions to have persisted in April and sustained high levels of domestic manufacturing production.

We expect the Bank of Japan to keep its monetary settings unchanged in April. The short-term interest rate target will likely be held steady at -0.1% and the 10-year bond yield target will be maintained at around 0%. The BoJ's recent decision to allow wider bands for longer-term yields and conditional purchases of risky assets were steps towards a more sustainable monetary stance. Now, with the localized outbreak continuing to intensify, propping up depressed domestic demand will take precedence; however, the increased needs are likely to be met by additional fiscal spending, rather than further monetary easing.

Japan's consumer and production metrics for March are likely to have been a mixed bag. While industrial production is likely to have returned to growth, having risen by 1.2% on monthly terms in March, following a 1.3% decline in February, retail sales are likely to have moderately risen by 0.7% over the month, following a 3.1% increase in February, as consumer spending likely remained subdued amid the new surge.

In comparison, employment, particularly in customer-facing services like restaurants and retail segments, is likely to have seen some weakness in March and resulted in fewer jobs per applicant. However, the overall unemployment rate is likely to have remained unchanged at 2.9% over this period, possibly due to some offsetting gains in manufacturing employment.

	Key indicators	Units	Moody's Analytics	Confidence	Risk	Last
Mon @ 3:00 p.m.	Singapore Industrial Production for March	% change yr ago	6.0	2	•	16.4
Tues @ 9:00 a.m.	South Korea GDP for Q1	% change	0.8	3	•	1.2
Tues @1:00 p.m.	Japan Monetary Policy for April	%	-0.1	4	<b>(</b>	-0.1
Wed @ 7:00 a.m.	South Korea Consumer Confidence for April	Index	99.0	2	•	100.5
Wed @ 9:30 a.m.	Japan Retail Sales for March	% change	0.7	3	•	3.1
Wed @ 11:30 a.m.	Australia CPI for Q1	% change	1	3	•	0.9
Wed @ 2:00 p.m.	Malaysia Foreign Trade for March	MYRbil	11.0	2		17.9
Fri @ 9:00 a.m.	South Korea Industrial Production for March	% change yr ago	1.5	3	•	0.9
Fri @ 9:00 a.m.	South Korea Retail Sales for March	% change	0.9	3	•	-0.8
Fri @ 9:30 a.m.	Japan Unemployment for March	%	2.9	3	-	2.9
Fri @ 9:30 a.m.	Japan Industrial Production for March	% change	1.2	3		-1.3
Fri @ 11:00 a.m.	China Manufacturing PMI for April	Index	52	3	-	51.9
Fri @ 6:00 p.m.	Taiwan GDP for Q1	%	6	3		4.9

### The Long View

# The Long View

# The bulk of the funds from high-yield bonds are going toward refinancing outstanding debt.

By Ryan Sweet, Senior Director-Economic Research April 22, 2021

### **CREDIT SPREADS**

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 98 basis points was below its high over the past 12 months of 179 bp and a hair above its low of 95 bp. Still, the investment grade corporate bond yield is lower than its 116 basis-point median of the 30 years ended 2019. This spread may be no wider than 110 bp by year-end 2021.

The recent composite high-yield bond spread of 325 bp approximates what is suggested by the accompanying long-term Baa industrial company bond yield spread of 137 bp but is narrower than what might be inferred from the recent VIX of 17.2 points. The latter has been historically associated with a 476-bp midpoint for a composite high-yield bond spread.

### **DEFAULTS**

March 2021's U.S. high-yield default rate of 7.5% was up from March 2020's 4.9%. The recent average high-yield EDF metric of 1.9% portend a less-than-3% default rate by 2021's final quarter.

### 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.

For 2019, worldwide corporate bond offerings grew 5.8% annually (to \$2.456 trillion) for IG and advanced 51.6% for high yield (to \$570 billion). The annual percent increases for 2020's worldwide corporate bond offerings are 19.7% (to \$2.940 trillion) for IG and 23.9% (to \$706 billion) for high yield. The expected annual declines for 2021's worldwide rated corporate bond issuance are 17% for investment-grade and 2% for high-yield.

### U.S. ECONOMIC OUTLOOK

We expect real GDP to rise 6.4% this year, compared with the 5.7% in our March and 4.9% in our February baselines. We have been consistently revising our forecast higher for GDP this year because of changes to our fiscal policy assumptions. GDP is expected to rise 5.3% next year, weaker than the 5.7% in the February baseline. The higher corporate tax rate will bite a little bit into the economy next year, but its drag is basis points, not percentage points.

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### The Long View

The unemployment rate is expected to average 4.55% in the fourth quarter of this year, compared with 5% in the March baseline. The unemployment rate averages 3.9% in the fourth quarter of next year, 30 bp lower than in the prior baseline.

The 10-year Treasury is now expected to average 2% in the fourth quarter of this year, compared with the 1.77% in the March baseline.

### The Long View

### **Europe**

By Ross Cioffi of Moody's Analytics April 22, 2021

#### **FRANCE**

Sentiment among France's manufacturers climbed to a recent high in April. The INSEE's indicator rose from 99 in March to 104 in April, the highest reading since May 2019. The improvement came mostly as a result of a better view on past activity and much less pessimism about overall order books; expectations for one's own future output also improved. The results are in line with trends we've seen in Europe. Goods-producing sectors have been pulling the economy forward as lockdowns paralyze service sectors. Things are not perfect for all goods producers, however, and France has had a particularly tough go of it given the importance of the aeronautics and other transport sectors. Industrial output tumbled by 4.7% m/m in February, due mostly to transport equipment sectors, though machinery and equipment output also faltered. These sectors are not only exposed to the demand effects of the pandemic but also to supply-side disruptions battering firms across Europe.

Input costs have been surging since the start of the year, and key components, namely semiconductors, have been scarce in the global economy. On the sector level, however, sentiment improved among automakers and producers of machinery and equipment, signaling that some of the supply issues may be easing as we progress into the second quarter.

Although sentiment among France's manufacturers improved, it weakened among service providers and retailers. The services sentiment index fell to a reading of 91 in April from 94, and the retail trade sentiment index was down to 90 from 95. In each case, the rollover of social distancing measures through April is the issue. Forward-looking indicators deteriorated as service providers and retailers continue to see lockdowns rolled over. The slow pace of vaccination also makes it harder to bet on a fast and timely return to normal. Among retailers, views on the general business outlook slumped after improving in March. Views on expected sales worsened, and ordering intentions receded considerably. Service providers also had a darker general outlook, and the balance of opinions on their expected demand and activity worsened. Sentiment won't improve in these sectors until there is a more definitive roadmap out of lockdown.

### **EURO ZONE**

Budget deficits across the euro zone reached historic highs in 2020. On the aggregate level, the government deficit to GDP was 7.2% in 2020, deepening the 0.6% deficit in 2019. Meanwhile, the debt-to-GDP ratio jumped to 98% from 83.9%. The largest deficit was recorded in Spain, at 11%. In Italy, the deficit reached 9.5%, in France it was 9.2%, and in Germany it was 4.2%. Debt to GDP jumped to 120% in Spain, to 115.7% in France, to 155.8% in Italy, and to 69.8% in Germany.

The COVID-19 pandemic caused a significant reversal of the trend towards stabilizing or declining debt-to-GDP ratios in the euro zone since the sovereign debt crisis. Not only did spending and debt levels jump, but GDP contracted by more than it has in generations. Given the assumption that the pandemic will end this summer in Europe, we expect GDP to start rebounding. Economic growth will lower ratios, as will lower government spending. Although we do not expect governments to rush back into austerity mode, spending will trend down as fiscal policies such as wage subsidy schemes wind down.

The locus of debt risk remains in the south: in Greece, Italy, Portugal and Spain. The importance of tourism and consumer-facing services in these countries poses a recovery risk. Structural problems that weigh on productivity growth from before the pandemic remain as well. The ECB's policy will be more accommodative than it was following the 2008 Great Recession, and the Next Generation EU recovery funds will help to add fiscal stimulus for new investments and existing income and job supports without raising debt.

### ECB monetary policy remains accommodative

As expected, the European Central Bank's interest rates and asset purchase programs remained unchanged after its April meeting. The ECB is taking a wait-and-see approach following its decision in December to increase the size of its Pandemic Emergency Purchase Program and to extend new asset purchases from June 2021 to March 2022 at the earliest. Purchases under the PEPP will prevent rapid increases in sovereign yields and, as a result, support the sustainability of debt levels.

### The Long View

### **Asia Pacific**

By Katrina Ell and Shahana Mukherjee of Moody's Analytics April 22, 2021

### **IAPAN**

Japan's economy is running at two speeds: Export-driven sectors are on the mend, while domestic demand is subdued. Offshore demand has improved thanks to recoveries in Japan's major trading partners gathering pace. Meanwhile, the situation at home is more lacklustre. Japan is currently battling a fourth wave of infections with daily new cases reaching more than 4,000 recently. This has seen the reimposition of restrictions in Tokyo, Kyoto and Okinawa on 9 April, only three weeks after the withdrawal of the prior state of emergency. It has also led to concern about whether the Tokyo Olympics will proceed, scheduled to begin in late July.

The situation at home adds downside risk to our Japan forecast. We expect GDP to expand 3.4% in 2021, following the 4.9% contraction in 2020. Japan is not forecast to recover the lost output from COVID-19 until the December quarter of 2021. This compares with global output being on track to recover by the June quarter of 2021.

### Capital spending is mending

Machinery orders are a leading indicator of capital spending and exemplify the two speeds. Core machinery orders, which exclude the volatile shipbuilding category were up 12.9% month over month on a three-month moving average in February. Of which, overseas orders rose by 28.6% month over month, while domestic orders fell by 1.3%. In the past six months, overseas orders have averaged 11.2% and domestic orders have grown just 1.4%.

Domestic demand is expected to remain subdued in the June quarter as social-distancing rules remain in place for some prefectures given recent infection spikes. Another drag is the sluggish vaccine rollout, which began for the general public on 12 April.

### Exports power ahead

Data released this week show Japan's seasonally adjusted trade balance returned to surplus with a ¥297.8 billion reading in March, from February's downwardly revised ¥11 billion deficit. The year-over-year expansion in Japan's exports is impressive, at 16.1%, returning to double-digit growth for the first time since 2018 and following from a 4.5% fall in February. But this doesn't really mean much given that the annual comparisons are inflated by a low base effect. In March 2020, Japan's major export partners were being derailed by the pandemic; exports contracted by 11.7% year over year in March 2020. Low base effects will worsen through the June quarter; exports decreased by 21.9% year over year in April 2020 and 26.2% in May 2020.

Notably, seasonally adjusted exports rebounded over the month with a 4.5% expansion, following the 4.8% decrease in February. Japan's export engine performed well in the final months of 2020, and that was a key driver of its better-than-expected December-quarter GDP data. Export performance is more critical than usual in Japan to help offset the sluggish domestic demand due to renewed restrictions.

### Correlation and causation?

China and the U.S. are large final destinations for Japanese-produced goods, each representing almost 20% of Japan's exports. Not surprisingly, there is a decent correlation between Japan's exports and China's manufacturing PMI, as well as the U.S. ISM manufacturing survey, given that these series are decent barometers of demand in their respective economies.

Demand in the U.S. and Chinese markets has improved in the past six months and is forecast to keep improving. This is enabled by the vaccination programs, allowing economies to reopen and businesses and consumers to return to more normal activity. An additional lift in the U.S. is coming from fiscal stimulus. A Granger causality test confirmed a causal relationship between China's manufacturing PMI and Japan's exports with a lag length of two, but the same hypothesis couldn't be proved between the U.S. ISM manufacturing survey and Japan's exports.

### **Ratings Round-Up**

# **Ratings Round-Up**

# U.S. Corporate Credit Quality on the Rise

By Steven Shields April 22, 2021

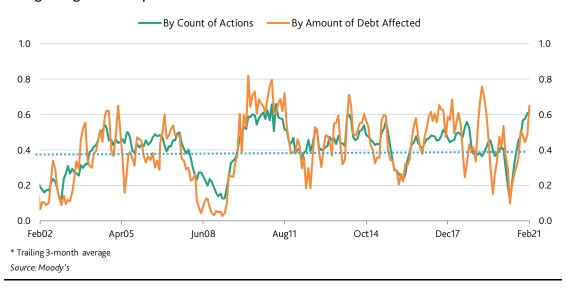
U.S. corporate credit quality has strengthened again. For the period ending April 20, upgrades accounted for fifteen of seventeen rating changes issued by Moody's Investors Service and nearly all the affected debt. Rating activity remained mostly limited to speculative-grade companies, with just two changes issued to investment-grade firms. The period's most notable upgrade was made to Netflix Inc. with its senior unsecured debt ratings and corporate family rating upgraded two notches to Ba1 from B3. The upgrade, impacting approximately \$15.8 billion in outstanding debt, reflects Netflix' rapid credit improvement thanks to strong subscriber growth, particularly internationally, and operating margin expansion across most regions. Moody's maintained its positive outlook on the company. Other notable upgrades included Howmet Aerospace Inc. and Cliffs Inc. The largest downgrade was made to Tanger Properties Limited Partnership with its senior unsecured debt rating lowered to Baa3 from Baa2. The rating action is a result of the ongoing challenges for retail landlords, reflected in the REIT's portfolio occupancy. The downgrade also reflects the likelihood of continued pressure on Tanger's releasing spreads as it addresses current vacancies. The outlook was revised to stable from negative with Moody's assuming Tanger will maintain its conservative financial policy while navigating through this difficult operating environment.

Ratings activity was also positive in Europe with upgrades accounting for two-thirds of the changes, but two credit downgrades comprised the bulk of debt. Coca-Cola European Partners PLC's senior unsecured debt instruments were lowered to Baa1 from A3 following the announcement to acquire all shares of Coca-Cola Amatil Limited, resulting in a material increase in leverage and deterioration in its credit metrics. The downgrade affected approximately \$8.2 billion in outstanding debt instruments. Meanwhile Evonik Industries AG's senior unsecured notes were lowered to Baa2 from Baa1 reflecting its increased gross financial leverage and lower free cash flow generation. The most notable upgrade in the period was made to RWE AG, with its issuer rating raise to Baa2 from Baa3 and its subordinated hybrid capital securities to Ba1 from Ba2. The ratings upgrade follows RWE's strong operating performance in 2020 and reflects Moody's expectation that financial metrics will remain in line with the higher rating level. The change also accounts for RWE's prudent financial policy and progress in executing its strategy, growing its renewables generation portfolio as conventional thermal capacity is reduced.

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# Ratings Round-Up





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

# Ratings Round-Up

FIGURE 3 Rating Changes: Corporate & Financial Institutions – US

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG
4/14/21	TANGER FACTORY OUTLET CENTERS, INC TANGER PROPERTIES LIMITED PARTNERSHIP	Financial	SrUnsec/Sub/PS	1,150	D	Baa2	Baa3	IG
4/14/21	CIGNA CORPORATION	Financial	SrUnsec		U	Baa2	Baa1	IG
4/15/21	CLEVELAND-CLIFFS INC.	Industrial	SrSec/SrUnsec /LTCFR/PDR	4,002	U	B2	B1	SG
4/15/21	W&T OFFSHORE, INC.	Industrial	SrSec/LTCFR/PDR	625	U	Caa3	Caa2	SG
4/15/21	VERINT SYSTEMS INC.	Industrial	SrSec/BCF		U	Ba2	Ba1	SG
4/15/21	NETFLIX, INC.	Industrial	SrUnsec/LTCFR/PDR	15,793	U	Ba3	Ba1	SG
4/15/21	WIRECO WORLDGROUP INC.	Industrial	SrSec/BCF /LTCFR/PDR		U	Caa1	В3	SG
4/15/21	VIVINT SMART HOME, INC. -APX GROUP, INC.	Industrial	SrSec/SrUnsec/SrSec/ BCF/LTCFR/PDR	2,125	U	В3	B2	SG
4/16/21	HECLA MINING COMPANY	Industrial	SrUnsec/LTCFR/PDR	475	U	Caa1	В3	SG
4/16/21	BLUE RIBBON, LLC	Industrial	LTCFR/PDR		U	Caa1	B2	SG
4/16/21	CENTENNIAL RESOURCE DEVELOPMENT, INCCENTENNIAL RESOURCE PRODUCTION, LLC	Industrial	SrUnsec/LTCFR/PDR	900	U	Caa2	В3	SG
4/19/21	BEACON ROOFING SUPPLY, INC.	Industrial	SrUnsec/LTCFR/PDR	1,300	U	В3	B2	SG
4/19/21	ENCINO ACQUISITION PARTNERS HOLDINGS, LLC	Industrial	LTCFR/PDR		D	B1	B2	SG
4/20/21	HOWMET AEROSPACE INC.	Industrial	SrUnsec/LTCFR /PDR/PS	4,529	U	Ba3	Ba2	SG
4/20/21	STONEMOR INC.	Industrial	LTCFR/PDR		U	Caa1	В3	SG
4/20/21	SP HOLDCO I, INCSURGERY CENTER HOLDINGS, INC.	Industrial	SrSec/BCF /LTCFR/PDR		U	B1	B1	SG
4/20/21	BCPE EMPIRE TOPCO, INCBCPE EMPIRE HOLDINGS, INC.	Industrial	SrSec/BCF		U	В3	B2	SG
Source: Mo	ody's							

### IGURE 4

# Rating Changes: Corporate & Financial Institutions – Europe

Date	Company	Sector	Rating	Amount (\$ Million)	Up/ Down	Old LTD Rating	New LTD Rating	IG/ SG	Country
4/15/21	RWE AG	Utility	LTIR/Sub /MTN/CP	1,300	U	Ba2	Ba1	SG	GERMANY
4/19/21	ELECTRICITE DE FRANCE -EDISON S.P.A.	Industrial	LTIR		U	Baa3	Baa2	IG	ITALY
4/19/21	AGEAS SA/NV	Financial	LTIR/JrSub/IFSR		U	A2	A1	IG	BELGIUM
4/19/21	EUROPCAR MOBILITY GROUP S.A.	Industrial	SrSec/PDR	599	U	Caa1	В3	SG	UNITED KINGDOM
4/19/21	COCA-COLA EUROPEAN PARTNERS PLC	Industrial	SrUnsec/LTIR	8,228	D	А3	Baa1	IG	UNITED KINGDOM
4/20/21	EVONIK INDUSTRIES AG	Industrial	SrUnsec/LTIR /JrSub/MTN	3,594	D	Baa1	Baa2	IG	GERMANY
ource: Moo	dy's								

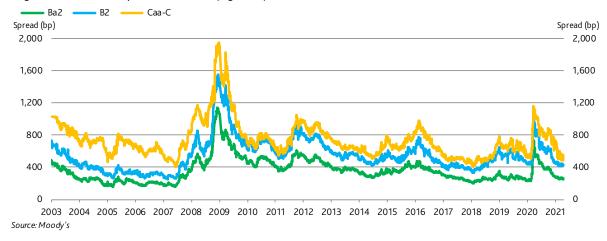
### Market Data

# **Spreads**

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 (April 14, 2021 – April 21, 2021)

CDS Implied Rating Rises	CDS Impli		
Issuer	Apr. 21	Apr. 14	Senior Ratings
PPG Industries, Inc.	A3	Baa2	A3
Raytheon Technologies Corporation	A2	A3	Baa1
Philip Morris International Inc.	A1	A2	A2
Bank of New York Mellon Corporation (The)	A1	A2	A1
PNC Financial Services Group, Inc.	A2	A3	A3
Dish DBS Corporation	Caa1	Caa2	B2
ERP Operating Limited Partnership	A2	A3	A3
WEC Energy Group, Inc.	A3	Baa1	Baa1
Liberty Interactive LLC	В3	Caa1	B2
iStar Inc.	B1	B2	Ba3

CDS Implied Rating Declines	CDS Impli	_	
Issuer	Apr. 21	Apr. 14	Senior Ratings
Altria Group Inc.	Baa2	A3	A3
JPMorgan Chase & Co.	A3	A2	A2
Bank of America Corporation	A3	A2	A2
Ally Financial Inc.	Ba1	Baa3	Ba1
Apple Inc.	A1	Aa3	Aa1
Comcast Corporation	A3	A2	A3
Oracle Corporation	A2	A1	Baa2
American Express Credit Corporation	A3	A2	A2
CVS Health Corporation	Baa1	A3	Baa2
Amazon.com, Inc.	A2	A1	A2

CDS Spread Increases			CDS Spreads	
Issuer	Senior Ratings	Apr. 21	Apr. 14	Spread Diff
Carnival Corporation	B2	348	315	33
Royal Caribbean Cruises Ltd.	B2	382	352	30
Encompass Health Corp.	B1	178	161	17
Univision Communications Inc.	Caa2	320	304	16
Murphy Oil Corporation	Ba3	428	412	16
American Airlines Group Inc.	Caa1	787	771	16
Altria Group Inc.	A3	59	45	14
Walgreen Co.	Baa2	65	51	14
Pactiv Corporation	Caa1	411	396	14
Nordstrom, Inc.	Baa3	253	240	13

CDS Spread Decreases			CDS Spreads	
Issuer	Senior Ratings	Apr. 21	Apr. 14	Spread Diff
R.R. Donnelley & Sons Company	В3	463	511	-48
Staples, Inc.	В3	692	734	-41
Dish DBS Corporation	B2	367	393	-26
iStar Inc.	Ba3	277	304	-26
Dell Inc.	Ba2	86	108	-22
Talen Energy Supply, LLC	В3	1,127	1,147	-20
Levi Strauss & Co.	Ba2	123	142	-19
Marathon Oil Corporation	Baa3	157	169	-12
Cameron International Corporation	Baa1	85	97	-12
United Airlines, Inc.	Ba3	416	427	-11

Source: Moody's, CMA

Figure 4. CDS Movers - Europe (April 14, 2021 - April 21, 2021)

CDS Implied Rating Rises	CDS Impli		
Issuer	Apr. 21	Apr. 14	Senior Ratings
Rabobank	Aa2	Aa3	Aa3
Barclays PLC	Baa1	Baa2	Baa2
Portugal, Government of	Aa3	A1	Baa3
Commerzbank AG	A3	Baa1	A1
NatWest Group plc	Baa1	Baa2	Baa2
NatWest Markets Plc	A3	Baa1	A3
FCE Bank plc	Ba2	Ba3	Ba2
Credit Suisse AG	Baa1	Baa2	Aa3
BAWAG P.S.K. AG	Baa2	Baa3	A2
Bertelsmann SE & Co. KGaA	Aa3	A1	Baa2

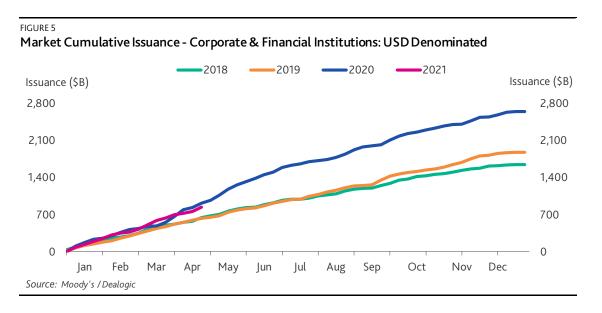
CDS Implied Rating Declines	CDS Implied Ratings		_
Issuer	Apr. 21	Apr. 14	Senior Ratings
Schaeffler Finance B.V.	Baa1	A2	Ba2
Banca Monte dei Paschi di Siena S.p.A.	Ba3	Ba2	Caa1
Merck KGaA	Aa2	Aa1	Baa1
United Utilities PLC	A2	A1	Baa1
Henkel AG & Co. KGaA	Aa2	Aa1	A2
Caixa Geral de Depositos, S.A.	Ba1	Baa3	Ba1
thyssenkrupp AG	B1	Ba3	B1
Italy, Government of	Baa3	Baa3	Baa3
France, Government of	Aa2	Aa2	Aa2
United Kingdom, Government of	Aaa	Aaa	Aa3

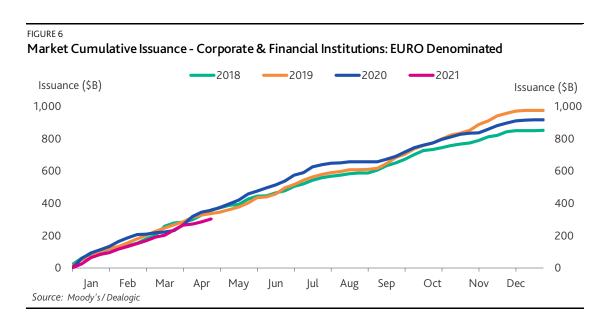
CDS Spread Increases		CDS Spreads		
Issuer	Senior Ratings	Apr. 21	Apr. 14	Spread Diff
Novafives S.A.S.	Caa2	769	743	26
Iceland Bondco plc	Caa2	420	397	23
thyssenkrupp AG	B1	243	227	17
Deutsche Lufthansa Aktiengesellschaft	Ba2	284	270	14
Piraeus Financial Holdings S.A.	Caa3	521	506	14
Casino Guichard-Perrachon SA	Caa1	524	511	13
Rolls-Royce plc	Ba3	269	259	10
Schaeffler Finance B.V.	Ba2	53	43	9
CMA CGM S.A.	B3	403	395	8
Ziggo Bond Company B.V.	B3	236	228	8

	CDS Spreads		
atings Apr. 21	Apr. 14	Spread Diff	
2 152	194	-43	
1 557	569	-12	
1 137	147	-10	
3 233	240	-8	
3 77	85	-8	
2 110	117	-7	
63	70	-6	
2 71	77	-6	
26	31	-5	
33	38	-5	
	233 233 33 77 32 110 2 63 32 71 3 26	233 240 233 77 85 22 110 117 2 63 70 2 71 77 3 26 31	

Source: Moody's, CMA

### **Issuance**





		USD Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	57.100	18.440	77.370
Year-to-Date	574.652	241.945	836.371
		Euro Denominated	
	Investment-Grade	High-Yield	Total*
	Amount \$B	Amount \$B	Amount \$B
Weekly	10.789	7.414	18.364
Year-to-Date	239.495	52.728	302.090

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CAPITAL MARKETS RESEARCH

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