

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

JUNE 2, 2020

In early April, we laid out four prerequisites that we believed were required for economic activity in the United States to begin to normalize. As we enter June, we would like to provide an update on progress toward hitting those milestones and add some thoughts about what the months ahead may hold.

Here is a quick review of the prerequisites we laid out two months ago. We argued that for the US economy to begin the recovery process, we needed to see:

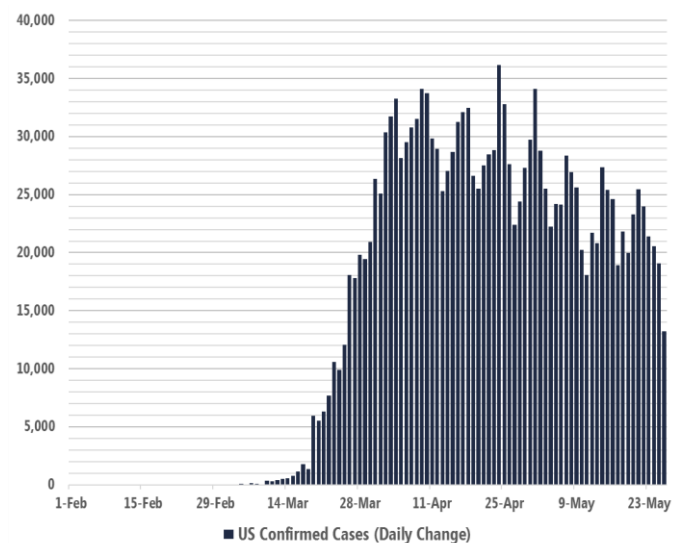
1. Evidence the infection rate curve was stabilizing and flattening.
2. Evidence that monetary policy was working as intended to reduce stresses in the financial system.
3. Evidence that the massive fiscal policy response was providing the financial bridge businesses and individuals needed to make it through the crisis.
4. Clarity on both the depth and expected duration of the economic disruption from the shutdown.

Let's examine each in more detail.

## THE INFECTION RATE CURVE

As we said in April, getting the spread of the virus under control was by far the most important prerequisite for the green shoots of an economic recovery to begin to appear. One would be hard pressed to find a likelier candidate for the 2020 phrase of the year than "flatten the curve" – the term is ubiquitous across the media landscape. As the true nature of the outbreak was coming into focus, several (ultimately flawed) academic papers predicted that the virus' death toll would reach into the millions. Faced with these dire predictions and a lack of conclusive data, policy makers were initially

justified in imposing broad-based lockdowns. Flattening the infection curve was vital to ensure that infections did not overwhelm the capacity of the health care system to treat COVID-19 patients. While New York City in particular was at risk of exceeding this threshold early in the outbreak, social distancing measures and stay-at-home orders have largely been successful, and this feared possibility was avoided in even the areas hardest hit by the virus. Cases in the U.S. appear to have plateaued, and while cases may not be declining as quickly as public health officials may wish, the country has successfully flattened the infection curve, with daily confirmed cases peaking at 36,188 on April 24, and demand for acute care resources remains far below the available supply.

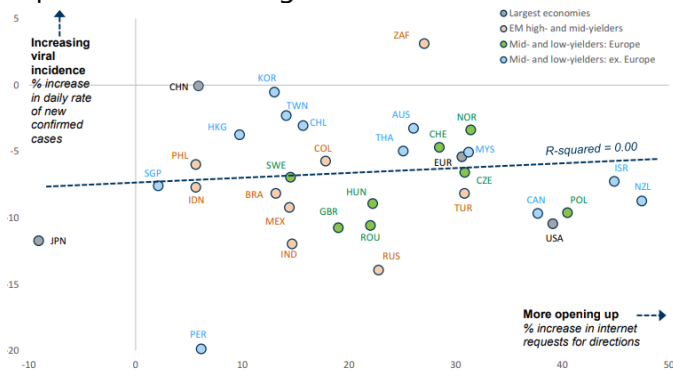


Source: Bloomberg, FFA Investment Management

When making the public case for an unprecedented economic shutdown to combat the spread of the virus, officials the world over argued that there was a clear relationship between the level of social and economic activity and the spread of the virus – "we need to follow the science" was an oft-repeated refrain. Given the dearth of data on the novel coronavirus early in the pandemic, this was the rational, conservative approach. In recent weeks, however, analysis of the data on infection

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

rates before, during, and after widespread lockdowns has provided growing evidence that lockdowns of the severity imposed across much of the United States may have been more extensive than necessary to constrain infection growth rates and also may have been maintained longer than necessary – especially in light of other policy considerations. Countries across the globe and states across the country have opted for a diverse set of policy approaches, providing us with the data needed to analyze the effect of lockdowns on the spread of the virus. Quantitative researchers at JPMorgan looked at infection rates globally and in the United States to compare the infection rate during the lockdown period and the subsequent infection rate after lockdowns were lifted, and found that infection rates actually decreased at a statistically significant level *after* stay-at-home orders were lifted.<sup>1</sup> At the country level, regression analysis showed that nearly every country studied experienced a decline in infection rates after lockdown orders were lifted that was statistically significant at the >99% level. Using a slightly different data set, economists at Goldman Sachs found that there is no statistical relationship between the amount of “opening up” a country has experienced and the growth rate of new infections.<sup>2</sup>



Source: Goldman Sachs Global Investment Research

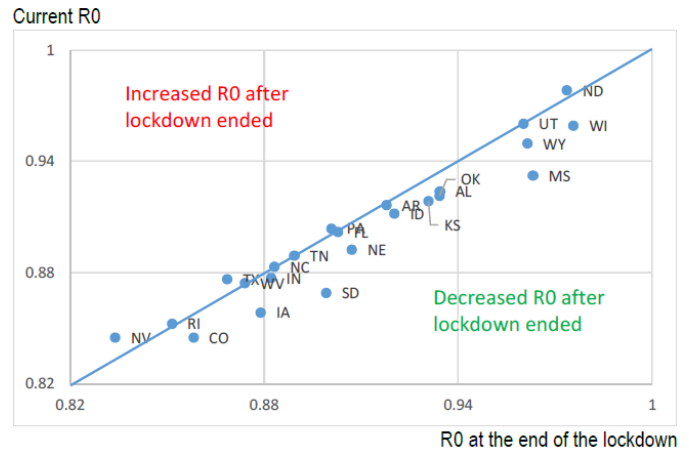
<sup>1</sup> (Kolanovic, PhD and Kaplan, CFA 2020)

<sup>2</sup> (Tomb 2020)

Looking at the state-level data in the United States, JPMorgan found that the vast majority of states experienced a decline in the transmission rate of the virus ( $R_0$ ) after statewide lockdowns ended. These results were also statistically significant at the >99% level. Goldman Sachs arrived at the same conclusion.<sup>3</sup>

Source: JPMorgan Securities, LLC

## Vast Majority of States Experienced Decline in COVID-19 $R_0$ After Statewide Lockdown Lifted



To be clear, this *does not* imply that lifting lockdowns caused infection growth rates to decline. What this analysis *does* tell us – at least thus far – is that the trajectory of infection growth rates has not been altered in the vast majority of regions that have lifted lockdown orders.

These findings also don’t tell us why infection growth rates have continued to decline after lockdown orders have been lifted. There are likely many confounding variables at play; we can’t definitively rule out seasonality in infection rates, for example. The end of lockdown orders coincided with warmer spring weather across much of the northern hemisphere. Researchers across the country have been hard at work analyzing the data on the outbreak, and while some have found some

<sup>3</sup> (Taylor 2020)

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

weak statistical evidence that increases in UV light are associated with slightly lower virus growth rates, thus far no papers have been able to definitely prove or disprove that the virus has seasonality. What we can say is that the mathematical evidence indicates that the relaxation of strict lockdown orders had little to no impact on the infection rate in nearly every geographical region analyzed. Given these observations, it is difficult to make the case that lockdowns and stay-at-home orders must continue for several more months.

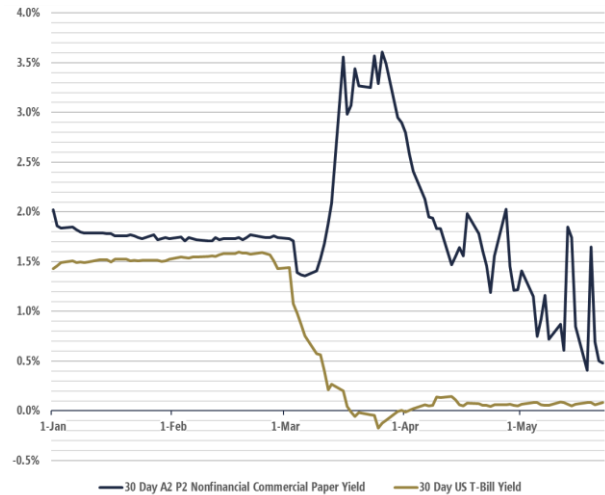
Political considerations complicate the picture, but ***we believe that the first and most important prerequisite for an economic recovery – getting the outbreak under control – has been met.*** As a whole, the United States has flattened the curve and avoided overwhelming the capacity of the health care system to provide care for those infected. Going forward, the focus of public policy should begin to shift to an economic recovery while maintaining infection rates below levels that would overwhelm the capacity of our health care system through social distancing and other appropriate measures. We are significantly below those levels today, and thus lockdowns can begin to relax.

## **MONETARY POLICY**

The second prerequisite for recovery we identified in early April was evidence that the Federal Reserve's unprecedented interventions to shore up the fixed income markets that make up the plumbing of the financial system had been successful. As demand for cash surged in the middle of March, even the safest of financial markets froze up, the details of which were laid out in an expertly woven narrative by Justin Baer in a recent piece for the Wall Street Journal.<sup>4</sup> We

<sup>4</sup> (Baer 2020)

identified this potential systemic risk early, holding several internal discussions the week of March 9, ultimately culminating in an emergency meeting of



Source: Bloomberg, FFA Investment Management

our Investment Policy Committee the week of March 16, and we have been monitoring the situation consistently ever since.

Now that the Federal Reserve's emergency measures are firmly in place and functioning, short-term fixed income markets have begun to normalize, but yields remained volatile through most of May.

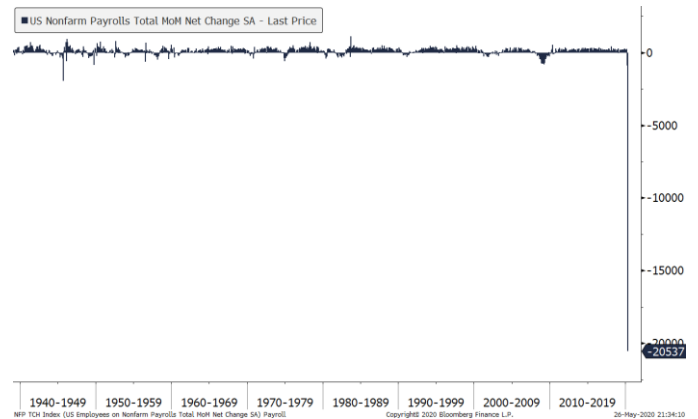
The Federal Reserve has signaled to market participants that it will take any and all steps necessary to stabilize these markets – “whatever it takes.” Borrowing from the playbook developed in the depths of the global financial crisis over a decade ago, the Fed swiftly intervened as markets teetered in mid-March, announcing a package of unprecedented market intervention programs to ensure that the financial system did not seize up. The alacrity with which the Federal Reserve leapt to action during the week of March 16 and its willingness to build on the GFC playbook by introducing additional unconventional programs to

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

stabilize markets has credibly established Chairman Powell and his colleagues' willingness to back up the "whatever it takes" pledge. Bouts of choppiness likely lie ahead for short-term markets, but ***we are comfortable confirming that these vital markets have firmed up enough to provide a solid base for economic recovery.***

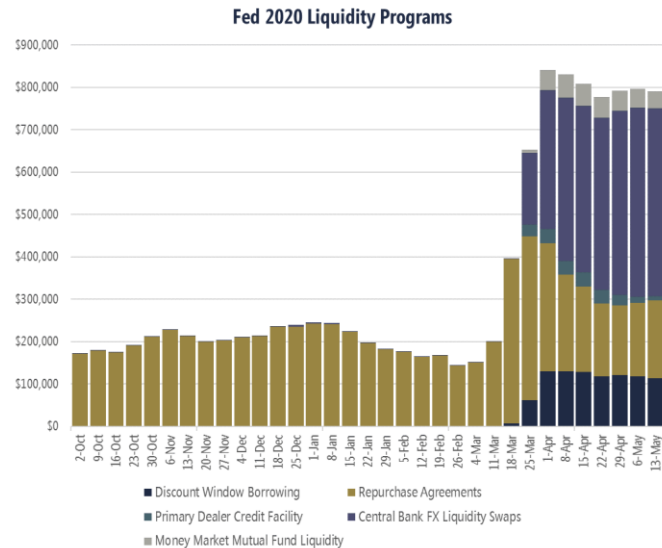
of Labor Statistics report found that 20 million jobs were lost in April, but with initial filings for unemployment vastly exceeding that number over the same period, the actual figure is almost certainly higher. Estimates on the true number of Americans currently out of work or working reduced hours reach as high as 43.2 million – or

27% of the American workforce.<sup>5</sup> Compared to the entire historical record of monthly job losses, stretching all the way back to 1939, April 2020 was literally off the charts. A picture is worth a thousand words:



Source: Bloomberg, FFA Investment Management

In just two short months, the US unemployment rate has surged from a 50-year low to a near 80-year high. Facing perhaps the quickest, sharpest fall in aggregate demand in history, the federal government unleashed a stimulus response equally unparalleled in size. In the past two months, Congress has approved discretionary fiscal programs totaling \$2.6 trillion in spending (12.6% of GDP), dwarfing the entire fiscal response in the aftermath of the global financial crisis between 2009-2011. Washington is likely not finished with fiscal stimuli for the year; negotiations to increase that already record amount are in progress.



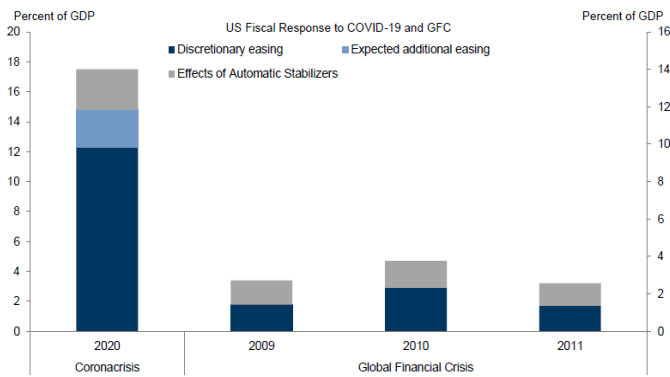
Source: Bloomberg, FFA Investment Management

## FISCAL POLICY

The third prerequisite for recovery we identified in April was evidence that the record-breaking emergency stimulus measures enacted by the federal government were functioning as intended. During a typical recession, the initial decline in aggregate demand is exacerbated as the decline in spending eventually reverberates through downstream sectors and industries, resulting in a "second wave" effect, much akin the feared second wave of COVID-19 infections – and is directly related to the axiom that one person's spending is another person's income, which we discussed in our March 20 piece. The official Bureau

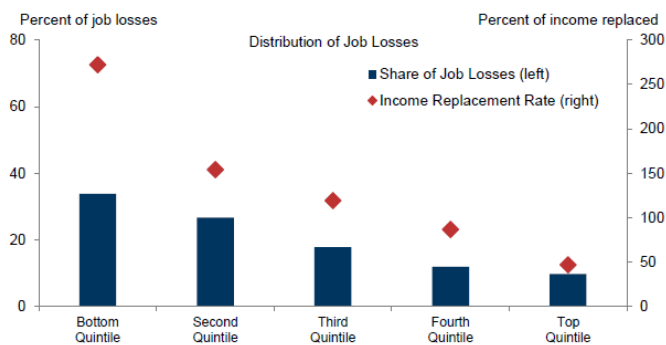
<sup>5</sup> (Kurtz, Yellin and Manley 2020)

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK



Source: Goldman Sachs Global Investment Research

As we said in previous pieces, given the unprecedented nature of the COVID-19 outbreak and the subsequent public health policy response, a fiscal bridge from the federal government was the only option to limit the economic damage caused by efforts to slow the spread. The demographic profile of those households most impacted by the policy-driven economic shutdown further illuminate the initial need for and importance of the fiscal stimulus programs. Low-income households are bearing the brunt of the labor market pain, with around 60% of the jobs lost in the past two months falling in the bottom two quintiles by household income.



Income replacement rates are calculated as the median ratio of UI benefit income to pre-layoff weekly labor income within each income quintile.

Source: Goldman Sachs Global Investment Research

This massive fiscal program is not without potential downsides, however. Externalities – both positive and negative – are a given in the public policy realm, especially when legislation is passed hastily in the midst of a crisis. In an effort to blunt the pain from the layoffs members knew were imminent, Congress agreed to a temporary federal supplement to state unemployment insurance payments as part of the CARES Act, over objections from several Republican senators. In addition to state-provided benefits, the federal government is providing an additional \$600 a week to unemployed Americans through the end of July 2020. Without a doubt, this supplemental payment is welcome help to millions of struggling families during an extremely difficult time – but it also creates potentially substantial long-term negative externalities that could ultimately weigh on the strength of the recovery. Goldman Sachs estimates that the median weekly wage in the United States is \$957.<sup>6</sup> On average, state unemployment insurance schemes replace around half of a claimant’s wages, up to a cap of \$500 or so (rules differ slightly by state). Using this data – making adjustments for job losses by state-level industry, claims, and population differences – GS economists estimate that workers earning the median weekly wage of \$957 would receive an unemployment benefit of \$1079 per week, or 14% more than they would earn if they returned to work.<sup>7</sup> Expanding this analysis to the macro level, Goldman estimates that up to 75% of unemployed workers could be receiving benefits that exceed their previous wages.<sup>8</sup>

Counterintuitively, despite what is expected to be the deepest single-quarter decline in GDP ever recorded in the United States, total disposable income is actually expected to rise in Q2 and Q3 of 2020 as a result of the fiscal stimulus programs currently in place. Disposable income growth is not

<sup>6</sup> (Hatzius 2020)

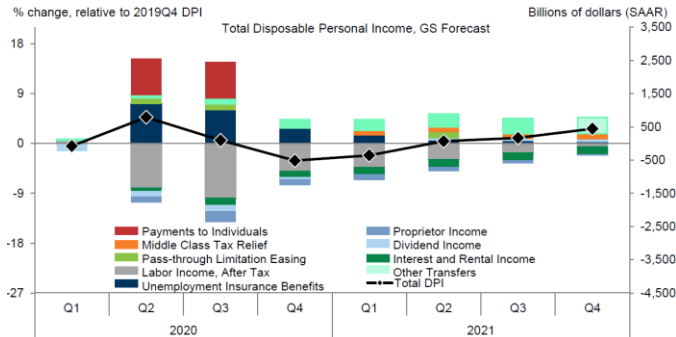
<sup>7</sup> (Hatzius 2020)

<sup>8</sup> (Hatzius 2020)



# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

expected to turn negative until Q4 2020, the first full quarter these benefits will no longer be in effect.

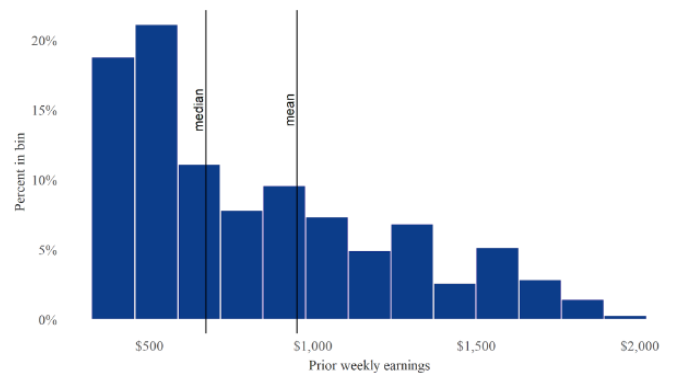


Source: Goldman Sachs Global Investment Research

Academic researchers have arrived at similar conclusions in more recently published work. As designed, the supplemental payment was set at \$600 in an effort to replace 100% of the income lost by the average worker who experienced a job loss during the lockdown. As is often the case in Washington, however, the math behind the bill was more than a little fuzzy. Despite the subject being among the first topics covered in Statistics 101, policymakers confused **median** earnings (the number at which half of the labor force earns more and half earns less) with **mean** earnings (the total amount of income received by the labor force divided by the number of workers in the labor force). Because of a small set of extremely high-wage earners, mean earnings are skewed significantly to the upside.

<sup>9</sup> (Ganong, Noel and Vavra 2020)

<sup>10</sup> (Ganong, Noel and Vavra 2020)



Notes: This figure shows the distribution of average weekly earnings in the year prior to unemployment for unemployed workers who are eligible for UI. Average weekly earnings are the ratio of annual earnings to annual weeks worked in the Current Population Survey Annual Social and Economic Supplement.

Source: University of Chicago Becker Friedman Institute for Economics

A working paper published by the Becker Friedman Institute for Economics at the University of Chicago found that the median income replacement rate for individuals who lost their jobs during the shutdown is 134%.<sup>9</sup> Two-thirds of unemployment insurance recipients are receiving benefits that exceed lost earnings, and 20% are receiving benefits at least double their lost earnings.<sup>10</sup> With nearly 70% of laid-off workers receiving more to remain at home than they would earn if they returned to work, there is a significant incentive to stay home until the enhanced benefits expire, as a recent NPR piece highlighted.<sup>11</sup> This has the potential to stunt the economic recovery; businesses may struggle to rebound in this environment, and temporary job losses may ultimately turn into permanent ones.

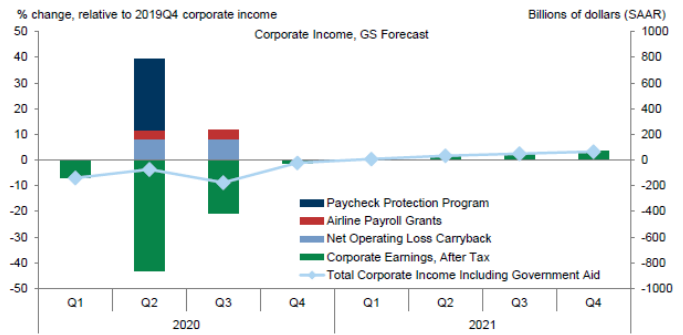
Millions of the nation's small businesses were also targets of the fiscal stimulus program, the highlight of which was the Paycheck Protection Program (PPP). Early evidence indicates that the PPP program may have missed the target. In a recent paper, economists at the University of Chicago and MIT examined data on the distribution

<sup>11</sup> (Horsley 2020)

# MARKET UPDATE SARS-CoV-2/COVID-19 OUTBREAK

of PPP funding and found some glaring deficiencies. The authors found that rather than flowing to the regions hardest hit by the economic shutdown as measured by declines in hours worked and business shutdowns, PPP funding actually flowed disproportionately to areas least impacted by the crisis.<sup>12</sup> Fifteen percent of establishments in the areas most affected received funding, compared with 30% of establishments in the areas least affected.<sup>13</sup>

The authors also found significant differences in PPP loan disbursement across banks that were not simply a reflection of underlying differences in loan demand. Comparing the percentage of outstanding small business loans held by institution to PPP distribution per institution, the authors found some stark disparities. Banks that underperformed in the PPP program (i.e., banks with PPP disbursements lower than their share of outstanding small business loans) accounted for two-thirds of all small business loans outstanding but only provided 20% of the available PPP funding. The top four US banks – JPMorgan Chase, Bank of America, Wells Fargo, and Citibank – account for 36% of outstanding small business loans, but disbursed less than 3% of PPP funding.<sup>14</sup> The largest banks largely dominate the market in the cities hit hardest by the economic impact of the lockdowns, and reluctance on the part of these large banks to participate in the PPP program at levels that matched their small business lending indicates that funding ultimately did not flow to the areas that needed the relief the most. Goldman Sachs estimates that fiscal stimulus, largely in the form of the Paycheck Protection Program, will offset a significant portion of the decline in corporate earnings in Q2, providing the foundation for a strong economic recovery beginning in the second half of 2020 through 2021.



Source: Goldman Sachs Global Investment Research

Given the evidence that the program was not as effective as intended, the fiscal offset may not be as strong as predicted. While funding was needed in every area of the country, these failures in the areas where the stimulus program would be most beneficial likely contributed to increased job losses and business closures, which could ultimately weaken the economic recovery we hope is now in its nascent stages. ***We believe it is still unclear whether the fiscal policy programs are as effective as policy makers initially hoped, and believe additional programs or tweaks to existing ones are more likely than not in the weeks and months ahead.***

## **DURATION OF CONTAINMENT EFFORTS**

That brings us to the final prerequisite we identified – clarity on the duration of containment efforts. Given the evidence that an end to lockdowns has not resulted in a spike in the infection rate, we believe policymakers will find it difficult to continue to justify stringent lockdown measures. The restrictions put in place beginning in March to combat the virus resulted in higher unemployment in all 50 states for the first time in history in April. Twenty states saw unemployment jump by 10% or more in a single month. Forty-

<sup>12</sup> (Granja, et al. 2020)

<sup>13</sup> (Granja, et al. 2020)

<sup>14</sup> (Granja, et al. 2020)

# MARKET UPDATE **SARS-CoV-2/COVID-19 OUTBREAK**

three states set all-time highs for the number of residents out of work. At the end of April, 2,600 counties – representing 30% of national GDP – were under severe lockdown orders. That number has starting to decline, as the latest reports indicate only 575 counties (13% of GDP) remain in lockdown. We expect the majority of states across the country will reopen over the course of the next month. Even so, few areas will be operating at full capacity, as social distancing policies will still likely remain in place. 2020 is an election year, however, and attack ads highlighting the response to the virus are already airing. Over the next few months, there is a risk that policy decisions will become driven by political considerations rather than public health ones. Reopening decisions already appear to be increasingly split down partisan lines. ***While we believe lockdowns will mostly be lifted in the weeks ahead, it could take substantially longer for life to return to the pre-outbreak norm, if it ever does.***

Despite all this, markets have experienced an extraordinary rally since late March, recouping a significant portion of the gains lost during the initial sell-off. We expect market volatility to continue in the near-term, but we believe the foundation for a strong recovery is mostly in place. That said, we can't rule out the possibility of a spike in cases throughout the summer or a second wave of infections in the fall and winter. Should either occur, we believe the nation will be better prepared to deal with it than the country was when the virus first surfaced. Officials have alleviated shortages of personal protective equipment, ramped up testing and contact-tracing efforts, stockpiled ventilators, and are developing numerous therapies, treatments, and vaccines that may help in treating and preventing infections. We must remain diligent and continue these efforts so that we are as prepared as possible for a resurgence in infections from the current virus and potentially others in the

future, but we are optimistic that the country is beginning to turn the corner and can cautiously start to work toward economic recovery. Thank you for the trust you place in Fulton Financial Advisors and Fulton Private Bank to help you navigate through these extraordinary times. Please reach out to your Wealth Advisor, Private Banker, or Portfolio Manager to discuss the ongoing events in further detail, and please stay safe as we all work to get our nation through this pandemic safely and come out stronger on the other side.

**Matthew T. Brennan, CFA®**  
**Portfolio Manager**



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# MARKET UPDATE **SARS-CoV-2/COVID-19 OUTBREAK**

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