MOODY'S ANALYTICS

WEBINAR

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COVID-19: Top 10 Questions and Answers

The economic damage inflicted by COVID-19 is cataclysmic and difficult to comprehend. This Q&A tackles the 10 most-often asked questions from our clients and should help explain how and how badly the virus is wrecking the economy and some of the near- and longer-term implications.

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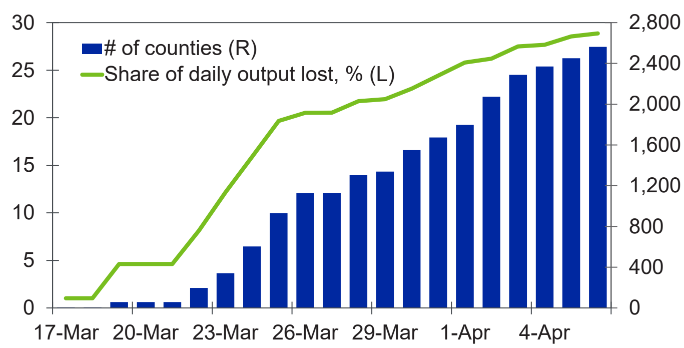
Question: How big a blow will the U.S. economy take from COVID-19?

Answer: It is actually two big blows. The first hit is from business shutdowns, as shelter-in-place orders go nearly nationwide. As of the start of April, an estimated 29% of the nation's output or GDP is not being produced because businesses are not able to operate (see Chart 1). This is based on estimating the output lost in each of the nation's locked-down counties given their industry mix (a workbook with these estimates is available upon request). If sustained throughout the month, which seems likely, some $450 billion in GDP will be lost. This is on top of the more than $200 billion already lost in March as the shutdowns extended across the country.

Chart 1: Economic Sudden Stop

Share of output lost as more counties shelter in place



Sources: BEA, NY Times, Moody's Analytics

This sudden stop in the economy is unprecedented. Possible analogues are the 9/11 terrorist attacks or hurricanes and earthquakes. But the business disruptions associated with these were at most for a few days and in small geographical areas. The 9/11 attacks cost close to $110 billion in today's dollars in lost GDP.

The second blow from the virus is to demand. The loss of jobs has been seismic. Ten million workers had already filed for unemployment insurance through late March; they were for the most part workers living in states that were early to shelter in place and have UI systems capable of handling the flood of claims. Well over 30 million U.S. workers were employed in industries such as retail and leisure and hospitality and are at risk of losing hours and wages, if not their jobs. Another over 30 million are in industries at more moderate but significant risk of the same result. Incomes are evaporating and so too is consumer demand.

Much diminished nest eggs will also soon cut into the demand of high-income consumers. About $10 trillion in stockholder wealth (depending on the day and hour) has been wiped out since the peak in stock prices in late February. The large baby boom generation, a cohort now in its 50s and 60s that over-invested in the stock market in a vain effort to prepare for retirement, is surely panicked. These boomers have no choice but to pull way back on spending and save more, lest they never retire in comfort.

The supply-side hit of the sudden stop in the economy is approaching its apex, while the demand-side hit is just now being felt. The result will be an expected annualized decline in first-quarter real GDP of close to 10% and a chilling 30% decline in the second quarter (this is our preliminary April baseline forecast). Some 15 million jobs will be lost at the peak, expected in May, and unemployment could top out near 15%. For context, at its peak in the financial crisis, unemployment briefly touched 10%.

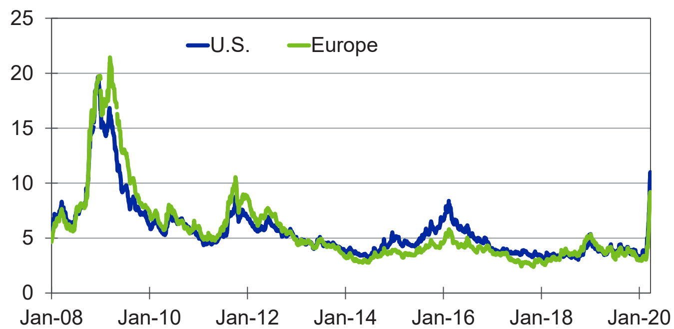
Q: Are the Federal Reserve's aggressive actions helping to cushion the blow?

A: The Fed's actions have kept the financial system intact. The Fed has pushed short-term interest rates to near zero, restarted purchases of Treasury bonds and agency mortgage backed securities, lowered reserve and capital requirements for banks, provided trillions in liquidity to short-term funding markets, and quickly stood up a number of credit facilities to keep credit flowing in different corners of the system. Some of these facilities were established during the financial crisis, others are being invented on the fly in the current crisis.

Credit is the mother's milk of the economy. If it dries up, businesses quickly become unable to operate, and households stop spending. Before the Fed stepped up, credit markets were starting to seize-up as bond issuance came to a standstill, credit spreads were gapping out, and lending was put on hold (see Chart 2). Now, markets are functioning reasonably well with the Fed backstopping the commercial paper, repo, asset-backed securities, municipal bond, and corporate bond markets. It costs businesses more to borrow, but they are still able to borrow.

Chart 2: Stress in Credit Markets

Option-adjusted high-yield corporate spreads, %



Sources: Bloomberg Index Services Limited, Moody's Analytics

The Fed's efforts are benefiting from a strong banking system. After the financial crisis, banks were required to significantly increase their capitalization and liquidity and beef up their risk management practices, including stress-testing that roughly mimics the severity of the current crisis. The systemically important banks in particular are in good financial shape since they have been required to hold additional capital buffers. The banking system should be able to weather this storm and provide ample credit.

However, the Fed will continue to be tested. Nonbank financial institutions, which include a mélange of players from independent mortgage bankers to private equity funds and financial technology companies, rely on the big banks for lines of credit and on short-term funding markets for the financing they need to fund their own lending. Ensuring that this so-called shadow financial system continues to get the funds it needs while delinquencies, defaults and downgrades mount will require all of the Fed's resources, resolve and ingenuity.

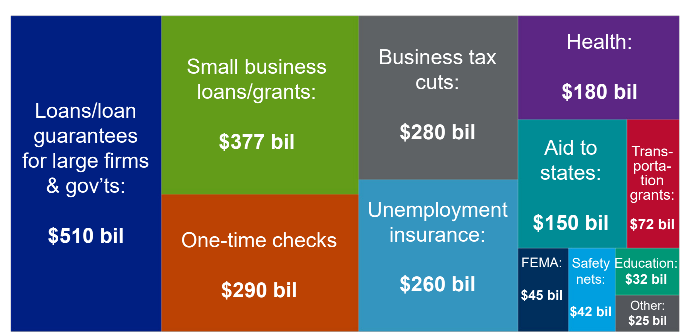
Q: Will the $2.5 trillion in fiscal rescue funds provided by lawmakers to date be enough?

A: Congress and the Trump administration responded quickly to the economic crisis, but they will need to do more, and soon. In March, lawmakers passed three pieces of legislation appropriating $2.5 trillion to pay for costs to the healthcare system and for cash and credit to hard-pressed households and businesses. This is more than 10% of GDP, which is about the total amount of fiscal support provided during and after the financial crisis to help stimulate the economy.

The CARES Act, the latest and largest fiscal rescue package, includes approximately $1 trillion for individuals through expanded unemployment insurance and one-time payments, another $1 trillion for businesses through loans and grants from the Small Business Administration and a credit facility for mid-size and large companies, and several hundred billion dollars for health-related and state and local government spending (see Chart 3).

Chart 3: U.S. Lawmakers Need to Do More

Cost of Coronavirus Aid, Relief & Economic Security (CARES) Act



Sources: CRFB, Moody's Analytics

This fiscal support will significantly cushion the downdraft in the economy. With the support, real GDP is expected to decline by close to 30% annualized in the second quarter. Without the support, GDP would have declined by more than 40%. The cash and credit help offset the loss of income and business profits resulting from business shutdowns and unemployment. However, the rescue would be even more effective if not for the difficulty the Treasury is having in quickly getting checks to individuals and cash to small businesses via the SBA. The credit facility for mid-size and larger companies is creative, but new and untried, and thus risks being less helpful than hoped.

Lawmakers will need to do much more. Another $2 trillion of fiscal stimulus is ultimately anticipated and will continue to focus on financially strapped households, more aid to state and local governments whose finances will be shredded by the surge in expenditures and collapse in revenues, and to pay for the medical expenses of those stricken with the virus and the costs of testing for the virus and its antibodies. A large infrastructure program may also finally become a reality. Given that unemployment is expected to remain high for at least several years, the long timelines for most infrastructure projects will be a feature of this stimulus, and not a bug.

Q: Will global investors be spooked by the ballooning government deficits and debt?

A: The U.S. government's fiscal situation was precarious before the virus struck and is a mess given the costs of responding to it. The cumulative budget deficits this fiscal year and next will be well over $5 trillion, equal to one-fourth of GDP. The nation's debt-to-GDP ratio will surge to more than 100% of GDP. State and local government budgets will be under similar stress.

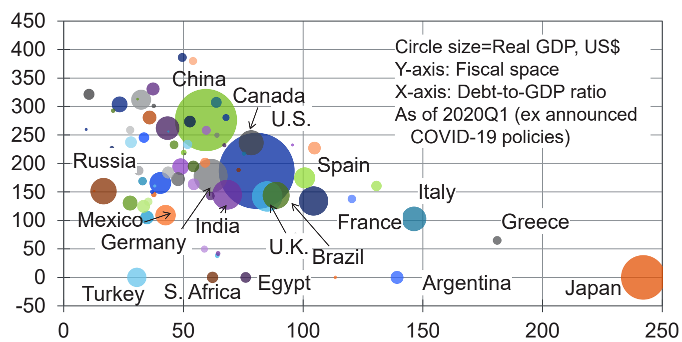
Prospects that the government will be hemorrhaging red ink seems to have made global investors in Treasury bonds nervous. Ten-year Treasury yields remain extraordinarily low at well below 1%, but only because the Federal Reserve is committed to purchasing whatever the Treasury issues. Indeed, until that became clear, long-term yields had begun to run back up as global investors contemplated the massive amounts of bonds they would be asked to purchase.

Having said this, there is little chance that global investors will significantly curtail their purchases of U.S. Treasuries, which firmly remain far and away the highest quality assets in the world. The Fed has the Treasury's back, and investors know they will get their coupon payments. As such, the U.S. has a substantial amount of fiscal space—capacity to increase debt loads without causing investors to lose faith that they will get paid the principal and interest they are owed (see Chart 4).

Even so, there remains a significant risk of a future debt crisis in other parts of the world, including many emerging markets and Europe. Other than Germany, most other major European nations have higher debt loads than they did when Europe suffered a debilitating debt crisis in the wake of the financial crisis.

Chart 4: Who Has Fiscal Space?

Borrowing capacitygiven current yields,proj.output growth&primary bal.



Source: Moody's Analytics

Q: Will the eventual economic recovery be shaped like a V, U, L, W, or something else?

A: It is hard to see how the economy will enjoy a strong V-shaped recovery. As long as the virus threatens to make people sick, travel and trade will be impaired, and uncertain businesses will only cautiously add to payrolls and expand their operations. A vaccine seems unlikely before this time next year, and until there is one, we will likely be battling disruptive outbreaks. This is evident in much of Asia where the worst of the infection is over, but new infections continue to reappear causing governments to clamp back down with mitigation efforts and close their borders.

Moreover, the current business shutdowns are sure to result in a rash of business failures and bankruptcies, particularly among smaller businesses in a wide array of industries. Many displaced workers will not have jobs to return to once the virus passes, and this will diminish the economy's ability to rebound quickly. New businesses will eventually form, but not quickly.

There is also no obvious engine of global growth. In past recessions, there was always a major economy that weathered the downturn reasonably well and powered the global economy during the early stages of the recovery. China played that role coming out of the financial crisis. Now the entire world is contending with the virus and in recession, and trade will not be the way out of this downturn for any country, including the U.S. (see Chart 5).

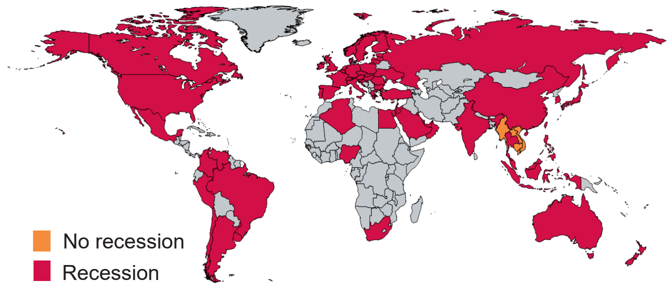
An L-shaped recovery, in which the economy does not kick back into gear anytime soon, seems overly pessimistic, assuming there is a vaccine or medical solution to the virus in the not-too-distant future. Even barring that, populations eventually will develop immunity to the virus and mitigation efforts to manage the virus through testing and social distancing. We are assuming in our baseline scenarios that a vaccine will be available by summer 2021. The massive monetary and fiscal stimulus being provided globally should also ensure the economic recovery does not remain stuck in an L.

This leaves the most likely scenario as a W-shaped recovery. That means the deep slide in the economy that we are suffering now, a bounce when businesses begin to reopen, and then a modest slump as consumers and businesses remain cautious until a vaccine becomes available and the economy fully engages. Under any shape, the recovery will take time—until mid-2023 in our outlook—to get back to full employment, which we estimate is consistent with a 4.5% unemployment rate.

Of course, this assumes nothing else goes wrong, which is a big assumption when the economy and financial system are under such intense pressure. As credit problems mount, the financial system will come under renewed pressure, and the Fed may not be up to the task of maintaining credit flows. Also, the longer the unemployed remain jobless, the harder it will be to get them back to work. This so-called hysteresis is a characteristic of most recessions but is especially pernicious in a severe downturn like this. There are many known unknowns and surely some unknown unknowns that could turn the W-shaped recovery we expect into something more resembling a check mark.

Chart 5: Engulfed in Recession

2020 economic outlook



Source: Moody's Analytics

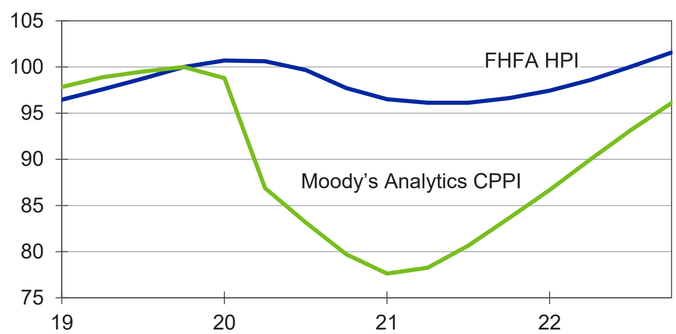
Q: Is housing headed for another crash? What about commercial real estate markets?

A: The housing market is in a very different place today than prior to the housing bust that was the catalyst for the financial crisis. Most important is that the market for low- and mid-priced homes is significantly undersupplied. There is an affordable-housing crisis. Despite some overbuilding in the high end of the market, particularly for apartments, the vacancy rate across the housing stock is near a 35-year low and was falling. This is very different than over a decade ago, when the market was significantly overbuilt and vacancy rates at record highs.

House prices have risen strongly in recent years, and pockets of overvaluation have developed, mostly in western U.S. markets—but nothing compared to the speculative conditions that prevailed in the housing bubble prior to the financial crisis. Housing investors, empowered by easy-to-get mortgage loans, had juiced-up prices well beyond what could be explained by household incomes, rents or construction costs. That is not the case today.

Chart 6: Real Estate Prices Will Slump

2019Q4=100, Apr preliminary baseline



Sources: FHFA, Moody's Analytics

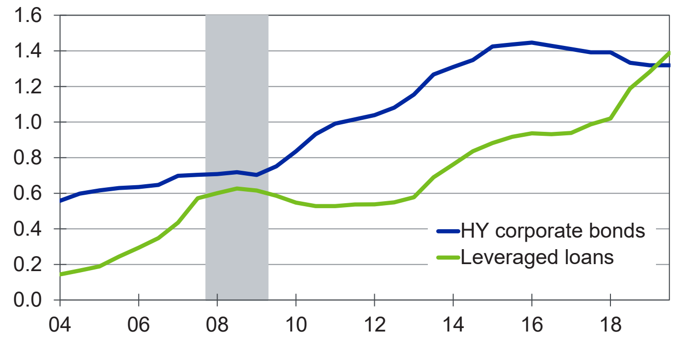
There is thus something of a floor under house prices and rents. Given the collapse in housing demand—homebuying and selling are hard to do when the country is on lockdown—house prices will come under pressure and we expect some price declines later this year and early next, when home sales resume. But house price index declines will be in the low single digits nationwide (see Chart 6). Continued record low mortgage rates should also buoy housing demand once we are allowed out of our homes.

Commercial real estate is a darker story. CRE prices have risen very strongly since hitting bottom after the financial crisis and appear meaningfully overvalued. Indicative of this are capitalization rates that are about as low as they have ever been across much of the CRE market. Low cap rates make sense given that interest rates are low. But they were so low that they effectively anticipated consistently strong demand for commercial space, low vacancy rates, and robust growth in net operating income. COVID-19 has upended these expectations, particularly as businesses quickly learn how to make do with no office space and consumers learn how to shop online for just about everything. CRE prices are expected to decline by double digits over the next few years.

Q: How bad will credit conditions get?

Chart 7: Leveraged Firms Leverage Up

Debt outstanding, $ tril



Sources: BCA Research, BIS, IMF, Moody's Analytics

A: It would seem obvious that credit conditions, including delinquencies, defaults, foreclosures and bankruptcies, will weaken rapidly in this downturn, but the situation is a bit tricky given that a substantial amount of forbearance will be shown at least for the next several months. The FHA and FHFA, the regulator for Fannie Mae and Freddie Mac, have stopped foreclosures and evictions and are requiring these government lenders to provide a moratorium on residential mortgage payments for at least six months, and as long as a year. Close to 70% of all first mortgage loans are covered by these moratoriums. Banks and other financial institutions that own the other 30% are also providing some forbearance to their borrowers. We estimate that 15 million mortgage borrowers will ultimately need this help.

Other consumer and business borrowers under severe financial stress should also receive some temporary reprieve from their lenders. Not that lenders will forgive loans, but only to allow borrowers to delay making payments on those loans. These efforts should forestall, at least for a bit, a serious erosion in credit quality.

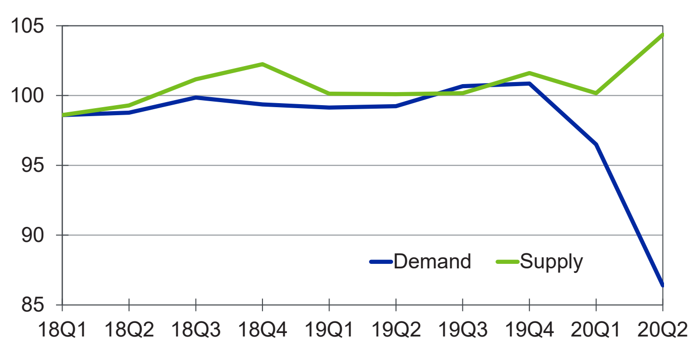
Also mitigating a weakening in household credit quality is the generally good underwriting in the years after the financial crisis. Lending to households with lower credit scores has been substantially more constrained. And households have been judicious in taking on debt. As such, debt service burdens—the share of after-tax income that households must devote to their debt payments to remain current on them—are at record lows.

Regardless, credit conditions are sure to weaken under the weight of double-digit unemployment, particularly as the moratorium and forbearance efforts wind down. This will become clearly evident later this year and early next. Most problematic will be corporate credit quality, where lending has been aggressive in recent years and leverage is high. Leverage lending—lending to low-rated businesses—has long been widely recognized as a potential systemic risk (see Chart 7). The credit facilities established by the Fed and lawmakers to help support the finances of businesses may not be able to help these companies, and business failures and bankruptcies are sure to surge over the coming year.

Q: When can we expect oil prices to recover?

Chart 8: Global Oil Glut

Mil bpd



Sources: BCA Research, BIS, IMF, Moody's Analytics

A: Not anytime soon. Oil prices have stabilized on the news that Saudi Arabia and Russia are open to negotiating an end to their brinkmanship over the production cuts needed to bring global oil supplies in line with much weaker global oil demand. The price for West Texas Intermediate oil bounced closer to $30 per barrel from near $20. The Saudis and Russians are expected to come to some kind of deal since they are getting hammered at current oil prices. But any agreement will not address the oil supply glut (see Chart 8). Nothing short of a restart in the global economy will address this glut. Oil prices are expected to hover near $30 per barrel through the remainder of this year before slowly rising back to their estimated equilibrium of $55 to $60 as the economy returns closer to full employment several years from now.

Q: Should we worry about runaway inflation? How about deflation?

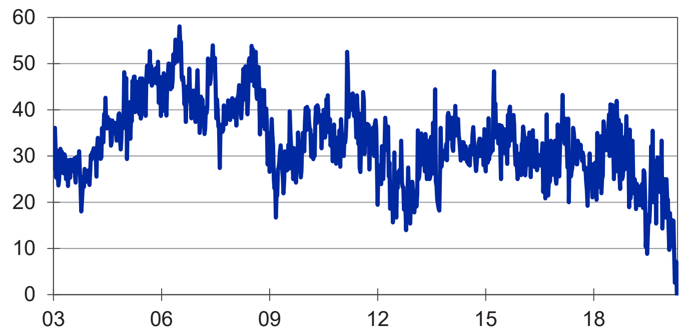
A: With businesses shut down and spot shortages for certain products, there is concern that prices will jump and inflation more broadly will accelerate. This is unlikely. While prices for certain products in short supply will experience temporary price spikes—toilet paper and surgical masks, for example—this will not result in a broader pickup in inflation. While the supply side of the economy is impaired, demand is being crushed. With double-digit unemployment and wages under severe pressure, most businesses will have no latitude to raise prices.

This is starkly evident in our weekly survey of global businesses, which shows a record low number of businesses currently raising prices for their goods and services (see Chart 9). If anything, disinflation is the concern, and our outlook has core inflation, as measured by the core consumer expenditure deflator, moderating from close to 2% currently to nearer 1% by this time next year.

It is also instructive that inflation did not accelerate during the Spanish flu pandemic that struck a century ago. While economic data from the period are sparse, consumer price inflation data are available since 1913. It shows that the pandemic had no discernible impact on inflation. Inflation had surged prior to that contagion, but that is because World War I created an immense demand for materials and sparked a massive surge in government spending and borrowing. Perhaps more relevant to the current crisis, deflation pressures set in after the pandemic due to a sharp decline in the economy in the early 1920s after the flu had passed.

Chart 9: Businesses Are Not Raising Prices

% of business respondents raising prices



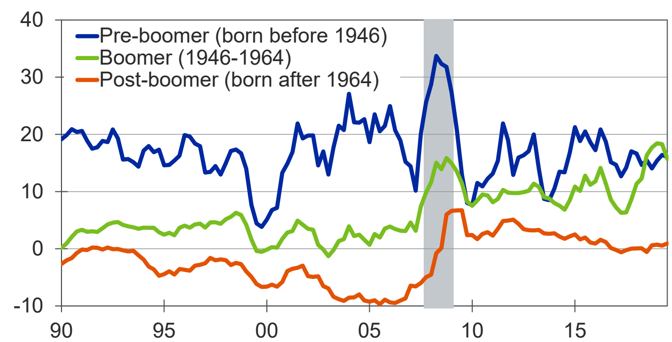
Source: Moody's Analytics

Q: Will the COVID-19 crisis fundamentally change how we live and work?

A: COVID-19 will undoubtedly change how we live and work for a long time to come. Consumers and businesses are likely to be more cautious and save more. The baby boom generation, close to or already in retirement, will have little choice but to save substantially more and spend less. Prior to the virus, this cohort owned more than half of stock wealth, accounting for more than one-fifth of all their assets. With stock prices down over 20% from their peak, and prospects that they will not recover the lost ground anytime soon, boomers will need to adjust their expectations and spending. But households of all ages will not forget how quickly jobs vanished and household finances were wrecked. There will surely be some pent-up consumer demand that is unleashed once we are on the other side of the virus, but consumers will be more prodigious savers, just like those who lived through the 1930s' Great Depression or suffered through the financial crisis (see Chart 10).

Chart 10: More Prodigious Savers

Personal saving rate, %



Sources: Federal Reserve, BEA, Moody's Analytics

Consumer spending patterns will also shift, at least for a while. People will not travel as much, at least not to faraway destinations and especially not until the virus is licked. It may also take a while to get people to attend big events and crowded places. Healthcare and housing may become bigger parts of the typical American's budget. Much more shopping will be done online. This trend was firmly in place pre-virus, but it will now be supercharged as people learn to purchase just about everything online: groceries in particular.

The most significant longer-term casualties of the virus will be lower-income households that had just begun to benefit from the previous record-long economic expansion and tight labor market. Wage growth for those in the bottom of the income distribution had been rising faster than for any other income group. With the job market in disarray, and unlikely to return to full employment for years, lower-income households are sure to be left farther behind financially. The income and wealth distribution, which is already highly skewed, will become more so.

Businesses will also be chastened by this crisis, and those that have leveraged up in recent years will need to de-leverage—if they are able to survive the turmoil. Lenders and their regulators will reinforce this since they will tighten their underwriting. Banks and other financial institutions will need to raise more capital and repair their balance sheets after all the credit losses, and they will be in no position or mood to take significant risks. Risk-taking will remain dormant for some time.

The geopolitical fallout may also be significant. Globalization—the integration of the global economy through trade, immigration and investment—was already unwinding before the virus struck, due to widespread nationalistic sentiments that developed as a result of the financial crisis. The virus has forced governments to shut borders, and it is unclear how quickly and to what degree they will reopen after the virus has passed. Fear of future pandemics may cause governments to be more circumspect in reconnecting with the rest of the world.

Nationalism may also be re-energized by the global economic downturn. Many countries, hard-hit by the financial crisis and angry at their plight, will be battered again in this crisis and place the blame on the rest of the world. Brexit in many respects is a manifestation of this. The European Union seems most at risk of fracturing, as came very close to happening in the European debt crisis immediately following the financial crisis. And this nationalistic perspective is strongly held across much of the globe, including here in the U.S.

COVID-19 will be a seminal event in economic history. It will stand with the 1930s' Great Depression and the financial crisis of 2008-2009 as one-in-50-year events. We are unfortunate that we have been hit by two of these black swan events, each so far out on the tail of the distribution of possibilities, in a little over a decade. It also makes us more vulnerable to anything else that may go wrong. Our collective finances are a wreck, and effectively responding to another such event anytime soon will be difficult. We need to address this quickly on the other side of the virus and hope for a bit of luck.

About the Author

Mark Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

Dr. Zandi is on the board of directors of MGIC, the nation's largest private mortgage insurance company, and is the lead director of Reinvestment Fund, one of the nation's largest community development financial institutions, which makes investments in underserved communities.

He is a trusted adviser to policymakers and an influential source of economic analysis for businesses, journalists and the public. Dr. Zandi frequently testifies before Congress and conducts regular briefings on the economy for corporate boards, trade associations, and policymakers at all levels. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, *Meet the Press*, CNN, and various other national networks and news programs.

Dr. Zandi is the author of *Paying the Price: Ending the Great Recession and Beginning a New American Century*, which provides an assessment of the monetary and fiscal policy response to the Great Recession. His other book, *Financial Shock: A 360º Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis,* is described by the New York Times as the "clearest guide" to the financial crisis.

Dr. Zandi earned his BS from the Wharton School at the University of Pennsylvania and his PhD at the University of Pennsylvania.

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