

WEEKLY MARKET OUTLOOK

Moody's Analytics Research

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Markets Sense an Upturn Despite Pockets of Profound Misery

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[The Long View](#)

Full updated stories and key credit market metrics: Corporate bond issuance and rating revisions may be normalizing.

Credit
Spreads

Investment Grade: Year-end 2020's average investment grade bond spread may resemble its recent 134 basis points. High Yield: The high-yield spread may be somewhat above its recent 533 bp by year-end 2020.

Defaults

US HY default rate: According to Moody's Investors Service, the U.S.' trailing 12-month high-yield default rate jumped from August 2019's 3.1% to August 2020's 8.7% and may average 10.6% during 2020's final quarter.

Issuance

For 2019's offerings of US\$-denominated corporate bonds, IG bond issuance rose by 2.6% to \$1.309 trillion, while high-yield bond issuance surged by 55.8% to \$432 billion. In 2020, US\$-denominated corporate bond issuance is expected to soar higher by 52.1 for IG to a record 1.992 trillion, while high-yield supply may rise 23.4% to a record high \$534 billion.

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[Moody's Capital Markets Research](#) *recent publications*

Links to commentaries on: Issuance boom, default rate, volatility, credit quality, unprecedented stimulus, bond yields, record savings rates, demographic change, high tech, complacency, Fed intervention, speculation, risk, credit stress, rate cuts, optimism, coronavirus, corporate credit, spreads, leverage, VIX.

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[Click here for Moody's Credit Outlook](#), our sister publication containing Moody's rating agency analysis of recent news events, summaries of recent rating changes, and summaries of recent research.

Credit Markets Review and Outlook

Credit Markets Review and Outlook

By John Lonski, Chief Economist, Moody's Capital Markets Research, Inc.

Markets Sense an Upturn Despite Pockets of Profound Misery

The declining trend of initial state unemployment claims persists. Since peaking at the 5.79 million of the span-ended April 18, the moving four-week average of first applications for state jobless benefits has since declined to the 857,000 of the span-ended October 3.

Though the number of unemployed individuals remains far too high, the declining trend of initial state unemployment claims should continue as Americans better adapt to the constraints imposed by COVID-19.

To a degree, reduced spending on travel, leisure, and hospitality will be re-allocated elsewhere. For example, food stores and their wholesale suppliers have benefited considerably from much diminished spending at restaurants. Indeed, several companies with exposure to food retailing have had their credit outlooks revised higher, while some have had credit ratings revised higher.

The flexibility of the U.S. economy is of vital importance. Regulations which hinder such flexibility may have dire implications for living standards and social stability.

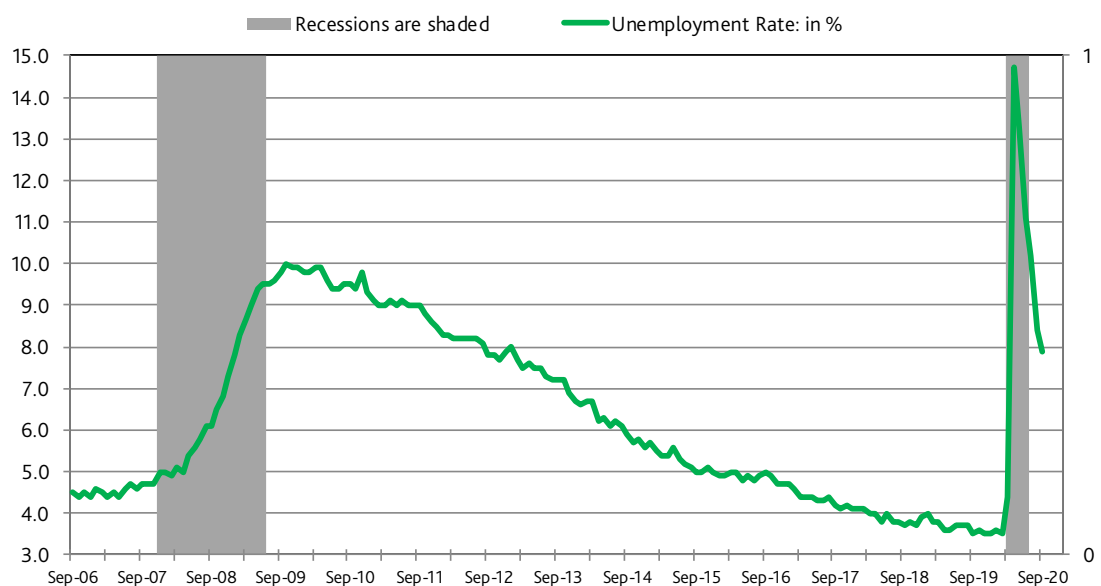
Drop by Jobless Rate Is Much Quicker than 2009-2012's Slide

After having endured a recession like no other, the U.S. is now in a recovery like no other. In fact, pockets of depression-like conditions argue against the presence of a business-cycle upturn notwithstanding a third-quarter 2020 annualized sequential rebound by real GDP that may be closer to 30% than 25%.

Nevertheless, important macro indicators of U.S. business activity appear to be improving at a faster pace compared with the recovery that followed 2008-2009's Great Recession. Consider the drop by the unemployment rate from April 2020's roughly 80-year high of 14.7% to September's 7.9%. The five months that it took for the jobless rate to plunge by 6.8 percentage points to 7.9% seems extraordinary when compared to the 35 months that expired between the unemployment rate's October 2009 peak of 10.0% to something no greater than 7.9% (or the 7.8% of September 2012).

Figure 1: Took Only 5 Months for Unemployment Rate to Drop from April 2020's Peak to September's 7.9%...35-Month Wait for Jobless Rate to Sink from 2009's Peak to 7.9%

sources: BLS, NBER, Moody's Analytics



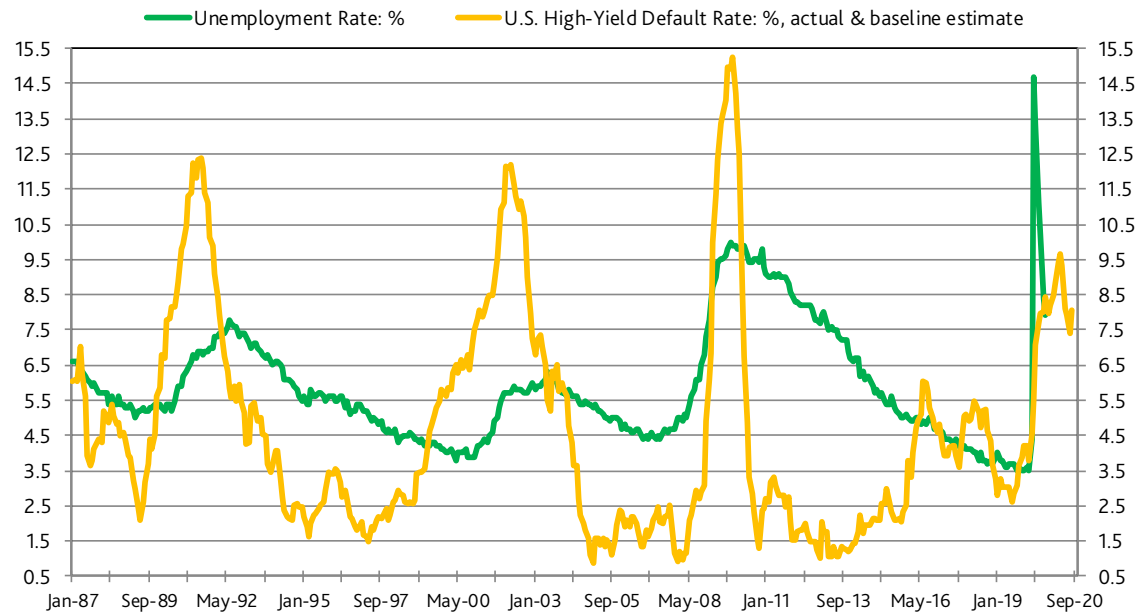
Credit Markets Review and Outlook

Lower Unemployment Rate Foreshadows Lower Default Rate

The ongoing slide by the unemployment rate bodes well for corporate credit quality. The quick drop by the U.S. jobless rate reinforces expectations of a short-lived climb by the high-yield default. Immediately following a recession, rising rates of utilization for labor and other productive resources often generate outsized gains for corporate earnings that drive default rates lower. As the outlook for corporate earnings improves, corporate credit spreads narrow. Thinner spreads help to boost systemic liquidity, which reinforces the declining trend for defaults.

Figure 2: High-Yield Default Rate Trended Lower Following Each Prior Cycle Peak for Unemployment Rate

sources: U.S. Labor Department, Moody's Investors Service, Moody's Analytics



The record also shows that prior series of increases by the default rate amid a declining unemployment rate are short-lived. For example, in response to 2015-2016's profits recession and bout of industrial commodity price deflation, the U.S. high-yield default rate rose from December 2014's 2.1% to a June 2016 high of 6.0%. However, the accompanying slide by the jobless rate from December 2014's 5.6% to December 2016's 4.7% helped to quickly drop the default rate to 4.6% by the end of 2016.

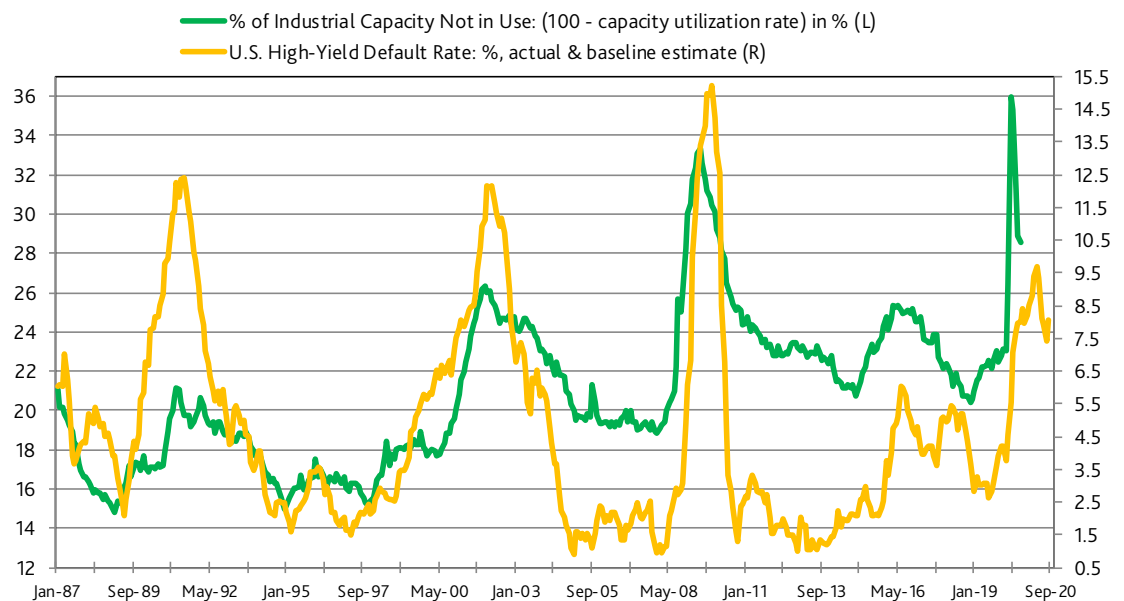
Capacity Usage Outshines Jobless Rate at Explaining Defaults

What did correlate well with 2015-2016's brief climb by the default rate was a transitory drop by the rate of industrial capacity utilization. The climb by the default rate from December 2014's 2.1% to June 2016's 6.0% was closely linked to a drop by the percent of industrial capacity in use from 79.0% to 74.9%, respectively. During this episode, the capacity utilization rate bottomed at May 2016's 74.6%.

According to a sample that begins in January 1988, the year-to-year percentage point change of the stronger inverse correlation of -0.70 with the yearly change of the industrial capacity utilization rate compared to its 0.45 correlation with the yearly change of the unemployment rate.

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Figure 3: High-Yield Default Rate Moves in Direction Taken by the Percent of Industrial Capacity Not in Use
 sources: Federal Reserve, Moody's Investors Service, Moody's Analytics



ISM's Service-Sector Index Stages a Stunning Recovery

Markets now give short shrift to September's smaller-than-anticipated addition of 661,000 jobs to U.S. nonfarm payrolls. Instead markets turned their attention to September's bigger-than-expected addition of 879,000 jobs to private-sector payrolls.

The unexpectedly low number for overall jobs growth was more than accounted for by the loss of 281,000 government jobs to the delayed opening of public schools in many parts of the U.S. After excluding public-sector education, government payrolls would have grown by 65,000 jobs in September, which, in turn, implied a 942,000 job increase by nonfarm payrolls excluding public education.

The service sector has suffered disproportionately from the COVID-19 recession. Nonetheless, the ISM index of U.S. service-sector activity has performed splendidly. The latest release shows the ISM service-sector index rising from August's already elevated 56.9 points to a higher-than-anticipated 57.8 points in September. The ISM services index has topped a very lively 56 points for four consecutive months, which is unusual for even a solid business cycle upturn.

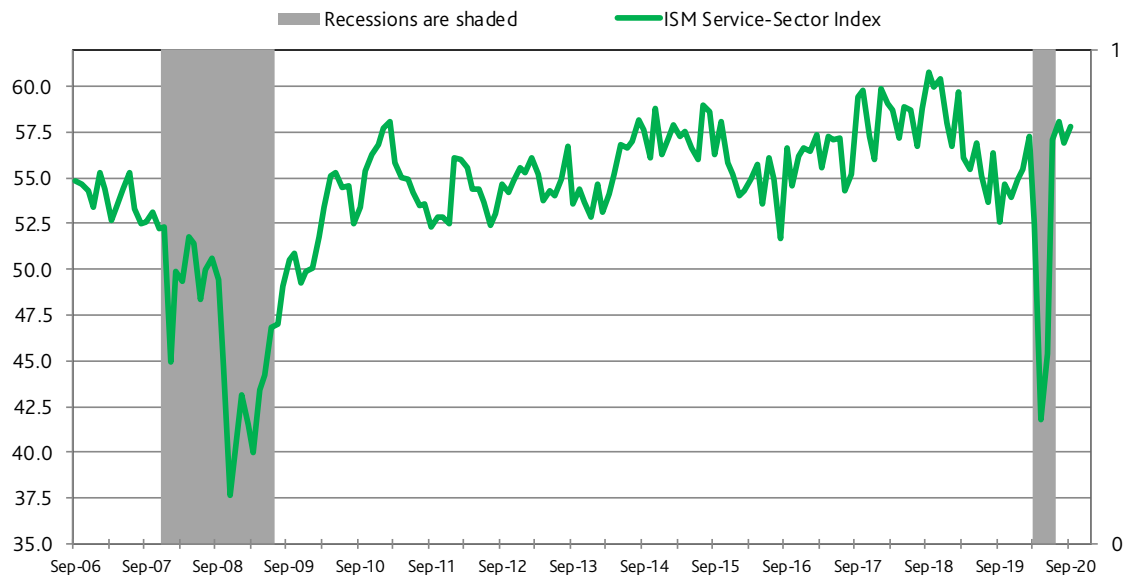
Not only did the ISM's U.S. service-sector index fare much worse during the Great Recession, its recovery from 2008-2009's downturn was limp. For example, the ISM's service-sector index incurred a contractionary score of less than 50 for each of the 12 months ended August 2009, ten of which overlapped the Great Recession.

In stark contrast, the services index spent only two months at a reading of less than 50 during the COVID-19 recession, namely April and May. Moreover, the recovery from 2008-2009 was so sluggish that the ISM service-sector index did not at least match its 57.5-point average of the four months ended September 2020 until the four months ended November 2014. The latter was nearly five and a half years after June 2009's official end to the Great Recession.

Credit Markets Review and Outlook

Figure 4: ISM's Service-Sector Activity Index Recovers Quickly Despite COVID-19's Devastation of Commercial Airline, Restaurant, Lodging and Entertainment Industries

sources: Institute for Supply Management, NBER, Moody's Analytics



ISM Composite Index Favors Thinner Corporate Bond Yield Spreads

The ISM's indices of service-sector activity and manufacturing can be combined to form a composite index of U.S. economic activity. Applying weights of 75% to services and 25% to manufacturing generates a composite activity index that supplies a very high inverse correlation of -0.80 with the high-yield bond spread's month-long average. Thus, it is not surprising that when the ISM composite most recently bottomed at the 41.7 points of April 2020, the high-yield bond spread peaked at 796 basis points. September 2020's ISM composite equaled 57.2 points for its highest reading since February 2019's 58.3 points.

When the ISM composite averaged 54.0 points during the 12-months-ended February 2020, the high-yield bond spread averaged 376 bp. Nevertheless, the latter was unsustainably thin according to the historical record.

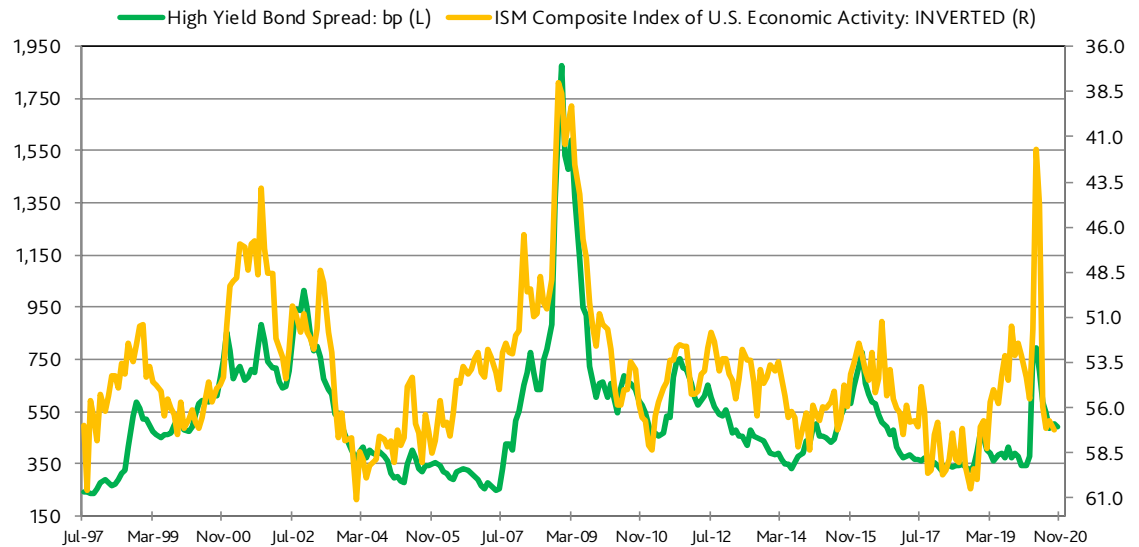
As inferred from the long-term relationship between the high-yield bond spread and the ISM composite, a lasting stay by the composite at or above September's 57.2 points would favor a midpoint of 400 bp for the high-yield bond spread. The latter is well under October 7's high-yield bond spread of 479 bp.

When the ISM composite last bottomed at April 2020's 41.7 points, the statistical record supplied a 1,150 bp midpoint for the high-yield bond spread. However, the high-yield spread instead averaged a much narrower 796 bp. Perhaps, October's now wider-than-interpolated spread from the ISM composite correctly warns of a lower ISM composite in the months ahead.

Credit Markets Review and Outlook

Figure 5: Recovery by Weighted Average of ISM's Manufacturing and Service-Sector Indices (INVERTED) Complements Narrowing of High-Yield Bond Spread

sources: Bloomberg/Barclays, ISM, Moody's Analytics



Rally in Motor Vehicle Industry Shares Hints of Deepening Recovery

Home sales have staged a V-shaped recovery and then some. August 2020's sum of the unit sales of new and existing homes was the highest since December 2006. A still positive outlook for housing explains why the PHLX index of housing-related stock prices was recently up by 15.8% for 2020-to-date and 19.1% year-to-year, both of which outran the U.S. equity market's comparably measured gains of 6.9% and 18.4%, respectively.

Housing is not the only big-ticket item showing improved sales. On October 1, it was reported that September's seasonally adjusted sales of light motor vehicles in the U.S. rose by 7.6% from August to an annualized pace of 16.3-million units. The latter represents the best month for auto sales since February 2020's 16.8-million annualized units. September's bigger-than-expected jump by auto sales favors at least a 37% annualized sequential increase by the real consumer spending of 2020's third quarter.

By responding positively to the upbeat reading on September's auto sales, the higher prices of motor vehicle industry shares reflect expectations of a faster pace for motor vehicle sales. Since the end of September 2020—or just prior to the release of September's car and light truck sales—the equity prices of 11 manufacturers from the motor vehicle and parts industry showed a stunning median percent increase of 14.8% as of the early afternoon of October 8.

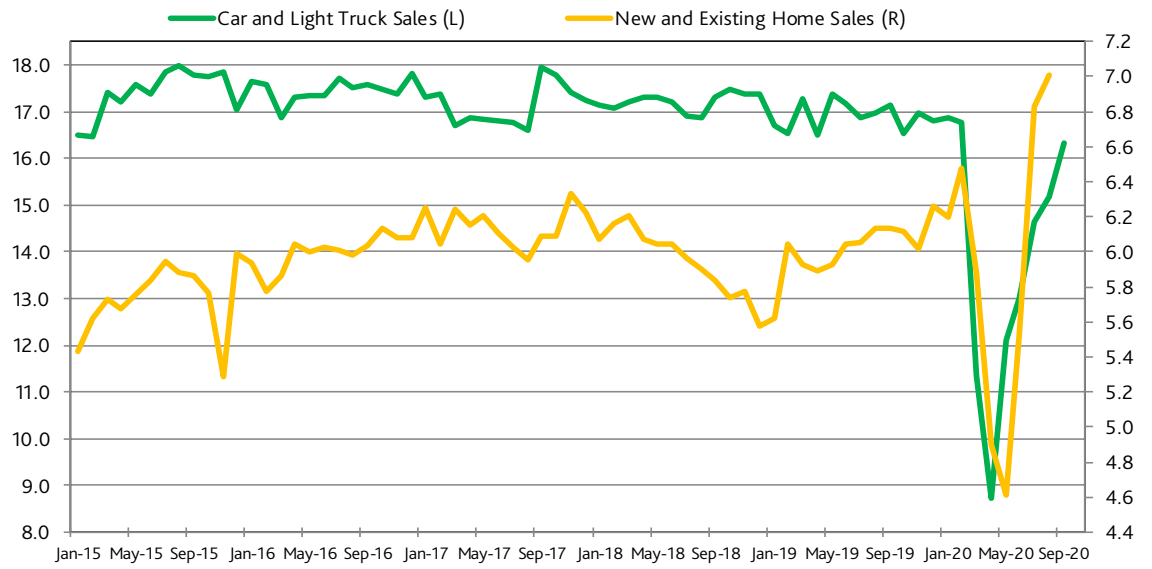
According to the same serial comparison, the market value of U.S. common increased by a smaller 2.9%, where the latter included an outsized 7.5% advance by the Russell 2000 stock price index for smaller companies. Not only is the Russell 2000's latest rally good news for the many small-company high-yield issuers, the latest upswing by the Russell 2000 also hints of a more widely distributed business cycle upturn.

Credit Markets Review and Outlook

Figure 6: Unit Sales of Housing and Light Motor Vehicles Both Form V-Shaped Recoveries

millions of annualized units

source: Moody's Analytics



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

THE U.S.

By Evan Karson and Bridget Ryan of Moody's Analytics

How Long Will Recovery Take?

Recent labor market data indicate that the initial bounce from reopening efforts faded in July and August, raising questions about the shape and length of the ongoing U.S. recovery.

Currently, the Moody's Analytics baseline has the U.S. reaching pre-COVID-19 employment by the end of 2023, but the baseline assumes that about \$1.5 trillion in additional stimulus will be approved before Election Day and that the U.S. will stave off another major intensification in new COVID-19 infections, which have accelerated throughout September. The forecast greatly depends on the spread of the virus as summer turns to fall and whether Congress can quickly agree on a substantial relief package.

Various possible recoveries

To frame the potential distribution of outcomes for the labor market, we simulate various possible recoveries using historical data. We calculate the average monthly growth rate of nonfarm payrolls in each of the last 12 U.S. expansions, beginning with the 1947-1948 expansion and ending with the decade-long recovery that followed the Great Recession. Next, we apply each growth rate ad infinitum to the most recent Bureau of Labor Statistics estimate of nonfarm payrolls to see how long a full recovery would take across a range of potential outcomes.

U.S. Historical Expansions

| Start mo | End mo | Length (mo) | Avg jobs added per mo (ths) | Avg monthly growth rate of payrolls (%) |
|----------|----------|-------------|-----------------------------|---|
| Jan-1947 | Oct-1948 | 22 | 81 | 0.18% |
| Nov-1949 | Jun-1953 | 44 | 189 | 0.36% |
| Jun-1954 | Jul-1957 | 38 | 114 | 0.22% |
| May-1958 | Mar-1960 | 23 | 161 | 0.31% |
| Mar-1961 | Nov-1969 | 105 | 168 | 0.27% |
| Dec-1970 | Oct-1973 | 35 | 200 | 0.27% |
| Apr-1975 | Dec-1979 | 57 | 254 | 0.30% |
| Aug-1980 | Jun-1981 | 11 | 139 | 0.15% |
| Dec-1982 | Jun-1990 | 91 | 234 | 0.24% |
| Apr-1991 | Feb-2001 | 119 | 207 | 0.17% |
| Dec-2001 | Nov-2007 | 72 | 103 | 0.08% |
| Jul-2009 | Jan-2020 | 127 | 171 | 0.12% |

Sources: BLS, NBER, Moody's Analytics

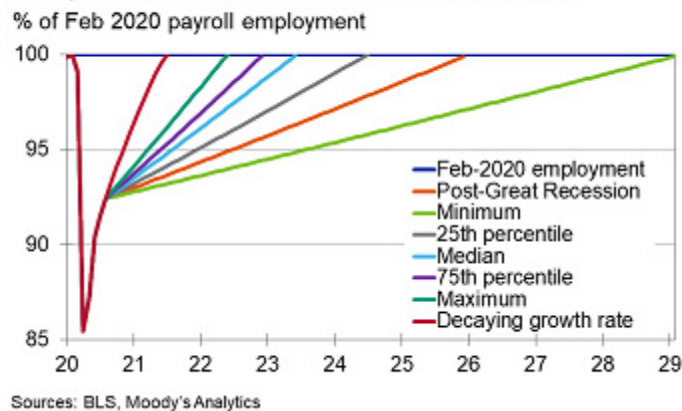
The median historical growth rate (0.23%) implies that nonfarm payrolls would not reach pre-pandemic levels until mid-2023, roughly a three-year recovery and close to par with the Moody's Analytics baseline. The duration of potential recoveries varied from two years at the shortest to nine years at the longest, a range of seven years.

While both the two-year and nine-year-projections represent potential tail outcomes, the extreme downside scenario may be more plausible than the extreme upside. The growth rate used in the extreme upside scenario (that is, the maximum growth rate) comes from the 1949-1953 post-World War II boom years, a period in economic history starkly different from the present. Conversely, the

The Week Ahead

extreme downside scenario uses the pace of job growth from the 2001-2007 expansion, a period when the economy bore material structural and demographic resemblance to today's economy.

A Spectrum of Potential Recoveries



The scenario using the growth rate of the 2009-2020 expansion merits special attention. Even though the financial crisis of 2007-2008 and the COVID-19 pandemic created vastly different economic problems, the U.S. economy of the 2010s provides the closest comparison to today's economy based on structure and demographics.

At 0.12%, the pace of job growth averaged during the 2009-2020 expansion implies that nonfarm payrolls would not heal to pre-pandemic levels until early 2026, a six-year recovery that would stretch for another 1½ presidential terms. An important caveat is that economic recoveries following financial crises tend to be slow, weakening the comparative value of the 2009-2020 expansion.

A different economic hole

Our backward-looking approach is limited by the fact that the U.S. is digging itself out of an economic hole qualitatively different from any in our sample. In addition to the unique public health risks stemming from the COVID-19 pandemic, the magnitude of the recession is unprecedented: The peak-to-trough GDP decline will be 9.1% at minimum, more than two times worse than the previous record set in the Great Recession when real GDP contracted 3.9%.

To provide at least one potential recovery path based on data from the current crisis, we estimate the decay rate of employment growth from May, when payrolls began recovering, through August. We find that job growth over this period has decreased by an average of 5% per month, and we use this 5% decay rate to forecast job growth. To briefly explain, we take the rate of job growth in August (0.98%) and reduce it by 5% (that is, we multiply by 0.95), resulting in a growth rate of 0.93%, which we apply to the level of employment in August to forecast September payrolls. We repeat this process of decaying the pace of job growth until the projected level of employment reaches pre-pandemic levels.

This approach implies a full recovery by summer 2021, a rebound faster than that of any historical growth rate we tested. However, there are reasons to question this projection. We have only four datapoints with which to calibrate the decay rate (a small sample), and the decay rate itself is highly sensitive to which observations are included. For instance, if the May datapoint is removed from the calculation, the decay rate balloons from 5% to 43%, and at a decay rate greater than 11%, nonfarm payrolls never reach their pre-pandemic level.

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Two big downside risks

Two major downside risks loom over the road to recovery that could determine which path the labor market will follow: a spike in COVID-19 cases or a fiscal policy blunder. A double-dip recession will be unavoidable if widespread contagion slows business activity materially or sparks another round of nonessential business closures. The risk of a surge is increasing as the weather gets colder and people begin socializing inside.

The economic impact from a prolonged congressional stalemate on fiscal relief could be devastating, too. State and local governments are grappling with unprecedented budget shortfalls and, generally, have less fiscal space to maneuver than the federal government. Failing to deliver another round of direct stimulus payments or expand unemployment benefits would hit household spending and consumer-driven industries hardest.

Ultimately, significant gains will occur only when a vaccine is widely available. Businesses that cannot operate at full capacity because of social distancing rules will make limited contributions to job growth until those restrictions can be relaxed safely.

Next Week

After several months of firm gains, inflation indicators for September via the consumer and producer price indexes along with import-export prices will bear close scrutiny. U.S. retail sales for September will shed light on the state of the recovery after gains slowed in August. Tuesday's NFIB index for September will open a window on small business optimism, which in August had regained some of the strength lost a month prior. The state of the economy also will be displayed in other indicators due in the week, including industrial production for September, the Philadelphia Fed's latest factory survey, the Empire State manufacturing survey, and business inventories for August.

EUROPE

By Ross Cioffi of Moody's Analytics

Euro Zone CPI Still Falling

Industrial production and consumer price releases will be at the fore as data are released for August and September. We expect that German consumer prices fell 0.2% y/y in September after making no move in August. Germany will have followed in the footsteps of Spain and Italy, where prices are likely to have contracted 0.4% y/y and 0.5% respectively this September, similar to their August declines. Weak demand has been putting downward pressure on prices across the euro zone. Prices are falling the most in Spain and Italy, where the recession has been strongest. In Germany a temporary VAT cut, introduced in July and lasting until the end of the year, is adding the extra pressure that will push prices into contractionary territory this fall and winter to weigh down the euro zone aggregate. Of the major economies, France is the only one where prices likely continued growing in September, but by just 0.1% y/y, down from 0.2%. Ultimately, we expect September consumer prices in the euro zone to have fallen 0.3% y/y.

Euro zone aggregate industrial production data for August is also due. We see output falling 2.1% m/m after having risen 4.1% in July. We always expected the recovery in output to slow by the end of the third quarter. Demand won't hold up as long as COVID-19 forces households and businesses to put major spending and investment decisions on hold. Russian industrial production figures, due Thursday, should have improved in September, but output will remain significantly below year-ago levels. We think production will fall 5.1% y/y for September, following the 7.2% decline in August. In particular, oil demand is wavering as European countries (Russia's major market) get ready for a second wave of COVID-19.

The trade surplus for the euro zone likely tightened to €15.7 billion in August from July's €27.9 billion. Trade flows are slowly improving after this Spring's shock. Exports and imports are recovering but will remain below pre-pandemic levels for months to come. In the meantime, we expect imports grew faster than exports. Thanks to a relatively sturdy recovery in China, trade between it and the euro area returned more quickly, but demand from the U.S. and U.K. have been much slower to return thanks to more virulent pandemics and an earlier winding down of stimulus measures than in much of Europe.

Finally, the U.K. unemployment rate was likely unchanged at 4.1% in the three months to August after rising to 4.1% in July from 3.9% in June. The U.K.'s current short-time work benefits will stay in effect through October, at which point they will be extended under a less-generous program for another six months. The support should keep the unemployment rate low for the time being, and it is the reason we think the August unemployment rate held steady. But the British economy is still reeling from the pandemic, and things will only worsen if Brexit trade negotiations fall apart. We expect hiring to be largely on hold until COVID and Brexit uncertainties improve.

| | Key indicators | Units | Moody's Analytics | Last |
|------------------|---|-----------------|-------------------|------|
| Mon @ 2:00 p.m. | Russia: Foreign Trade for August | \$ bil | 6.9 | 4.3 |
| Tues @ 7:00 a.m. | Germany: Consumer Price Index for September | % change yr ago | -0.2 | 0.0 |
| Tues @ 9:30 a.m. | U.K.: Unemployment for August | % | 4.1 | 4.1 |
| Wed @ 8:00 a.m. | Spain: Consumer Price Index for September | % change yr ago | -0.4 | -0.5 |
| Wed @ 10:00 a.m. | Euro Zone: Industrial Production for August | % change | -2.1 | 4.1 |
| Thur @ 7:45 a.m. | France: Consumer Price Index for September | % change yr ago | 0.1 | 0.2 |
| Thur @ 1:00 p.m. | Russia: Industrial Production for September | % change yr ago | -5.1 | -7.2 |
| Fri @ 9:00 a.m. | Italy: Consumer Price Index for September | % change yr ago | -0.5 | -0.5 |
| Fri @ 10:00 a.m. | Euro Zone: External Trade for August | € bil | 15.7 | 27.9 |
| Fri @ 10:00 a.m. | Euro Zone: Consumer Price Index for September | % change yr ago | -0.3 | -0.2 |

Asia-Pacific

By Shahana Mukherjee of Moody's Analytics

Pandemic Weighs on Singapore's GDP

Singapore's GDP is likely to have declined by 7.13% in yearly terms in the September quarter, following a 12.6% decline in the prior quarter. The economy sank into recession as the 'circuit breaker' measures to contain the significant rise in domestic COVID-19 cases eroded all sectors, but weighed most heavily on construction, which fell by 54.7% in yearly terms. While restrictions have gradually eased, the resurgence of new cases in August and the significant weakness in demand are likely to have weighed heavily on the aggregate through the September quarter.

China's trade position is expected to have strengthened further in September, as exports are likely to have increased by 5% in yearly terms following a 9.5% increase in August. The Chinese economy has continued to recover strongly in the post-restrictions phase, with exports having returned to growth since June. The recovery in overseas demand, however, has been uneven and aided by the notable increase in demand for medical, electrical and high-tech products. We expect the ongoing resumption in global production and consumption to have buoyed demand through September, but the pace is expected to moderate, considering the previous month's low-base effect and because restrictions were renewed across parts of Europe.

The Bank of Korea is expected keep its benchmark policy rate unchanged at 0.5% at its October meeting. The central bank has responded to the COVID-19 shock with a significant 75-basis point rate cut and several measures to sustain financial market liquidity. While the prominent second wave, which peaked at the end of August, has placed additional strain on domestic conditions, we expect the central bank to hold fire for now, as another rate cut following a prolonged period of a low interest rates can exacerbate the strain on already high levels of household debt.

Australia's unemployment rate is expected to have risen to 7% in September from 6.8% in August. Even though most of Australia is in recovery and weekly payroll jobs have increased through most of September, the stringent restrictions imposed in the state of Victoria are expected to have worsened employment prospects within the state and weighed heavily on the national average, as several businesses remained closed through this period.

India's industrial production in August is expected to have improved further, declining by a narrower margin of 6% in yearly terms, following a 10.4% decline in July. Production has continued to resume in India following the easing of restrictions since June. With domestic consumption on the mend and exports having returned to growth in September after six months of decline, we expect a corresponding pickup in industrial production. However, in yearly terms, output is likely to have remained lower.

| | Key indicators | Units | Moody's Analytics | Confidence | Risk | Last |
|-------------------|---|-----------------|-------------------|------------|------|-------|
| Mon @ 9:50 a.m. | Japan Machinery Orders for August | % change | 3.0 | 2 | ↑ | 6.3 |
| Mon @ 3:00 p.m. | Malaysia Industrial Production for August | % change yr ago | 0.8 | 2 | ↓ | 1.2 |
| Mon @ 11:00 p.m. | India Industrial Production for August | % change yr ago | -6.0 | 2 | ↓ | -10.4 |
| Mon @ 11:00 p.m. | India CPI for September | % change yr ago | 6.8 | 3 | ↑ | 6.7 |
| Tues @ 1:00 p.m. | China Foreign Trade for September | US\$ bil | 64.0 | 3 | ↓ | 58.9 |
| Tues @ 6:30 p.m. | Indonesia Monetary Policy for October | % | 4 | 4 | ← | 4 |
| Wed @ 11:00 a.m. | Singapore GDP for Q3 | % change yr ago | -7.13 | 3 | ↓ | -12.6 |
| Wed @ 12:00 p.m. | South Korea Monetary Policy for October | % | 0.5 | 4 | ← | 0.5 |
| Thur @ 10:30 a.m. | Australia Unemployment for September | % | 7.0 | 3 | ↓ | 6.8 |
| Thur @ 11:30 a.m. | China CPI for September | % change yr ago | 2.3 | 3 | ↑ | 2.4 |
| Thur @ 11:30 a.m. | China Producer Prices for September | % change yr ago | -1.5 | 3 | ↓ | -2.0 |
| Thur @ 3:00 p.m. | Indonesia Foreign Trade for September | US\$ bil | -1.80 | 2 | ↑ | 2.33 |
| Thur @ 11:20 p.m. | India Foreign Trade for September | US\$ bil | -3.0 | 3 | ↓ | -6.8 |
| Fri @ 11:30 a.m. | Singapore Nonoil Exports for September | % change yr ago | 4.5 | 3 | ↑ | 7.7 |

The Long View

Corporate bond issuance and rating revisions may be normalizing.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group
October 8, 2020

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 134 basis points exceeded its 116 basis-point median of the 30 years ended 2019. This spread may be no wider than 135 bp by year-end 2020.

The recent high-yield bond spread of 533 bp is thinner than what is suggested by the accompanying long-term Baa industrial company bond yield spread of 207 bp and the recent VIX of 27 points. The latter has been historically associated with a 730-bp midpoint for the high-yield bond spread.

DEFAULTS

August 2020's U.S. high-yield default rate of 8.7% was up from August 2019's 3.1% and may approximate 11.3%, on average, by 2021's first quarter.

US CORPORATE BOND ISSUANCE

Second-quarter 2019's worldwide offerings of corporate bonds revealed an annual setback of 2.5% for IG and an annual advance of 17.6% for high-yield, wherein US\$-denominated offerings sank by 12.4% for IG and surged by 30.3% for high yield.

Third-quarter 2019's worldwide offerings of corporate bonds revealed annual advances of 15.2% for IG and 56.8% for high-yield, wherein US\$-denominated offerings soared higher by 36.8% for IG and 81.3% for high yield.

Fourth-quarter 2019's worldwide offerings of corporate bonds revealed annual advances of 15.3% for IG and 329% for high-yield, wherein US\$-denominated offerings dipped by 0.8% for IG and surged higher by 330% for high yield.

First-quarter 2020's worldwide offerings of corporate bonds revealed annual advances of 17.7% for IG and 26.5% for high-yield, wherein US\$-denominated offerings increased 43.7% for IG and grew 21.4% for high yield.

Second-quarter 2020's worldwide offerings of corporate bonds revealed annual surges of 69% for IG and 31% for high-yield, wherein US\$-denominated offerings increased 142% for IG and grew 45% for high yield.

For 2019, worldwide corporate bond offerings grew by 5.4% annually (to \$2.447 trillion) for IG and advanced by 49.2% for high yield (to \$561 billion). The projected annual percent increases for 2020's worldwide corporate bond offerings are a 16.2% advance for IG and 17.0% for high yield.

US ECONOMIC OUTLOOK

Unacceptably high unemployment and other low rates of resource utilization will rein in Treasury bond yields. As long as the global economy operates below trend, 1.00% will serve as the upper bound for the 10-year Treasury yield. Until COVID-19 risks fade substantially and election year risks recede, wider credit spreads are possible.

The Long View

Europe

By Ross Cioffi and Barbara Teixeira Araujo of Moody's Analytics
October 8, 2020

GERMANY

Germany's seasonally adjusted foreign trade surplus narrowed to €15.7 billion in August from €18 billion in July. The balance fell as imports grew faster than exports. Seasonally adjusted imports rose 5.8% m/m in August, adding to the 1.1% gain in July, while exports were up just 2.4% in August after a stronger 4.7% increase in July. In not seasonally adjusted terms, the trade surplus came in at €12.8 billion, down from €16.4 billion in the same month a year earlier. The current account balance, which adds trade in services (€2.9 billion deficit) and primary (€8.2 billion surplus) and secondary income (€3.2 billion deficit) to the trade balance, came in at €16.5 billion in August, up from €15.9 billion a year earlier. One reason the current account surplus improved was that in yearly terms, the services deficit narrowed more than the goods surplus did. This likely came from falling demand for business-to-business services and for tourism.

The recovery in trade progressed as expected in August. There is still a good way to go before exports and imports reach pre-pandemic levels, however. Our expectation is that imports into Germany will continue to grow slightly faster than exports, thereby keeping a lid on the trade surplus. Domestic demand should hold up better than foreign demand this year.

Although the country's center of gravity is its exporters, incomes are being protected through generous and timely stimulus measures, which could reach nearly 40% of GDP between state-backed loan guarantees for firms, direct spending like the short-time work scheme, and liquidity measures. Meanwhile, governments in many of Germany's major trade partners, such as Italy, have less space to roll out stimulus that would back up their domestic demand—or demand for Germany's exports. Unfortunately, demand for German exports will weaken further as COVID-19 spreads again in Europe and countries practice new social distancing measures. That said, a lot of the problem in August came from persistently weak exports to third countries: The two culprits here are the U.K. and the U.S.

Surprise decline in IP

Markets were disappointed Wednesday by the 0.2% m/m fall in Germany's industrial production in August—the consensus was for a further increase of over 1% m/m, which would have built on July's 1.4% rise. The drop came at odds with the factory orders data released on Tuesday, which were strong and showed that German new industrial orders surged for the fourth month running in August, raising hopes that the manufacturing rebound would carry over into the fourth quarter.

However, we weren't surprised by the decline. We have long warned that the immediate post-lockdown momentum wasn't expected to last—it was mainly due to pent-up demand—and that some slowdown was likely in the final quarter of 2020. The resurgence of COVID-19 cases across Europe only reinforces this view, especially because many euro zone countries are now reimposing restrictive measures to contain the virus, which should dent demand for Germany's export products. Although the situation at home remains more or less contained (at least compared with that of the other major euro zone countries), we wouldn't rule out further restrictions in some major German cities as well. This would hit domestic demand, especially for capital and consumer products, and compound the hit to external demand. Granted, we do expect that exports to Asia and the U.S. will hold ground in coming months, but risks are clearly tilted to the downside, especially because of the lack of agreement on fiscal stimulus in the U.S.

Back to the industrial production release details, the bad news was that the biggest drag came from the manufacturing industry. Manufacturing output fell by 0.7% m/m in August, which meant it remained about 12% below February levels. Across subsectors, the sharpest decline was recorded in capital goods production—it is still 16.4% below pre-pandemic levels—though this isn't surprising given how the pandemic is curbing investment overall.

Energy production rose sharply in August as the economy went further back on line. But construction output fell for the second month running, in line with the increased uncertainty levels, and it remained almost 7% below pre-pandemic levels. We think that energy production will take a step back in coming months, especially given the further travel restrictions imposed from September, while the story for construction shouldn't change much. Overall, then, we think it will still take some time before industrial production returns to precrisis levels.

The Long View

Asia Pacific

By Shahana Mukherjee of Moody's Analytics
October 8, 2020

AUSTRALIA

More evidence has emerged that a recovery in global consumption is well underway. Australia's exports slid by 4% in monthly terms in August following a 3.4% pickup in July, whereas imports rose by 2% following a stronger 6.2% increase in July. This marks the fourth consecutive month of decline in Australia's overseas sales but is characterized by some new developments.

While this reading reflects a deterioration in Australia's net exports position, the underlying details set this development in perspective. First, the monthly decline was entirely driven by a sharp contraction in nonmonetary gold shipments, the demand for which has accelerated in recent months owing to the COVID-19-induced uncertainty, and other mineral fuels. However, the primary components of Australia's merchandise exports—metals and metal ores, and coal, which contribute 46% and 11% to total goods exports, respectively—returned to growth in August, having risen by 3.4% and 9.3% in monthly terms, respectively.

Rural goods exports

Second, Australia's rural goods exports, which constitute approximately 12% of total goods exports, also bounced back in August, with all key categories showing growth despite the restrictions imposed by China on some of Australia's agricultural products. Moreover, the decline in services exports, too, eased in August, even though, the pause on tourism continues to weigh heavily on various industries. Overall, however, a change in the fundamentals of overseas demand for Australia is underway, and this resonates with the larger regional trend, even though weakness persists in some manufacturing segments including transport equipment, where exports are seeing a slower pickup.

Despite the largely reassuring turnaround, the concerns for Australia's exporters are far from over. The ongoing recovery in China's industrial activity bodes well and should sustain the current momentum seen in the demand for commodities such as iron ore. However, with global COVID-19 infections on the rise and restrictions returning in Europe following the resurgence of new cases, a potentially significant setback in global production is not entirely off the cards. For Australia's mining industry, even if the volume impact is relatively minor to the extent that the pickup in China partially offsets this pressure, the impact through potentially weaker global commodity prices could stack up unfavourably.

Trade tensions

Brewing trade tensions with China also remain a pertinent downside risk for agricultural exporters. China's trade restrictions impact Australia's barley, beef and wine exports to China, but concerns remain elevated that this could be expanded to cover key commodity exports. The likelihood of such a move remains low, considering Australia's prominent position as a supplier of iron ore and one of the top suppliers of a number of commodities to China. With limited options of alternative source markets, higher tariffs at this stage on iron ore or coal will exacerbate production costs and lower profitability margins. However, other goods are not entirely out of the tariff ambit at this stage.

The bigger concern remains the U.S.-China trade tensions. At a time when the global economy is just beginning to recuperate from the COVID-19 shock, another trade war will only exacerbate existing supply disruptions and trigger other potentially significant setbacks. We don't expect any major changes to trade policy until the U.S. elections next month, but the outcome will have a bearing on future trade policy and regional trade integration in a meaningful way. In the current setting, geopolitical tensions and the restrictions associated with the pandemic remain the pertinent downside risks that can stoke uncertainty and disrupt the recovery through the rest of 2020.

Ratings Round-Up

Ratings Round-Up

U.S. Corporate Credit Quality Declines

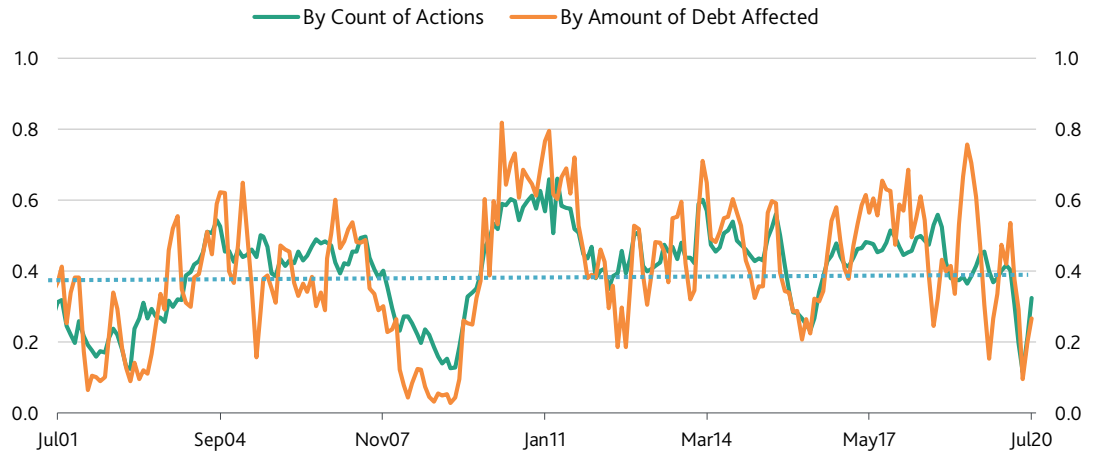
By Steven Shields

For the period ending October 6, U.S. corporate credit quality deteriorated with downgrades outnumbering upgrades 12 to eight. Rating changes were spread across 15 industries but were confined largely to speculative-grade firms. Energy-related firms comprised the bulk of downgrades in the period. Oasis Petroleum Inc.'s senior unsecured rating was lowered to Ca from Caa1 following the company's decision to file for bankruptcy. As a result of the filing, Moody's withdrew all of Oasis' credit ratings. Similarly, Moody's Investors Service downgraded SESI L.L.C.'s senior unsecured notes to Ca from Caa3. The downgrade reflects its high probability of a near-term bankruptcy. While the company's operations in international and offshore oilfield services markets have suffered modest deterioration, U.S. market conditions weakened much more severely amid the coronavirus pandemic, leaving little hope for any material improvements in profitability through 2021. Moody's Investors Service upgraded Morgan Stanley's long- and short-term ratings to A2 from A3. The upgrade accounted for the bulk of the debt affected in the period at \$144.9 billion. The rating action comes after Morgan Stanley's announcement that it has completed the acquisition of E*TRADE Financial Corp. Meanwhile Moody's Investors Services downgraded Simon Property Group Inc.'s senior unsecured debt rating to A3 from A2 on September 30 as the result of significant disruption to retail real estate and pressure on consumer spending due to the depressed macroeconomic environment and ongoing pandemic. The actions also considers likely pressure on valuations for retail real estate- assets amidst the growing uncertainty related to retail trends. The downgrade affected approximately \$17 billion in outstanding debt.

European rating change volume was limited, and like the United States, changes were credit negative. Downgrades outnumbered upgrades three to one and accounted for most of the affected debt in the period. LyondellBasell Industries N.V.'s senior unsecured bond rating was lowered to Baa2 from Baa1. Moody's Investors Service rating action reflects the company's increased leverage following the company's announcement that one of its U.S. subsidiaries entered an agreement with Sasol Chemicals LLC to create a 50/50 joint venture company that would own and operate Sasol's ethylene and polyethylene assets in Lake Charles, LA. Moody's Investor's Service lowered U.K. housing association Optivo's senior secured notes one notch to A3 from A2 citing weakening in its financial metrics. Optivo's debt has grown to support its development program, resulting in its interest cover metrics to decline.

Ratings Round-Up

FIGURE 1
Rating Changes - US Corporate & Financial Institutions: Favorable as % 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 |

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 | Old STD Rating | New STD Rating | IG/SG |
|---------|--|------------|------------------------------------|------------------------|-------------|----------------------|----------------------|----------------------|----------------------|-------|
| 9/30/20 | SIMON PROPERTY GROUP, INC. | Industrial | SrUnsec/PS/CP | 17,014 | D | A2 | A3 | P-1 | P-2 | IG |
| 9/30/20 | LAREDO PETROLEUM, INC. | Industrial | SrUnsec/LTCFR/PDR | 1,000 | D | B3 | Caa1 | | | SG |
| 9/30/20 | OASIS PETROLEUM INC. | Industrial | SrUnsec/LTCFR/PDR | 1,739 | D | Caa1 | Ca | | | SG |
| 9/30/20 | TMK HAWK PARENT, CORP. | Industrial | SrSec/BCF | | D | Caa2 | Ca | | | SG |
| 9/30/20 | PAE INCORPORATED -PAE HOLDING CORPORATION | Industrial | LTCFR/PDR | | U | B3 | B2 | | | SG |
| 10/1/20 | SUPERIOR ENERGY SERVICES, INC. -SESI, L.L.C. | Industrial | SrUnsec/LTCFR/PDR | 2,600 | D | Caa3 | C | | | SG |
| 10/1/20 | SOUTHEAST SUPPLY HEADER, LLC | Utility | SrUnsec | 400 | D | Baa3 | Ba1 | | | IG |
| 10/1/20 | LONESTAR RESOURCES, INC. -LONESTAR RESOURCES AMERICA INC. | Industrial | PDR | | D | Ca | D | | | SG |
| 10/1/20 | SERVICEMASTER GLOBAL HOLDINGS INC.-SERVICEMASTER COMPANY LIMITED PARTNERSHIP (THE) | Industrial | SrUnsec/LTCFR/PDR | 278 | U | B2 | B1 | | | SG |
| 10/1/20 | TUNNEL HILL PARTNERS, LP | Industrial | SrSec/BCF /LTCFR/PDR | | D | B2 | Caa1 | | | SG |
| 10/2/20 | MORGAN STANLEY | Financial | SrUnsec/LTIR/LTD /Sub/MTN/PS/CP | 144,937 | U | A3 | A2 | P-2 | P-1 | IG |
| 10/2/20 | MVK INTERMEDIATE HOLDINGS, LLC | Industrial | SrSec/BCF /LTCFR/PDR | | D | B2 | B3 | | | SG |
| 10/5/20 | OWENS & MINOR, INC. | Industrial | SrSec/BCF /LTCFR/PDR | 467 | U | B3 | B2 | | | SG |
| 10/5/20 | ANCHOR GLASS CONTAINER CORPORATION | Industrial | SrSec/BCF /LTCFR/PDR | | D | Caa2 | Caa3 | | | SG |
| 10/5/20 | SEG HOLDING, LLC-BI-LO, LLC | Industrial | SrSec/BCF | | U | B3 | B2 | | | SG |
| 10/6/20 | MOLINA HEALTHCARE, INC. | Financial | SrUnsec/IFSR | | U | B2 | Ba3 | | | SG |
| 10/6/20 | NEW ACADEMY FINANCE COMPANY LLC-ACADEMY, LTD. | Industrial | SrSec/BCF /LTCFR/PDR | | U | Caa1 | B3 | | | SG |
| 10/6/20 | UNITI GROUP INC. | Industrial | SrSec/SrUnsec /BCF/LTCFR/PDR | 4,510 | U | Caa1 | B2 | | | SG |
| 10/6/20 | GREAT WESTERN OIL & GAS COMPANY, LLC-GREAT WESTERN PETROLEUM, LLC | Industrial | SrUnsec/LTCFR/PDR | 300 | D | Caa3 | Ca | | | SG |
| 10/6/20 | NEXUS BUYER LLC | Industrial | SrSec/BCF | | D | B1 | B2 | | | 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 | Old STD Rating | New STD Rating | IG/SG | Country |
|---------|---|------------|-------------------------|------------------------|-------------|----------------------|----------------------|----------------------|----------------------|-------|-------------------|
| 10/1/20 | CINEWORLD GROUP PLC (GBP) -CROWN FINANCE US, INC. | Industrial | SrSec/BCF /LTCFR/PDR | | D | B3 | Caa3 | | | SG | UNITED KINGDOM |
| 10/1/20 | GRUPPO CASSA CENTRALE - CREDITO COOPERATIVO ITALIA- CASSA CENTRALE BANCA S.P.A. | Financial | STD/LTD | | U | Baa3 | Baa1 | P-3 | P-2 | IG | ITALY |
| 10/5/20 | LYONDELLBASELL INDUSTRIES N.V. | Industrial | SrUnsec | 11,550 | D | Baa1 | Baa2 | | | IG | NETHERLANDS |

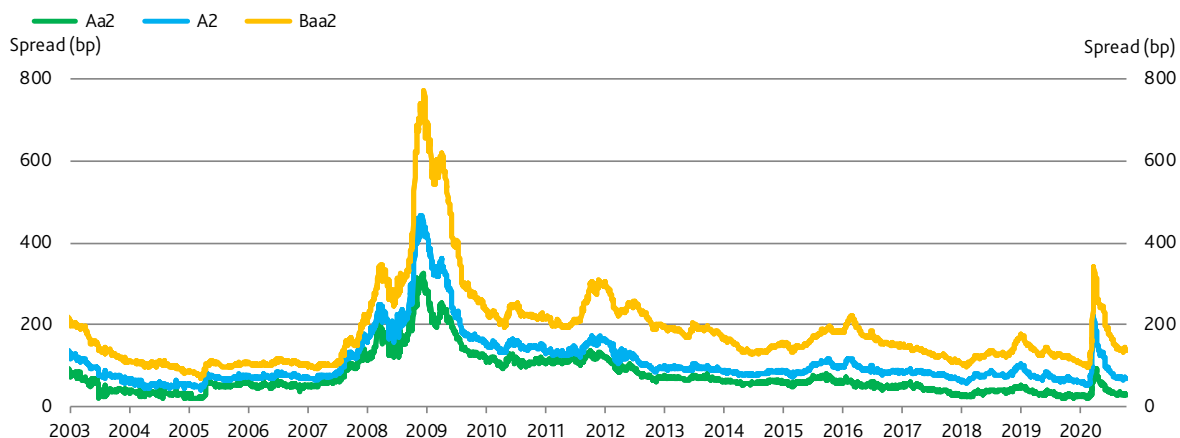
Source: Moody's

Market Data

Market Data

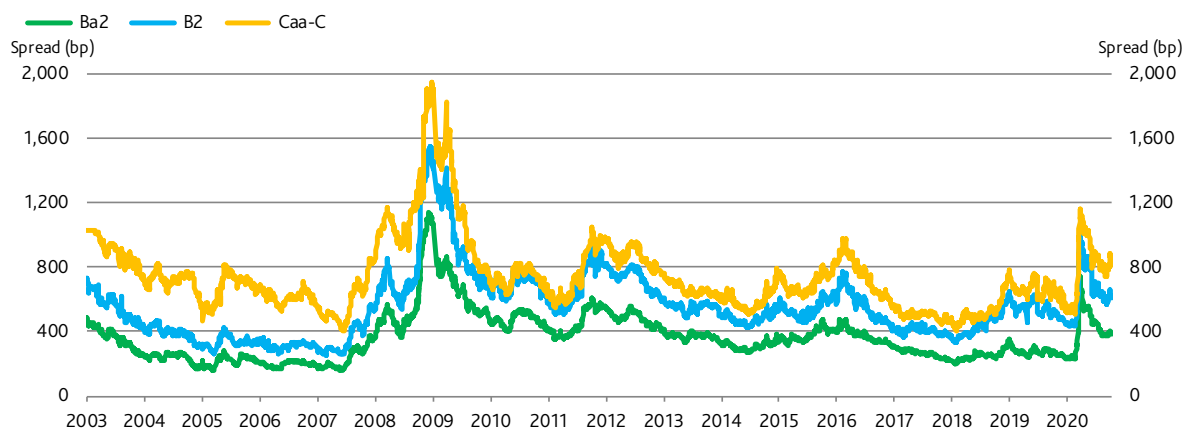
Spreads

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

Market Data

CDS Movers

Figure 3. CDS Movers - US (September 30, 2020 – October 7, 2020)

| CDS Implied Rating Rises | | CDS Implied Ratings | | |
|----------------------------------|--|---------------------|---------|----------------|
| Issuer | | Oct. 7 | Sep. 30 | Senior Ratings |
| JPMorgan Chase & Co. | | A2 | A3 | A2 |
| Morgan Stanley | | A3 | Baa1 | A2 |
| John Deere Capital Corporation | | Aa3 | A1 | A2 |
| Johnson & Johnson | | Aaa | Aa1 | Aaa |
| Occidental Petroleum Corporation | | Caa1 | Caa2 | Ba2 |
| Chevron Corporation | | A3 | Baa1 | Aa2 |
| Altria Group Inc. | | Aa3 | A1 | A3 |
| FedEx Corporation | | Aa3 | A1 | Baa2 |
| Dominion Energy, Inc. | | Aa3 | A1 | Baa2 |
| Mondelez International, Inc. | | Aa2 | Aa3 | Baa1 |

| CDS Implied Rating Declines | | CDS Implied Ratings | | |
|---------------------------------------|--|---------------------|---------|----------------|
| Issuer | | Oct. 7 | Sep. 30 | Senior Ratings |
| Bank of America Corporation | | A3 | A2 | A2 |
| Enterprise Products Operating, LLC | | Baa2 | Baa1 | Baa1 |
| NextEra Energy Capital Holdings, Inc. | | Baa2 | Baa1 | Baa1 |
| General Electric Company | | Ba2 | Ba1 | Baa1 |
| Valero Energy Corporation | | Ba1 | Baa3 | Baa2 |
| Carnival Corporation | | Caa3 | Caa2 | B2 |
| Kinder Morgan Energy Partners, L.P. | | A3 | A2 | Baa2 |
| Waste Management, Inc. | | Baa1 | A3 | Baa1 |
| Welltower Inc. | | Ba1 | Baa3 | Baa1 |
| Kimberly-Clark Corporation | | A3 | A2 | A2 |

| CDS Spread Increases | | CDS Spreads | | |
|--------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Oct. 7 | Sep. 30 | Spread Diff |
| Unisys Corporation | B3 | 366 | 302 | 64 |
| Carnival Corporation | B2 | 920 | 887 | 33 |
| Murphy Oil Corporation | Ba3 | 611 | 584 | 26 |
| Nabors Industries, Inc. | Caa1 | 3,278 | 3,261 | 17 |
| Valero Energy Corporation | Baa2 | 112 | 101 | 11 |
| Halliburton Company | Baa1 | 145 | 140 | 6 |
| Royal Caribbean Cruises Ltd. | B2 | 1,127 | 1,121 | 6 |
| Williams Companies, Inc. (The) | Baa3 | 99 | 94 | 5 |
| TEGNA Inc. | Ba3 | 215 | 210 | 5 |
| Nucor Corporation | Baa1 | 67 | 63 | 5 |

| CDS Spread Decreases | | CDS Spreads | | |
|-------------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Oct. 7 | Sep. 30 | Spread Diff |
| Delta Air Lines, Inc. | Baa3 | 536 | 695 | -159 |
| American Airlines Group Inc. | Caa1 | 2,555 | 2,698 | -142 |
| Macy's Retail Holdings, Inc. | B1 | 1,127 | 1,250 | -123 |
| United States Steel Corporation | Caa2 | 1,156 | 1,255 | -98 |
| Tenet Healthcare Corporation | Caa1 | 380 | 474 | -94 |
| Avis Budget Car Rental, LLC | B3 | 590 | 682 | -92 |
| Avon Products, Inc. | B3 | 220 | 311 | -91 |
| American Axle & Manufacturing, Inc. | B2 | 454 | 540 | -86 |
| Occidental Petroleum Corporation | Ba2 | 673 | 757 | -84 |
| Mattel, Inc. | B3 | 353 | 426 | -73 |

Source: Moody's, CMA

Market Data

Figure 4. CDS Movers - Europe (September 30, 2020 – October 7, 2020)

| CDS Implied Rating Rises | | CDS Implied Ratings | | |
|------------------------------|--|---------------------|---------|----------------|
| Issuer | | Oct. 7 | Sep. 30 | Senior Ratings |
| Banco Santander S.A. (Spain) | | A1 | A2 | A2 |
| HSBC Holdings plc | | Baa1 | Baa2 | A2 |
| Bankia, S.A. | | Baa2 | Baa3 | Baa3 |
| ING Groep N.V. | | A2 | A3 | Baa1 |
| Natixis | | Aa3 | A1 | A1 |
| Nordea Bank Abp | | Aa1 | Aa2 | Aa3 |
| Commerzbank AG | | A1 | A2 | A1 |
| Santander UK plc | | Baa2 | Baa3 | Aa3 |
| Lloyds Bank plc | | Aa3 | A1 | Aa3 |
| Danske Bank A/S | | Aa2 | Aa3 | A3 |

| CDS Implied Rating Declines | | CDS Implied Ratings | | |
|--|--|---------------------|---------|----------------|
| Issuer | | Oct. 7 | Sep. 30 | Senior Ratings |
| Spain, Government of | | A3 | A2 | Baa1 |
| Bayerische Landesbank | | Baa2 | Baa1 | Aa3 |
| Banque Federative du Credit Mutuel | | Baa1 | A3 | Aa3 |
| Landesbank Hessen-Thuringen GZ | | Baa1 | A3 | Aa3 |
| Landesbank Baden-Wuerttemberg | | A3 | A2 | Aa3 |
| Banca Monte dei Paschi di Siena S.p.A. | | Ba3 | Ba2 | Caa1 |
| Casino Guichard-Perrachon SA | | Ca | Caa3 | Caa1 |
| National Bank of Greece S.A. | | B3 | B2 | Caa1 |
| Bayer AG | | Baa2 | Baa1 | Baa1 |
| SKF AB | | A3 | A2 | Baa1 |

| CDS Spread Increases | | CDS Spreads | | |
|------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Oct. 7 | Sep. 30 | Spread Diff |
| Vue International Bidco plc | Caa2 | 1,413 | 1,213 | 200 |
| Selecta Group B.V. | Caa3 | 2,708 | 2,527 | 181 |
| Novafives S.A.S. | Caa2 | 1,173 | 1,075 | 98 |
| TUI AG | Caa1 | 1,132 | 1,097 | 35 |
| Bankinter, S.A. | Baa1 | 104 | 84 | 20 |
| Casino Guichard-Perrachon SA | Caa1 | 1,038 | 1,023 | 16 |
| Bayer AG | Baa1 | 68 | 59 | 8 |
| Heathrow Finance plc | Ba1 | 105 | 99 | 6 |
| CaixaBank, S.A. | Baa1 | 82 | 79 | 3 |
| Banco Sabadell, S.A. | Baa3 | 131 | 129 | 2 |

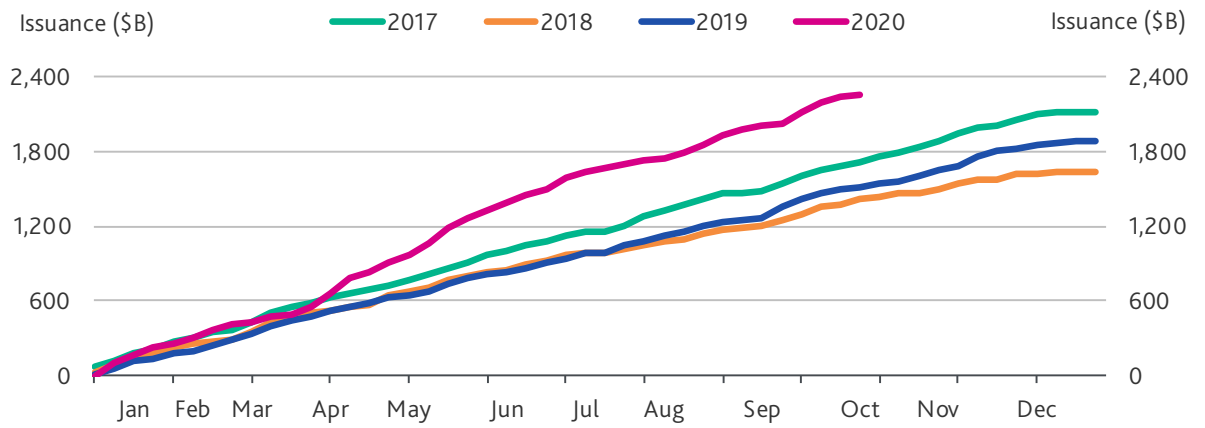
| CDS Spread Decreases | | CDS Spreads | | |
|----------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Oct. 7 | Sep. 30 | Spread Diff |
| Boparan Finance plc | Caa1 | 493 | 666 | -174 |
| Iceland Bondco plc | Caa2 | 571 | 623 | -52 |
| CMA CGM S.A. | Caa1 | 614 | 661 | -47 |
| Stena AB | Caa1 | 650 | 695 | -45 |
| thyssenkrupp AG | B1 | 389 | 434 | -44 |
| Rolls-Royce plc | Ba3 | 449 | 493 | -44 |
| Jaguar Land Rover Automotive Plc | B1 | 798 | 835 | -37 |
| UPC Holding B.V. | B3 | 240 | 277 | -37 |
| TDC A/S | B1 | 148 | 178 | -30 |
| Fiat Chrysler Automobiles N.V. | Ba2 | 147 | 176 | -29 |

Source: Moody's, CMA

Market Data

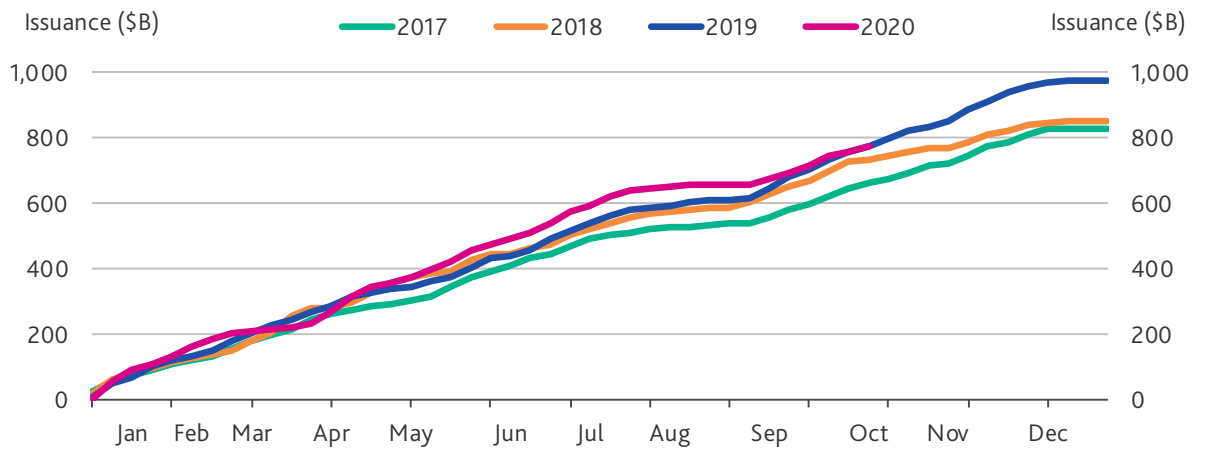
Issuance

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

Market Data

Figure 7. Issuance: Corporate & Financial Institutions

| | USD Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 19.383 | 5.875 | 25.629 |
| Year-to-Date | 1,748.187 | 437.069 | 2,257.583 |

| | Euro Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 10.147 | 3.210 | 14.900 |
| Year-to-Date | 649.981 | 92.555 | 773.199 |

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

Moody's Capital Markets Research recent publications

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Corporate Bond Issuance Boom May Steady Credit Quality, On Balance (Capital Market Research)

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