

WEBINAR

09 SEPTEMBER, 2020

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How Far From Normal?

Moody's Analytics & CNN Business on the U.S. Economic Recovery

We answer additional questions submitted in response to our recent webinar.

Question: Are COVID-19 case data available to download?

Answer: Yes. Clients can download COVID-19-related data—infections, hospitalizations, deaths, etc.—through Data Buffet. For the U.S., data are available at the national and state level.

Q: Do you have individual state index results for all states?

A: Yes. The Back-to-Normal Index is produced for the U.S. as well as all states. State-level data can be found at www.cnn.com/recovery or on Economic View.

Q: The rebound in rail traffic seems very surprising given that leisure and business travel are way down. Does this include commuter rail?

A: The rail traffic included in the Back-to-Normal Index is intermodal rail traffic of containers and trailers, not of passenger/commuter rail traffic.

Q: Is OpenTable a good resource for seated diners given that many people may be simply walking in to restaurants rather than making online reservations?

A: The OpenTable data on seated diners included in the index cover a sample of restaurants on the OpenTable network across all channels: online reservations, phone reservations and walk-ins. Therefore, any shift in behavior by consumers regarding how they interact with restaurants is being captured in the data.

Q: What is the Johnson Redbook Index?

A: The Johnson Redbook Index is a weekly retail sales index. The specific measure used in the Back-to-Normal Index is the same-store sales index for all retailers, which tracks year-on-year same-store sales growth.

Q: Who were the early and late reopeners?

A: The 10 earliest reopeners were Alabama, Alaska, Colorado, Georgia, Mississippi, Montana, Oklahoma, South Carolina, South Dakota and Tennessee. The 10 latest were California, Connecticut, Delaware, Illinois, Kentucky, Michigan, New Jersey, New York, Washington and Washington DC.

Q: Some of the data included in the national index are not available at the state level. How do you account for this in the calculation of the state indexes?

A: As described in detail in the index methodology, to account for the limited data available at the state level, the national-level Back-to-Normal Index is included as an input. This serves to incorporate additional national-level data as well as to reduce volatility in the state indexes.

Q: What weights were assigned to each indicator included in the Back-to-Normal Index?

A: In general, the index components at the national level are given equal weight when calculating the index with one exception. Given that the Moody's Analytics high-frequency GDP model incorporates 25 traditional economic indicators, it is given higher than average weight in the model. However, the amount of information contained in the model is balanced against the fact that it incorporates data released at a monthly frequency, which means that it is more lagged than most other measures being used. Under an equal-weighting setup, each of the 13 components would be weighted at 7.7%. Instead, the high-frequency GDP model is given 15% weight, and the remaining components are each given 7.1% weight. After weighting, the index is rescaled so that when all indicators are at their pre-COVID-19 levels, the index is equal to 100.

Q: Is there a similar index for Canada or European countries, and if so, what does that indicate?

A: Currently, the Back-to-Normal Index is available only at a national and state level in the U.S. We are not aware of any similar metrics being produced for other countries at this time.

Q: With relatively few infections, is its tourism industry the reason Hawaii is struggling?

A: Yes. Hawaii's tourism-dependent economy has been hit hard by the COVID-19 crisis. From the onset of the pandemic, Moody's Analytics identified the state as particularly vulnerable due to its large leisure and hospitality sector, under the assumption that infection fears would keep would-be vacationers closer to home. The data have thus far borne this out. Specifically hurting Hawaii's economic recovery has been a persistently elevated level of unemployment insurance claims as well as relatively low numbers of seated diners (OpenTable) and hours worked (Homebase).

Q: I find it counterintuitive that cases and economic recovery are inversely related. I would think that as economies reopen, cases rise.

A: The relationship between COVID-19 cases and the economic recovery is very much dependent on timing, but on a coincident basis the relationship is negative. As new cases surged in late March, the Back-to-Normal Index plummeted. Conversely, as case counts improved in May and June the index rose. This by no means suggests that COVID-19 case counts are the sole driver of movements in the index. Instead, changing case counts lead to social distancing measures and mandated business closures, which, in conjunction with the virus itself, were responsible for changing economic conditions.

It is true that as economies reopen, cases rise. However, the impact is more lagged. States began loosening restrictions in May and the index improved as cases continued to fall. Eventually, come late June we saw cases begin to rise again and a resulting leveling off of the index in subsequent months.

Q: Why is Massachusetts less back to normal than the rest of New England?

A: Compared with its New England neighbors, Massachusetts has had a slower recovery. As a percentage of February employment, Massachusetts has seen fewer jobs return than the other five New England states. Continuing claims for unemployment insurance have also remained elevated throughout the summer. Some degree of Massachusetts' more tepid recovery is likely the result of the state's higher population density, where the possibility of a rapid spread of infection is higher. The closure of college campuses in spring and their limited reopening since then have likely caused acute pain in Massachusetts, with its numerous and economically significant universities.

Additionally, much of the recovery in New England has been driven by a strong real estate market. New-home postings are above March's volume for every New England state besides Massachusetts. This may be due to Massachusetts' higher-priced real estate—not an attractive option for a now remote-working labor force looking for a more affordable place to live.

Q: Large, economically significant states are found among the 15 least recovered states. How much does the larger U.S. recovery depend on these states getting back to normal?

A: The bottom 15 states will have an outsize impact on the national recovery. Collectively these states account for nearly 45% of the U.S. population, while the 15 most back-to-normal states represent less than 16%. Less back-to-normal states Illinois, Massachusetts and New York have large portions of their populations concentrated in big cities. Because these densely populated areas are the most exposed to the virus, the states' recovery paths are particularly dependent on a widely distributed vaccination or treatment.

Q: How much do seasonal effects and weather issues impact the data (that is, heat waves, hurricanes, etc.)?

A: Of the components input into the index, the volume of seated diners on a given day would be most exposed to seasonal effects. However, OpenTable uses year-ago comparisons—comparing daily data to the same week and the same day of the week in the previous year. People go out and eat more on the longer, warmer days of the summer. Comparing seated diners in July to last July offers a more precise way to analyze declines in activity than would pegging normal to March. For a measure such as employment or jobless claims, that concern is unwarranted.

We also use moving averages to smooth out the effects of relatively anomalous events and holidays.

It is also interesting to observe the effects of temporary, non-COVID-19 events that have become visible. The Sturgis Motorcycle Rally in South Dakota was evident in seated diners, hours worked and mobility data, pushing the state's index reading upward before it fell after the event ended. As Hurricane Laura battered the Gulf Coast, particularly Louisiana, we saw swift declines across our real-time components.

As the recovery ages, similar events will occur, and parsing out their effects from the data will be impossible. A state's recovery back to normal is certainly subject to some volatility, and its path should be evaluated over time.

Q: As housing construction demand has recovered, do we expect to see construction wages rise similarly to lumber prices?

A: No. While demand for housing is likely to remain strong, there is an incredible amount of slack in the labor market that will prevent a sharp rise in wages. It is possible that wages could improve for skilled, specialty trades for which there may not be an abundance of available workers.

Q: How long can the housing market outperform the high unemployment rate? How quickly must the unemployment rate fall for housing to sustain current momentum?

A: The housing market has come a long way back from its pandemic lows. Single-family home sales and housing starts are near where they were prior to the virus, and house price growth has so far been unscathed. It helps that the market was on a roll pre-pandemic, when the severe shortage of affordable homes had finally pushed house prices up enough to convince builders it was profitable to ramp up construction. The pandemic has also persuaded many employers to permanently adopt work-from-home policies empowering now-footloose households to move from large urban areas to less crowded places with no commutes.

Housing has also been a big beneficiary of substantial government support. Largely courtesy of Federal Reserve actions, fixed mortgage rates have slid below 3%, a record low. Government-backed mortgage giants Fannie Mae, Freddie Mac and the FHA, which collectively accounted for nearly three-fourths of mortgage lending prior to the pandemic, remained stalwart providers of mortgage credit even at the height of the pan-

demographic angst. Mortgage borrowers with loans backed by these institutions have also benefited by receiving forbearance on their monthly payments. About 10% of mortgage borrowers have taken advantage of this. More than 12 million renters who live in apartment buildings financed by loans from Fannie and Freddie have also benefited from a moratorium on evictions.

However, housing will not skirt the fallout from the pandemic entirely, as risks are mounting. Construction costs are rising quickly, and builders are still grumbling about the inability to find buildable lots and skilled labor. Also, the resurgence in COVID-19 cases is weighing on the economy, as the job market has shown signs of weakening in recent months. The secondary effects of the recession and fading fiscal support likely will weigh on the economy and housing over the next six months. Mortgage credit quality will begin to deteriorate and foreclosures will increase, with the latter occurring after the moratoriums and forbearances end.

Q: Is it fair to call an economy that was in its 10th year of economic expansion with record low unemployment rates "normal"? Will the economy ever return to this definition of "normal"?

A: There is no single baseline for what a normal economy looks like. While the previous expansion was historically long, it was also plagued by notoriously slow growth in both output and jobs. The unemployment rate was indeed the lowest since the late 1960s, but the labor market was likely only marginally, if at all, better than in the late-1990s and pre-Great Recession periods. Long-term demographic changes have caused the unemployment rate to move lower over time, as older workers and college-educated workers have lower unemployment rates than their counterparts, and both cohorts have grown over time.

Q: Do you believe that the "perceived" benefits from reopening early on played a part in states' actual performance?

A: Early data suggest that gains from reopening were short-lived. Reopening quickly came at a cost as cases surged throughout the summer, particularly in the Sun Belt and South. Determining perception's role in the short-term bounce in economic activity in these early-reopening states is difficult. Economic activity goes sideways in these prematurely reopening states when infections begin to surge, speaking to the relatively tight correlation of economic activity and COVID-19 infections.

Q: Has there been an uptick in small-business bankruptcy failures? Is there an estimate for how many jobs the Paycheck Protection Program saved?

A: Small-business bankruptcies are difficult to track. Often, there is no bankruptcy declaration, and operations just cease. It is estimated that 1.3 million jobs were being supported by the PPP during the peak of the program's benefit in mid-June.

Q: What caused the Paycheck Protection Program to be less impactful in terms of mitigating the losses in the Back-to-Normal Index? Did the conflicting nature of expanded UI play any role in that?

A: While direct support to businesses was crucial to prevent widespread business failure and even more severe layoffs, keeping businesses open cannot change the realities of the COVID-19 crisis. Mandatory business closures and stay-at-home orders wreaked havoc on the economy as consumers could not or would not behave as they normally would. These changes in consumer spending and activity are the primary cause of the decline in the Back-to-Normal Index. Both the PPP and enhanced UI benefits helped to reduce further losses, but neither could prevent the fallout given the nature of mitigation efforts.

Q: What are the differences between states that are more and less recovered? Why are some more recovered while others fall behind?

A: The success of most of the states that are furthest along on their way back to normal is largely driven by demographic and geographic factors. The top of our list is inhabited by sparsely populated states. The epidemiological anxiety found in densely populated cities does not exist in the more rural areas of the country. The virus has spread less, and businesses and households are comparatively less affected. The influence of policy is most evident when evaluating the paths of states that reopened prematurely. When a state does experience a rapid spread in infections, such as Alabama, Arizona or Texas, we see a swift downturn in activity.

Some states have unique, existing characteristics that have determined their path back to normal—separate from their local infection experience. Hawaii and Nevada, with their large leisure and hospitality sectors, will struggle until the global pandemic eases and tourists feel comfortable flying and vacationing. Washington DC has a well above-average share of workers with the ability to work remotely. These would-be commuters have stayed home—keeping restaurants, bars, and other consumer-facing industries far below their pre-pandemic normal.

The states surrounding Massachusetts have seen a surging real estate market that Massachusetts has not. The increased buying and selling of homes is driving these states' recoveries and their paths back to normal. Property in Massachusetts is more expensive than in neighboring states. As the reality of potentially permanent remote work sets in, households seem to be moving toward lower-priced areas of the country.

Q: The low point for the U.S. appears to be right before stimulus checks were sent out and the additional unemployment insurance benefits began. Were these measures responsible for the strong recovery back to normal?

A: The bottoming out coincides with the broadest degree of movement restrictions and forced business closures. The relaxation of these lockdowns allowed the initial bounce in economic activity. Though the generous unemployment and stimulus checks have helped, they are not the primary driver behind the ascending paths observed from late April through early July. The weekly \$600 unemployment benefit expired at the end of July, several weeks after the recovery had slowed markedly.

Q: If we see a significant resurgence of the virus in the fall or winter, how does that impact your recovery estimates?

A: The impact to the recovery will be dictated in large part by the response of state and local governments in trying to slow the spread of any virus resurgence. We already saw two different ways that the economy can react to such surges in cases. If a resurgence is strong enough across large parts of the country to incite mitigation efforts like those imposed in March and April, the economy would almost certainly double-dip into recession. However, if rising case counts are localized or mitigation efforts are more moderate, as we saw in June and July, then it is possible the economy would avoid a double-dip recession and instead tread water for a longer period of time.

Q: Does Moody's Analytics expect a sharp rise in inflation?

A: No, Moody's Analytics does not expect a sharp rise in inflation. We do not forecast price growth to stray much above the Fed's 2% target rate. Minutes from the most recent Federal Open Market Committee meeting indicate disinflation pressures are more of a concern in the near term.

Q: What is the likelihood that the absence of additional unemployment assistance causes a double-dip recession?

A: Enhanced UI benefits were one of the many ways lawmakers helped hard-pressed households during the pandemic, and letting them expire at the end of July poses a significant threat to the economy. Though the recently signed executive order provides some additional benefits on a temporary basis, it will not be enough on its own to bridge the gap to a broader economic recovery. Based on simulations of the Moody's Analytics macroeconomic model, going cold turkey on the enhanced UI benefits would cost the economy 1.1 million jobs by year's end and increase the unemployment rate by 0.7 percentage point. With unemployment still elevated and seemingly set to go higher as more workers return to the labor force, this would seem a poor policy choice. This same analysis showed that completely removing the enhanced UI benefits would cause a greater than 1% decline in real GDP, sending the economy into a double-dip recession.

Q: Do you think productivity will increase as a result of the recession?

A: Yes. Increases in productivity are common at the onset of recessions, and the COVID-19 crisis will be no different. Even in a more typical downturn, firms tend to lay off their least productive workers first or less productive firms fail entirely, causing a spike in productivity. This effect was likely amplified during the COVID-19 recession given the magnitude of job losses and business failures as well as the devastation brought on to entire industries.

Q: While not necessarily an issue today, are you concerned with the amount of spending the government has undertaken and that the deficit is set to be the largest since World War II?

A: There are worries in some quarters regarding the nation's massive budget deficit with respect to additional fiscal stimulus being passed. The federal government's publicly traded debt-to-GDP ratio, which was close to 80% prior to the pandemic, is headed to more than 100% and is sure to ultimately bust through the record 106% briefly experienced after World War II. Back then, the U.S. enjoyed a long period of strong economic growth that brought the debt load back down, but prospects are for stunted economic growth after this pandemic.

This is disconcerting, but it is not an argument for pressing on the fiscal brakes now while the pandemic is still raging. Doing so would only undermine the economy and exacerbate the nation's fiscal problems. When it comes to the nation's finances, lawmakers have a Hobson's choice. There is no good option, but the least bad one is to continue to provide strong fiscal support at least until we are on the other side of the pandemic and the economy has a clear sight to return to full employment. Besides, with interest rates pinned close to zero by the Fed and likely to remain there for the foreseeable future, and with inflation low, there is no pressing reason for lawmakers to pull back now.

Q: Do you think business changes that have taken place during the pandemic (that is, more drive-thru and curbside service) will change business models going forward?

A: Separate from the evolving demand for office space and the effects that will have on the commercial real estate market, the shift to remote work has the potential to be more permanent and impactful than the changes mentioned above. As geographical proximity becomes less of a requirement for employment, employers may widen their applicant pools, and employees, able to work anywhere, may settle in more affordable parts of the country. This change could help spread some of the highest-paying jobs and highest-priced real estate away from the handful of large metropolitan areas where they are currently concentrated.

Q: How much on the loan performance side (particularly consumer loans) do you think is being held up by the stimulus and unemployment benefits? Do you estimate defaults to climb if Congress doesn't roll out another round of stimulus, and if so, by how much?

A: The impact of government interventions and expanded UI on consumer credit markets is significant but varies considerably by asset classes. The expanded forbearance program for government-backed mortgages has kept default rates low. The foreclosure moratorium has limited the supply of homes available for sale, which has propped up house prices on the supply side, while ultralow mortgage rates have supported demand.

Similarly, the automatic forbearance on government-backed student loans (90% of the market) has kept delinquency and default rates low for this segment.

Demand for cars and trucks has remained strong as individuals favor their own vehicles to public transportation and as families increasingly favor the suburbs to urban centers. Whether this trend holds in the long run is debatable, but for the time being strong demand and low interest rates have kept auto delinquencies low.

Payments on credit cards and unsecured personal loans are most closely tied to government income support programs. Delinquency and default rates would be significantly higher without expanded UI support given that these products are more exposed to lower-credit, lower-income individuals.

Given the still-weak job market, default rates would undoubtedly climb across credit segments without additional support.

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