Economic Forecast

History of the COVID-19 Crisis, a Projection of Events to Come and the Effects of our Election

The circumstances of life and market forces dictate the government policies necessary to continue overall human growth at any given point in time. This moment is not different, although the size and scale of the questions we have the opportunity to answer are unique. We have included this analysis as it contextualizes the scope of the challenges that the COVID-19 pandemic has unveiled for humanity and provides the vision underpinning our proposed approach to investing in our future.

For those with an interest to better understand the economic context within which we find ourselves and how our proposals can improve their individual experience of life through the lens of the economy, we have included the following analysis:

- In the first section of this article, we examine the origin of the COVID-19 health crisis and its impact on the financial and economic system

- In the second section, we have extended our analysis beyond a simple recount of events-to-date in order to illustrate the scope of the challenge facing the new Presidential Administration

- In the third section, we highlight key provisions in our Economic Growth Plan and Healthcare Plan (please refer to the Policy Plans section of our website) that will alleviate the short-term issues facing our economy from January 2021 onwards. We also illustrate the role of our proposed Federal Opportunity Investment Fund in reframing our approach to generating long-run economic growth

History of the COVID-19 Crisis: Events to Date

a. Coronavirus lands in the US in early 2020
    i. In late January, US officials confirmed the first instance of person-to-person spread of COVID-19, the disease caused by the novel coronavirus, within the US[1].

[1] https://www.marketwatch.com/story/coronavirus-update-a-new-task-force-195-us-citizens-in-isolation-and-who-to-decide-if-its-a-public-health-emergency-2020-01-30

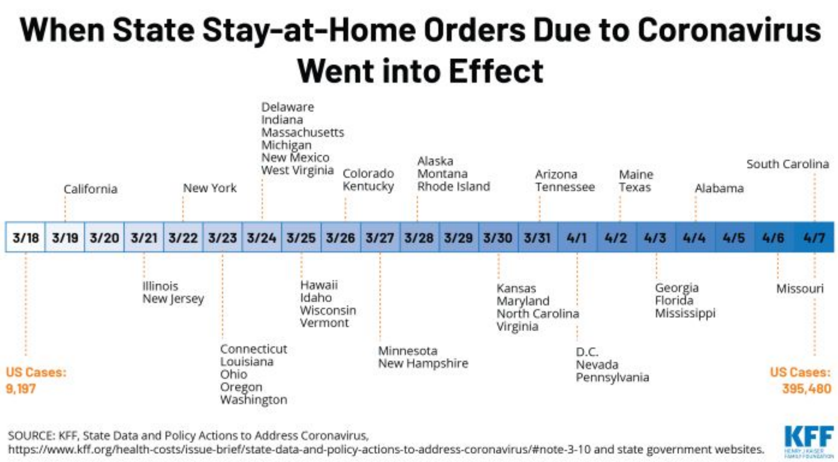
ii. In late February, health officials confirmed the first instances of community transmission (cases with no known origin) in California, Oregon and Washington state[2].

iii. Per internal emails exchanged by senior health officials at the Department of Homeland Security, the US had already lost the fight to contain the virus by late February because many people in the country were likely already infected and capable of spreading the virus without yet showing symptoms[3].

iv. Between Late February and Mid-March, many states issued warnings against large gatherings. Despite these warnings, people flocked to vacation destinations including Florida's beaches and New Orleans's Mardi Gras celebrations[4] [5].

v. By Mid-March, COVID-19 cases had been detected in the majority of US states.

vi. Between March 19 and April 6, US governors covering 95% of the US population issued mandatory stay-in-place orders aimed at reducing the spread of COVID-19 by shutting down all "nonessential businesses" and encouraging residents to stay at home[6]:



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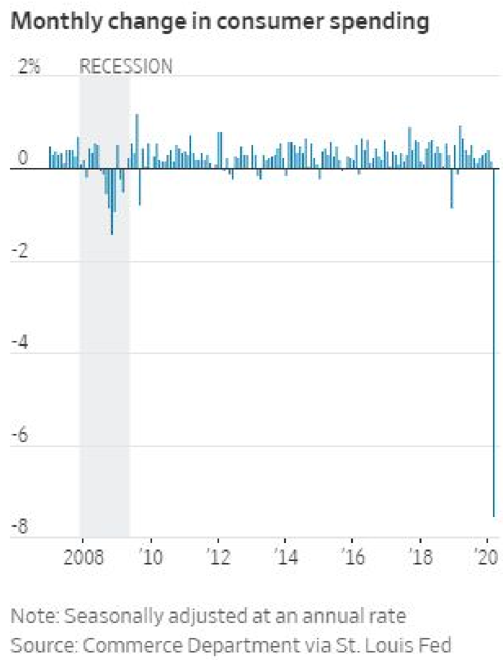
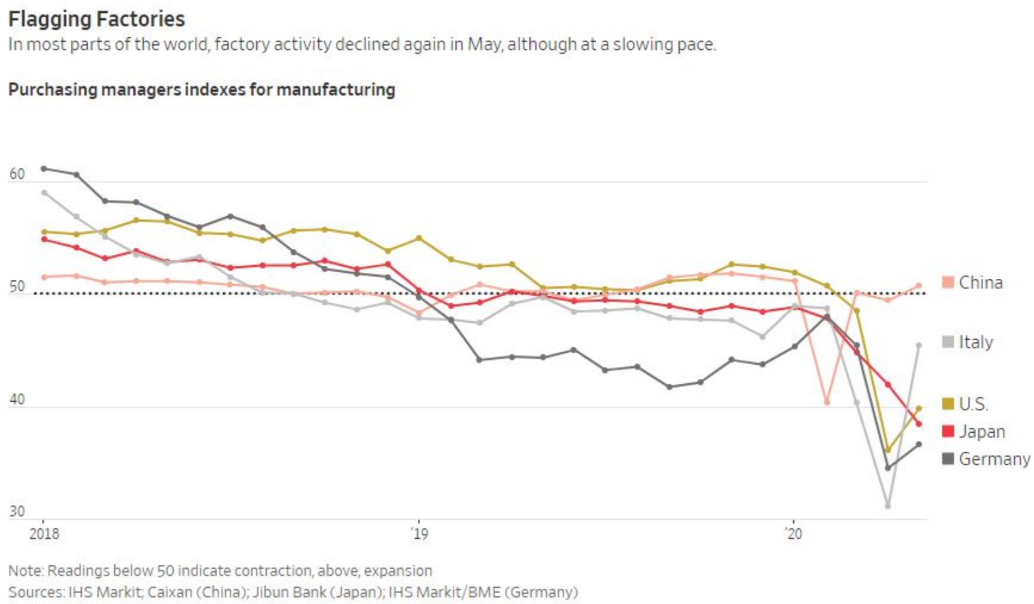
2 https://www.cnn.com/2020/02/28/health/coronavirus-us-updates-california-patient/index.html
3 https://www.nytimes.com/2020/04/11/us/politics/coronavirus-red-dawn-emails-trump.html?
4 https://www.nytimes.com/2020/03/26/us/coronavirus-louisiana-new-orleans.html
5 https://news.yahoo.com/thousands-flock-florida-beaches-ignoring-060744453.html
6 https://www.nytimes.com/interactive/2020/us/coronavirus-stay-at-home-order.html

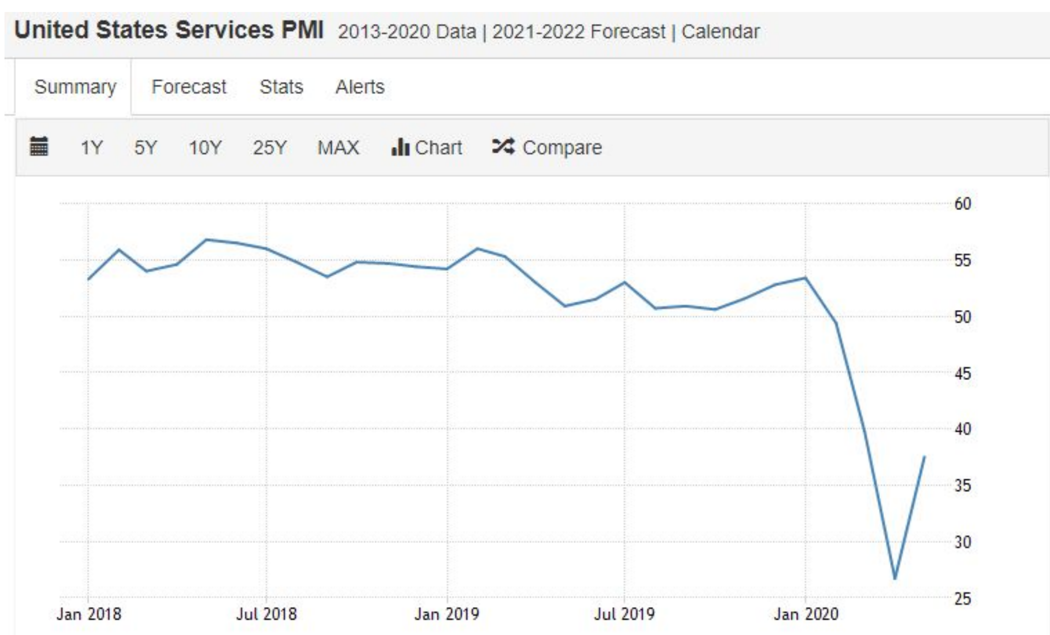
b. In many regions throughout the US, people began to socially distance and pull back on consumption before the stay-in-place orders went into official effect. This combined with the mandatory stay-in-place orders instituted by governments across the US caused an exogenous shock to demand as consumers stayed at home (reducing foot traffic significantly) and businesses were forced to close. Consumer spending dropped precipitously[7]:



[7] https://www.wsj.com/articles/consumer-spending-personal-income-coronavirus-april-2020-11590701150

c. At the same time, the global nature of the virus disrupted supply chains for many US businesses, negatively impacting their ability to provide goods and services and producing a supply shock[8 9]:





[8] https://www.wsj.com/articles/decline-in-factory-output-eased-in-may-but-recovery-set-to-be-slow-11591006623
[9]https://tradingeconomics.com/united-states/services-pmi#:~:text=Services%20PMI%20in%20the%20United,points%20in%20April%20of%202020.

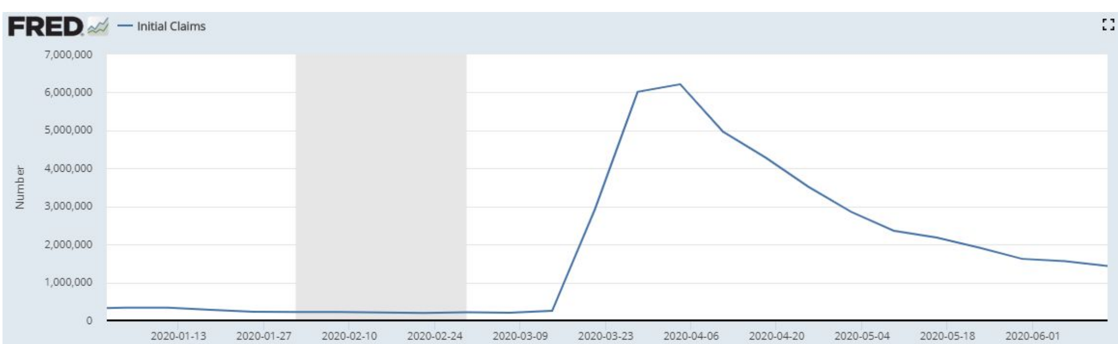
d. Many small businesses lack the liquidity buffer and access to capital to withstand sustained downturns in revenue[10], so in response to the sharp reduction in revenue and disruptions to their supply, firms seek to reduce monthly costs as much as possible[11].

   i. "Non-essential" employees are laid off or furloughed
   ii. Contracts for services with other businesses are cancelled or renegotiated
   iii. Unprofitable customer contracts are culled
   iv. Advertising and other near-term investment budgets are cut
   v. Long-term investments are deferred or eliminated

b. As virus-related business disruptions continue, some businesses become unable to pay business expenses such as:

   i. "Essential" employees
   ii. Rent / Mortgage Payments
      1. Some larger businesses exert their leverage over landlords and threaten to withhold rent in order to extract concessions[12]
   iii. Interest Expense and Principal payments on debt

c. As employees are laid off, they begin to file for state unemployment benefits in large numbers. Weekly initial unemployment claims spike up to over 6 million, and state systems struggle to keep up with the sudden jump in unemployment filings[13]:



d. In preparation for a surge of COVID-19 cases, hospitals across the US cancel elective procedures, immediately disrupting a profitable revenue stream that many hospitals depend on for survival[14]

[10] https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-small-business-report.pdf
[11] https://www.permanentequity.com/writings/how-to-cut-expenses
[12] https://la.eater.com/2020/3/25/21194144/cheesecake-factory-rent-strike-chain-restaurant
[13] https://fred.stlouisfed.org/categories/32240
[14] https://www.cnbc.com/2020/05/05/hospitals-losing-millions-of-dollars-per-day-in-covid-19-pandemic.html

i. Many people defer essential hospital and ER visits, fearing that a hospital visit will put them at risk of contracting COVID-19, further depressing hospital revenue

ii. In May, the AHA estimated hospitals nationwide would lose over $200 billion between March and June

iii. Rural care is set to suffer the most as rural hospitals - at least 20% of which were already at risk of failure prior to the pandemic - suffer the most from deferral of elective procedure and reduced patient counts[15]

e. As cases of COVID-19 are first detected in America, equity and credit markets begin to decline rapidly[16]

i. As investors rush to the safety of cash (US Dollars) and treasuries, short-term funding markets (primarily the Repurchase Market) that depend on liquidity in US dollars and treasuries experience severe disruptions

1. Please refer to our article entitled "Turmoil in the Repo Market" for more detail on Repurchase Market disruptions

ii. Disruptions in treasury and equity markets trigger massive deleveraging across equity and debt markets in certain hedge fund strategies including Risk Parity and Market-Neutral. Forced selling from these and other strategies results in volatile equity market declines that trigger multiple "circuit breakers" (stock market rules which halt market-wide trading during dramatic drops)

iii. On March 12, 2020 the Fed steps in with over $1T in total interventions into the repo market to ease market tension and ensure market makers can properly facilitate transactions[17]

f. Large and small businesses begin to react to the crisis, building cash balances and pulling down lines of credit to ensure that they have sufficient liquidity to weather the sharp reduction in demand and disruptions to supply[18]

i. The combination of businesses pulling down credit lines and turmoil in financial markets puts pressure on banks' balance sheets, and banks start to pull back from lending and market-making activities in the absence of Federal Reserve intervention

ii. The Fed reacts by reducing interest rates to zero and initiating a QE program to increase the amount of reserves held by the banks (thereby increasing their ability to lend and make markets)[19]

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[15] https://www.healthaffairs.org/do/10.1377/hblog20200429.583513/full/

[16] https://www.bis.org/publ/bisbull02.pdf

[17] https://www.ft.com/content/e8c7b5f0-6200-11ea-a6cd-df28cc3c6a68

[18] https://www.bloomberg.com/news/articles/2020-03-12/dash-for-cash-is-on-as-corporate-titans-draw-down-credit-lines

[19] https://www.cnbc.com/2020/03/15/federal-reserve-cuts-rates-to-zero-and-launches-massive-700-billion-quantitative-easing-program.html

1. Please refer to our article entitled [“Quantitative Easing”]() for more detail on central bank interventions to stabilize the financial system

iii. Banks and investors begin to step back from facilitating new credit issuance. Investors begin to sell their holdings of debt in the secondary market to reduce exposure to potential default risk

g. The rush for cash impacts money markets, as investors fearing the prospect of corporate defaults begin redeeming assets from prime money market mutual funds (“MMMFs”) which primarily invest in corporate commercial paper[20]

i. Regulations imposed after the 2008 financial crisis mandated that MMMFs implement a “gate” on redemptions when liquid assets (cash and treasuries) decline below 30% of total fund assets.

1. While the intention was to prevent “runs” on MMMFs that exacerbated the crisis in 2008, this regulation actually created incentives for investors to redeem quickly, creating a “run” on MMMFs, so that they don’t get stuck behind the gate

ii. Large scale redemptions to prime MMMFs disrupted the commercial paper (CP) market as the following ensued:

1. Banks stepped back from facilitating issuances of new CP, anticipating that they would have to buy large amounts of CP to support MMMF redemptions. As a result, businesses trying to roll over CP to finance working capital (payroll, etc.) lost an important source of ST financing

2. MMMFs stepped back from the repurchase market to preserve cash and assets ahead of a wave of redemptions, further disrupting short-term funding for many financial institutions

3. Disruptions in prime MMMFs began to cascade into other MMMFs that carried other types of short-term debt, including municipal debt and negotiable Certificates of Deposit

iii. In response to this significant disruption, the Fed created 2 facilities to stabilize the commercial paper market:

1. On March 17, 2020, the Fed reinstates the CPFF, which purchases new commercial paper to replace demand from MMMFs[21], and

2. On March 18, 2020, the Fed creates the Money Market Mutual Fund Liquidity Facility (MMMFLF), which loans non-recourse money for banks to use to purchase assets from MMMFs experiencing large redemptions[22]

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[20] https://www.cato.org/blog/recent-trouble-among-money-market-mutual-funds-way-forward

[21] https://nathantankus.substack.com/p/the-federal-reserves-coronavirus

[22] https://www.federalreserve.gov/monetarypolicy/files/mmlf-faqs.pdf

h. In response to rising unemployment, Fannie Mae and Freddie Mac – the government sponsored entities responsible for expanding the mortgage market by purchasing mortgage backed securities – order lenders servicing approximately half of all home loans in the US to offer forbearance to homeowners impacted by COVID-19[23]

    i. These forbearance programs cause significant liquidity issues at many non-bank mortgage originators and servicers who are responsible for collecting payments from homeowners and passing them on to Fannie Mae and Freddie Mac

i. Layoffs and missed rent and mortgage payments remain elevated as businesses continue to struggle with the impact of stay-in-place orders. People who have been laid off become unable to make payments related to rent, credit card, student loan, and auto loan debt. As larger numbers of businesses and individuals miss rent and payments, landlords start to miss mortgage payments[24]

    i. Throughout the economic expansion leading up to this year, personal debt, student loans, auto loans, corporate bonds and mortgages were all - to some extent - securitized into a class of debt known as Asset Backed Securities (ABS)

    ii. Securitization provides the base of the web through which short (commercial paper and repurchase) and long-term (term credit) debt financing is provided to companies by non-bank financial institutions (investors and fund managers); any disruption in the ABS market can spread rapidly throughout the system

    iii. Investors, fearing the effects of business layoffs and missed rent payments on the assets underlying ABSs fled the market - with no buyers and plenty of distressed / forced sellers, ABS spreads widened significantly, making new ABS origination uneconomical, closing down a key funding market for consumer and business term credit that threatened to exacerbate the slowdown in the economy

    iv. In order to prevent a disorderly liquidation of many assets in this market, which could spill over rapidly to the commercial paper and repurchase markets, the Fed stepped in and created the Term Asset-Backed Securities Loan Facility (TALF) on March 23, 2020 to provide capital to any AAA-rated ABS with underlying securities related to virtually any household or SME credit[25]

j. If the ABS market falls apart and investors pull back from corporate credit markets, the total availability of credit to companies shrinks and the cost of issuing new credit (either to finance investments or to roll over / term out / refinance existing debt) increases sharply

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[23] https://www.npr.org/2020/03/19/818343720/homeowners-hurt-financially-by-the-coronavirus-may-get-a-mortgage-break
[24] https://www.newyorkfed.org/medialibrary/media/research/epr/12v18n3/1210ashc.pdf
[25] https://nathantankus.substack.com/p/the-federal-reserves-coronavirus-276

i. This disruption would occur concurrently with the disruptions in the short-term commercial paper market; meaning that companies must contend with a sudden inability to roll short-term debt that is used to make payroll and long-term debt that could be used to term-out short-term debt and avoid a default
ii. In the absence of some form of intervention, this disruption is likely to force corporations to choose between immediate, sharp cost reductions (layoffs, etc) and a potential default
iii. On March 23, 2020 the Fed created two facilities to alleviate the stress in corporate debt markets and reduce the cost of issuance of new debt[26]
    1. The Primary Market Corporate Credit Fund (PMCCF) purchases new-issue Investment Grade corporate bonds and is authorized to purchase >100% of an issuer's outstanding bonds and loans at market interest rates, in order to ensure corporate issuers can maintain access to bond markets.
    2. The Secondary Market Corporate Credit Fund (SMCCF) purchases Investment Grade corporate bonds and bond ETFs on the market to help narrow bond spreads and provide a bid for bonds that are being sold by distressed / forced sellers

k. Congress finally approves the CARES act on March 27, after weeks of deadlock over the size and scale of the financial assistance. The act provides relief through a number of channels[27]:
   i. For Households:
      1. Eligible individuals receive cash stimulus checks (refundable tax credits) of up to $1,200 per person based on household status and income
      2. Unemployment insurance is expanded and increased via the Pandemic Unemployment Insurance program, which adds an additional 13 weeks of assistance to the typical state assistance duration and allocates $600 per week of federally-backed funds to augment state benefits. PUA expires at the end of July 2020.
      3. Provided a 60 day foreclosure moratorium on properties with federally-backed residential mortgages (those backed by the FHFA and the FHA)
      4. Freeze on evictions for 120 days for federally-backed multifamily properties
      5. Option to request up to 12 months of forbearance due to financial hardship on federally-backed residential mortgages

[26] https://nathantankus.substack.com/p/the-federal-reserves-coronavirus-276
[27] https://www.morganstanley.com/ideas/cares-act-overview

ii. For Small Businesses

1. Paycheck Protection Program - $349 billion in forgivable loans designed to provide an incentive for small businesses to retain employees. Program is administered through the SBA's 7(a) program, which allows it to partner with private banks
2. Economic Injury Disaster Loan: Low interest SBA loans to small businesses with favorable terms including up to a 30-year repayment period, payment deferral for up to 1 year
3. Economic Injury Disaster Loan Advance: $10,000 grants to businesses who need immediate assistance while waiting for a PPP or EIDL loan to fund

iii. For Large Businesses, States and Municipalities, and Markets

1. $46 billion to specific industries that are hard-hit including Airlines and Air Cargo carriers and industries critical to national security
2. $454 billion to support the Fed's credit market facilities

iv. For State and local governments

1. $330 billion in direct funding, aid to hospitals and public health initiatives, grants to airports, aid to transit agencies and a new education stabilization fund

v. For Hospitals[28]:

1. $130 billion in funds, $100 billion of which is set aside for reimbursing hospitals for COVID-19 related expenses and lost revenues, however little funding is specifically set aside for rural hospitals

l. The PPP program was launched in early April, with first applications being accepted beginning on April 3. The initial program was a huge success, and ran out of funds within 2 weeks[29]

m. Municipalities have been hit hard by the business shut-downs (reduced tax revenue) and increased spending necessary to combat COVID-19[30]. Budgets are falling and muni bond market liquidity concerns have led to significant volatility in yields, hindering the ability of municipalities to issue debt; and issuance may be more difficult in the future as government income streams dry up

   i. State and Local Government budgets are particularly stressed given the Treasury's decision to delay the tax filing deadline by 3 months

[28] https://www.healthaffairs.org/do/10.1377/hblog20200429.583513/full/
[29] https://www.businessinsider.com/demand-for-ppp-funds-slows-in-second-round-2020-5
[30] https://www.ncsl.org/research/fiscal-policy/coronavirus-covid-19-state-budget-updates-and-revenue-projections637208306.aspx

ii. Given the systemic nature of COVID-19, stress in some municipalities could lead to widening of spreads across other municipalities, causing financial difficulties that could spread out to other financial markets in the economy

iii. In response to this risk, the Federal Reserve created a new facility to address short-term municipal funding concerns on April 9, 2020. The Municipal Liquidity Facility (MLF) is authorized to purchase debt that matures within the next 2 years. Only cities whose population exceeds 1 million people and counties whose population exceeds 2 million people are eligible to participate in this facility[31]

iv. In late April, given low uptake of funds by municipalities, the Fed expanded the scope of the MLF to include cities whose population exceeds 250,000 people and counties whose population exceeds 500,000 people[32]

n. Fallen Angels - Credit downgrades are accelerating in the US and pushing a number of BBB rated credits into High-Yield status[33]

i. Fallen angels could experience difficulty financing their businesses and disrupt high yield markets; the associated stress could spill over to the CDO market and other credit markets as investors and banks take losses on defaulting debt

ii. The Fed is addressing this risk by extending its corporate debt facilities to account for fallen angels. In order to be eligible to participate in the corporate debt facilities, corporations have to have an investment grade credit rating as of March 22, 2022

o. In response to the strong success of the PPP program and the need for increased support for hospitals and small businesses, Congress passed an expanded aid package on April 24. Key provisions of the package include[34]:

i. $310 billion in incremental funding for the PPP program, of which $60 billion is dedicated to community banks and small lenders

ii. $75 billion in direct support for hospitals

iii. $25 billion in direct support for community testing efforts

iv. $60 billion in incremental funding for EIDL loans

p. Stay-at-home orders prove somewhat effective in slowing the spread of COVID-19 in many communities, but poor compliance hampers the US's efforts to "flatten the curve". After 1 month of stay-at-home orders, people in many communities begin to re-mobilize and states begin to prepare to reopen

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31 https://www.federalreserve.gov/monetarypolicy/muni.htm
32 https://www.federalreserve.gov/newsevents/pressreleases/monetary20200427a.htm
33 https://www.bloomberg.com/news/articles/2020-04-09/federal-reserve-s-fallen-angel-bond-buying-won-t-catch-them-all
34 https://thehill.com/homenews/administration/494412-trump-signs-484-coronavirus-relief-package

i. Most states lack adequate testing capacity to implement robust test-and-trace programs

ii. A commercial vaccine is in development, with some promising early results, but is not expected to be available until early 2021

q. In Mid-April, the White House issued a set of nonbinding, one-size-fits-all general guidelines for reopening states[35]:

  i. Gating Criteria for reopening:

    1. Symptoms – downward trajectory of influenza-like illnesses and COVID-like cases over 14 days prior to reopening
    2. Cases – downward trajectory of confirmed COVID cases or declining positive test rate (%) over 14 days prior to reopening
    3. Hospitals – treat all patients without crisis care and implement a robust testing program for at-risk healthcare workers

  ii. The guidelines also laid out general guidelines for a 3-phase reopening of states, with guidelines for individuals and employers

  iii. However, the guidelines did not address difficult questions, including:

    1. How states should finance expanded testing and tracing regimes
    2. Whether travel should be restricted while states are reopening
    3. How to deal with potential shortages of PPE
    4. Guidelines for implementing quarantines

r. At the end of April, stay-at-home orders for 30 states began to expire. Some states unveiled phased-in reopening plans in order to moderate the spread of covid-19 and allow businesses to adjust their operations to mitigate risks, while other states allowed stay-at-home orders to simply lapse. As of the end of June, most US states have more or less completely reopened[36]

  i. Reopening plans released by many states appear not to be driven by existing case counts and trends, and as states reopen, COVID-19 cases begin to creep upwards

  ii. Most states that commenced reopening at the end of April didn't meet the White House's general guidelines for reopening; 18 of the 30 states actually reported increasing daily average cases over the last two weeks of April[37]

s. On May 7, the media reported that the White House had ordered the CDC to revise its 68-page detailed guide to reopening states, claiming that the guide was "too prescriptive" and that it amounted to "counter messaging" as the

[35] https://www.whitehouse.gov/wp-content/uploads/2020/04/Guidelines-for-Opening-Up-America-Again.pdf
[36] https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html
[37] https://www.nytimes.com/interactive/2020/05/07/us/coronavirus-states-reopen-criteria.html

administration pushed each state to come up with its own specific set of guidelines for reopening[38]

   i. In mid-May, the CDC unveiled a watered-down, 60-page set of reopening guidelines to minimal fanfare; at this point, all states had commenced the process of reopening
   ii. It is unlikely that any individual state implemented even the watered-down guidelines in its reopening process

t. As states began to reopen, consumers became more mobile and increased spending off of April's sharply-reduced levels
   i. Overall retail sales recovered significantly in May to -1% from April's -18% decline[39]
   ii. Personal Consumption Expenditures grew 8.2% in May after a -6.6% decline in March and a -12.6% decline in April[40]
   iii. Despite rising COVID-19 infection and positive test rates, many states continue to reopen more businesses, schools and gathering places. States pointed to COVID-19 models that showed downward revisions in predicted deaths to support their decisions to reopen their economies[41]

u. Overall employment levels in May increased, driving an improvement in the official unemployment rate from 14.7% to 11.1% in May as consumer spending recovered and businesses used PPP to bring back employees who had been laid off[42]

v. By the end of June, COVID-19 case counts had begun to climb sharply across the southern US, from California to Florida[43]
   i. Some states, including California and Oregon, implemented face mask regulations, however compliance with these mandates remained poor
   ii. Governors of some states blamed increased testing for rising case counts, but concurrently rising positive test rates belied this explanation
   iii. Rising case counts have not yet led to increasing deaths. Some health experts have estimated that the lag between confirmed cases and death reporting by 27 days vs. 7-8 days in March due to a number of reasons:
      1. Increased testing and implementation of no-criteria testing have led to earlier detection of cases
      2. New treatments, including Remdesivir and Dexamethasone, have improved patient outcomes

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38 https://www.politico.com/news/2020/05/07/white-house-cdc-reopening-guidelines-243778
39 https://www.nytimes.com/2020/06/16/business/may-retail-sales.html
40 https://www.bea.gov/sites/default/files/2020-06/pi0520_0.pdf
41 https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html
42 https://www.bls.gov/news.release/empsit.nr0.htm
43 https://covid19-projections.com/

3. Patient demographic analysis indicates that the recent increase in infections could potentially be driven by younger patients, who are generally less susceptible to the virus[44]

w. Summary of events to date:

i. Community spread of COVID-19 within the US in early March led consumers and businesses to pull back on activity. Statewide stay-in-place orders exacerbated this by forcing the closure of many "non-essential" businesses

ii. In response, many businesses initiated layoffs, and the resulting distress in labor markets is illustrated in a ~11% unemployment rate and an employment / population ratio of ~53% in May, both of which are at the worst levels since the Great Depression

1. As of April 2020, annualized worker compensation is down ~10%[45]

iii. The Fiscal and monetary response has been strong thus far:

1. The Fed's myriad interventions have stabilized the financial system and prevented a collapse

2. Congress's rapid fiscal response in the form of the CARES act likely replaced well over 100% of workers' lost income in April (as a result of expanded unemployment and the one-time stimulus payments), and close to 100% of lost income in May, per BEA and Treasury reports[46]

iv. As a result of the strong fiscal and monetary response, the economy remains stable despite the sharp drop in consumption and high unemployment. Signs indicate that the interventions may have resulted in an economic recovery:

1. Personal Consumption Expenditures grew 8.2% in May after a -6.6% decline in March and a -12.6% decline in April

2. Financial markets have recovered significantly as the Fed has backstopped the financial system

   1. The S&P 500 has almost recovered all of its losses, and is up ~35% from its low

   2. Investment Grade bonds are near pre-crisis highs, with the representative bond fund (LQD) up ~25% from their low

   3. High Yield bonds have also recovered significantly, with the representative bond fund (HYG) up ~20% from their low

[44] https://covidtracking.com/blog/why-changing-covid-19-demographics-in-the-us-make-death-trends-harder-to/

[45] https://www.bea.gov/sites/default/files/2020-05/Effects-of-Pandemic-Legislation-on-Personal-Income.pdf

[46] https://www.bea.gov/sites/default/files/2020-05/Effects-of-Pandemic-Legislation-on-Personal-Income.pdf

4. Residential real estate prices have continued to increase through May 2020, supported by a shortage of housing that is exacerbated by stay-in-place orders[47]

v. Overall consumer savings have likely increased, as measured by the spike in the Personal Saving Rate to 33% of disposable income in April, from a pre-crisis run rate of ~8%[48]. While this measure is imperfect, directionally, it means that US consumers are likely building a cash buffer and paying down debt

vi. However, as of late June, US home mortgage delinquencies have reached their highest level since 2011, as more than 8% of all US residential mortgages were over 30 days past due or in foreclosure[49]

1. Only ~15% of homeowners in forbearance made payments as of mid-June, compared to 28% in May and 46% in April

vii. Examining the distributional effects of this crisis across the income spectrum illustrates that the crisis is disproportionately affecting lower-income members of the US[50]

1. Low-income consumer spending is down only ~3% since January 2020, compared to middle income spending down ~8% and high-income spending down ~13%. The implication is that low-income consumers are saving relatively less, and likely have less buffer in the future should the effects of the crisis persist or worsen

2. Employment rates among low income workers declined by ~38% compared to January 2020, compared to the ~11% unemployment rate for the broader economy

3. Wages among low income workers declined by ~36% compared to January 2020

viii. Small businesses continue to struggle despite stimulus efforts[51]

1. ~17% of small businesses nationwide remain closed, although this is a significant improvement from the April lows of ~33%

2. Small business revenue has decreased by ~19% since January 2020

ix. Despite having over 2.5 million confirmed cases of COVID-19 in the US, national seroprevalence is currently estimated at below 5% of the

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[47] https://www.advisorperspectives.com/dshort/updates/2020/06/30/s-p-case-shiller-home-price-index-april-update

[48] https://apps.bea.gov/

[49] https://www.bloomberg.com/news/articles/2020-06-22/u-s-home-mortgage-delinquencies-reach-highest-level-since-2011?sref=R04HIFIp

[50] https://tracktherecovery.org/

[51] https://tracktherecovery.org/

population, meaning that not much overall progress towards "herd immunity" has been made thus far[52]

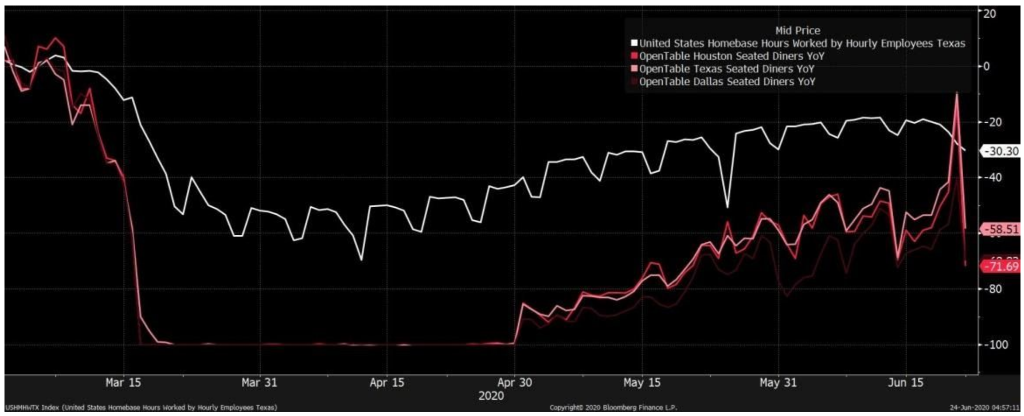
1. This also means that many people have not had severe personal experience of the virus – either by getting severely sick themselves or having someone they know having a severely negative experience with the virus

A Projection of Events to Come Through January 2021

a. States continue their reopening process over the upcoming months
    i. By reopening their economies and lifting stay-at-home orders without having adequately curbed the spread of COVID-19, many states effectively give up any authority to impose further lockdowns in order to control the spread
        1. States with large outbreaks may implement slight rollbacks of their reopening, closing some indoor and outdoor gathering areas and reducing capacity at restaurants, but will stop short of reinstating a full lockdown unless hospital ICUs reach capacity
        2. Piecemeal rollbacks will do little to limit the spread, but will add to consumer and business uncertainty
    ii. As states reopen, those with the broadest and fastest reopening plans begin to experience uncontrolled spread of COVID-19 about a month after the stay-at-home order expires
        1. Complexities in testing, cases hospitalizations and deaths data reported by states and the CDC make the data hard to understand and lead the populace to underestimate the severity of the disease
        2. Mixed messaging from state and federal government leaders also leads the populace to underestimate the severity of the disease and local outbreaks (which federal officials attribute to increased testing availability)
        3. Poor compliance with containment measures (wearing masks, maintaining social distancing, etc.) contributes to the increasing transmission rate nationwide

[52] https://www.morningstar.com/articles/984626/coronavirus-vaccine-progress-accelerates

iii. As more businesspeople and consumers have personal experiences with the virus, they begin to pull back on consumption activity once again – there are signs that this is already happening in Texas[53] [54]:

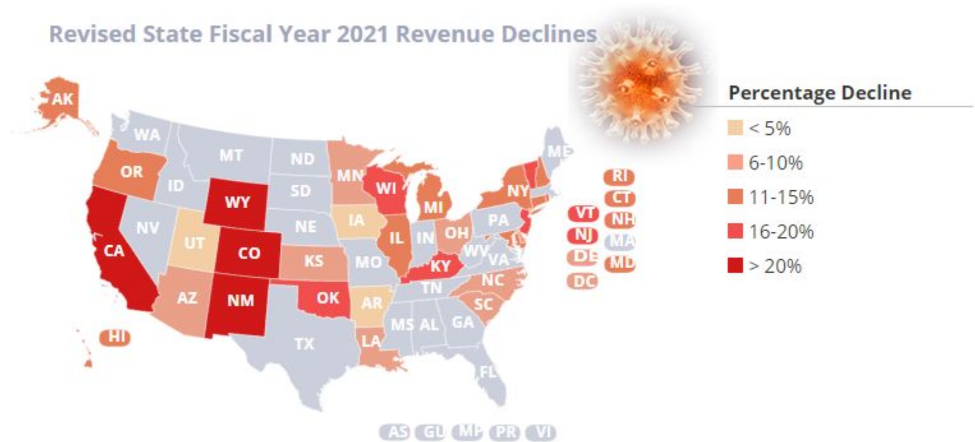


1. Nationwide consumer confidence began to slip in late June, particularly in regions that reopened earliest and most rapidly
2. Ongoing regional consumer confidence will be linked to case counts and death rates in each community
3. Ongoing nationwide consumer confidence will be linked progress against COVID-19 and the status of fiscal stimulus, as the expiration of CARES act benefits approaches at the end of July –
4. Current consumer confidence in the government's economic policies is at its lowest level since 2016

b. Many states run into new fiscal years at the end of June with budgets that are significantly smaller than the prior fiscal years

[53] https://www.bloomberg.com/news/newsletters/2020-06-24/five-things-you-need-to-know-to-start-your-day?sref=vuYGislZ
[54] http://www.sca.isr.umich.edu/

i. Many states are currently projected to enter the 2021 fiscal year with budgets that are 10-20% lower than their 2020 budgets[55]:



ii. States are unable to deficit spend like the federal government because many state budgets are limited by balanced-budget provisions and municipal debt markets are too thin to fund large-scale spending at the state level[56]

iii. Reductions to state fiscal budgets has a number of negative impacts[57]:

1. Funding reductions hit across the board and waves of state and local employees are laid off as a result
2. Large state infrastructure projects are put on hold as funding is redirected to support critical services, eliminating a key lever governments can use to reduce the impact of mass layoffs in the private sector
3. Deferrals of investments and increased state-level debt limits the ability of the state to invest in itself, rebuild critical institutions and prepare for future economic crises

c. With states having reopened and economic activity apparently tracking towards a recovery, the impetus behind further government stimulus dissipates, and any further stimulus ends up significantly smaller in size and scope (e.g. an infrastructure bill).

i. Expiration of PPP combined with lower demand and a lack of clarity regarding when demand will recover leads businesses to lay off workers that had been brought back or retained with PPP funds

[55] https://www.ncsl.org/research/fiscal-policy/coronavirus-covid-19-state-budget-updates-and-revenue-projections637208306.aspx
[56] https://www.ncsl.org/research/fiscal-policy/state-constitutional-and-statutory-requirements-fo.aspx
[57] https://www.nytimes.com/2008/12/29/opinion/29krugman.html

ii. Expiration of federal unemployment benefits instituted by the CARES act results in a consumption cliff at the end of July – beginning August 1, those on unemployment will have their personal incomes cut by ~60%
    1. Expansion or extension of the CARES act federal unemployment benefits ($600/week) appears unlikely as many in Congress believe that the additional benefits reduce incentives for the unemployed to return to work

iii. Expanded unemployment insurance, stimulus checks and PPP (original and expanded) combined to account for ~$1.2 trillion of the total consumer-oriented government stimulus since the beginning of the crisis – and it only provided enough support to last 4 months.
    1. Unless demand returns to pre-crisis levels by the end of July, it is likely that more large fiscal stimulus will be required to support consumer demand and prevent a significant economic downturn

iv. Without grants and no-strings-attached support for states, states will have to finance record unemployment payouts with loans from the federal government. Repayment terms on these loans are likely to reduce the state's ability to fund essential activities to fuel a recovery and replenish its unemployment insurance fund throughout the recovery to provide support in future downturns

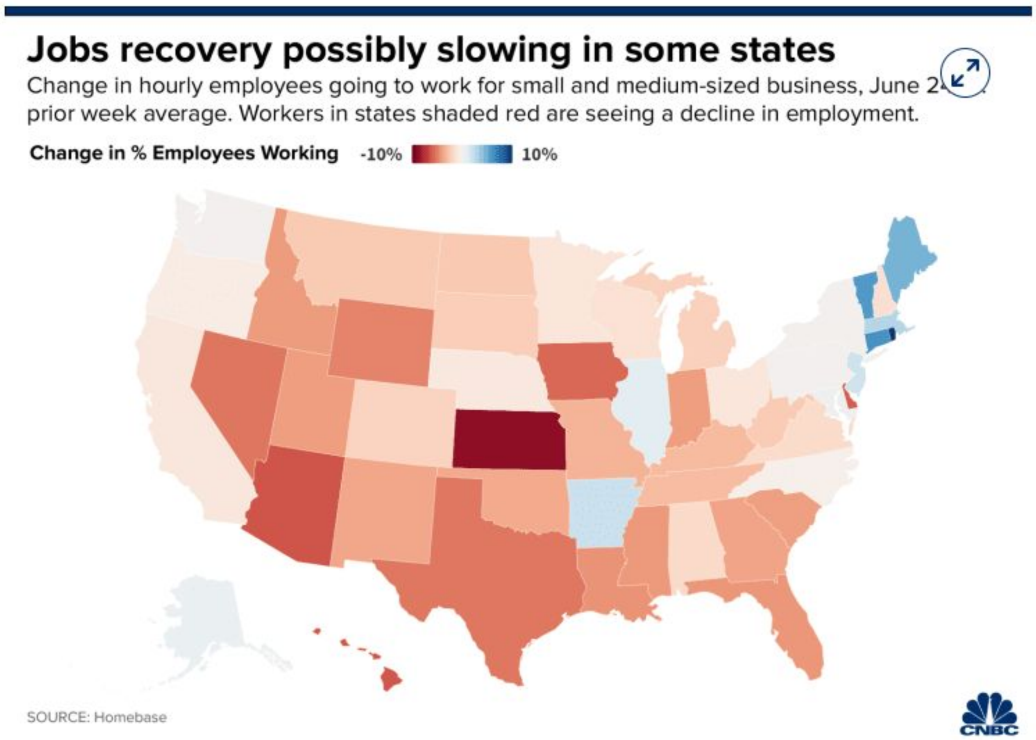
d. The recovery in consumer spending will slow or reverse in June and July (before the expiry of CARES act stimulus), as multiple effects play out in parallel:

i. The continued spread of COVID-19 results in increasing deaths in communities across the Southern US and localized outbreaks are detected in communities that were previously seeing declining community transmission rates. Consumers increasingly self-quarantine out of fear for their health

ii. Lack of progress on incremental federal fiscal stimulus causes unemployed consumers to anticipate a sharp reduction in their incomes after July, and they pull back discretionary spending to pay down debt and build a cash cushion

iii. Employed consumers, also anticipating disruption stemming from the expiration of CARES act stimulus, begin to pull back on discretionary spending as well

iv. Business owners, responding to reduced consumer demand, take actions to reduce costs once again, reversing any positive impact realized as a result of the PPP and EIDL programs. There is some evidence that, in June, the jobs recovery is already beginning to slow[58]:



e. Weakening consumer demand will result in reduced employment, which in turn will negatively impact rent and mortgage payments (residential and commercial) and consumer loans, which will spill over into the broader credit markets.

f. In response, the Federal Reserve will likely deepen its interventions in credit markets in an attempt to head off a financial crisis and encourage lending

g. Fiscal stimulus, when it comes, will not be large enough in size or scope to bring the economy back into a recovery:

   i. Infrastructure stimulus will create jobs, but will take time to filter through the economy and execution will be hindered by states' financial troubles

   ii. Extending or expanding the $600/week unemployment insurance payments contained in the CARES act will be politically unfeasible as many members of Congress have concerns over the expanding Federal

[58] https://www.cnbc.com/2020/06/26/coronavirus-live-updates.html

budget deficit and the perception that large unemployment benefits create a disincentive for many unemployed people to return to work

iii. Additional one-time stimulus will be ineffective in stimulating additional consumption without expanded unemployment insurance

iv. Back-to-work bonuses may not be effective as businesses permanently eliminate positions. Without incentives for businesses to provide safe workplaces, back-to-work bonuses will also create incentives for workers to return to jobs where they may not be safe

h. The final fiscal stimulus package will be passed in late July and have the following characteristics:

  i. No incremental protections for renters and homeowners

  ii. Federal unemployment insurance at a significantly lower rate than the current $600 / week

  iii. Back-to-work bonus payments that are greater than unemployment insurance to incentivize unemployed people to return to work

  iv. The fiscal stimulus package will also be accompanied by an infrastructure spending or similar bill that seeks to increase "productive" government spending

i. The impact of this stimulus package will be mixed:

  i. While the bill will avoid sending household income off a "cliff", unemployed consumers will have lower disposable income

  ii. Back-to-work bonuses will drive some reabsorption of unemployed people back into the workforce, but the effect will be more than offset by the drop in consumption seen from July onwards and the end of rent and mortgage payments relief

  iii. There will be a lag between the passage of the infrastructure (or similar) bill and the flow of money into the economy, meaning that no benefit will be seen until 2021

j. As a result, banks will have to absorb losses, and will tighten lending standards and pull back from lending and market making activities.

  i. While this action will prevent a full-blown financial crisis (which would result from a collapse in the banking system), it will ensure that

    1. the depth of the recession will be worse; and

    2. the timeline to a full recovery will be elongated

k. The resulting economic crisis will play out slowly over the upcoming months:

  i. Reductions in consumption will cause additional layoffs, driving unemployment slowly upwards

ii. Small businesses, particularly within the restaurant and retail sectors, will continue to fail at an elevated pace, driving additional layoffs and inhibiting innovation in a segment of the economy that drives net job growth and generates more productivity growth than larger, more established businesses[59]

iii. Mid-size and large bankruptcies, which have already been on the rise thus far in 2020 relative to years past, will increase as the economy adjusts to a lower rate of consumption[60]

    1. Companies with high-yield debt and leveraged loans (>$2 trillion outstanding in the US as of year-end 2019[61][62]) will increasingly experience solvency issues, becoming a center of weakness within the global economy as the Fed's programs are unable to prevent that market from freezing up

iv. While the big banks will remain strong and well capitalized, small / midsize banks' and mortgage originators and servicers are more susceptible to interruptions in payments, which will negatively impact the flow of credit through the economy, exacerbating the decline in consumption and the business sector's troubles

v. Inequality will continue to rise as those at the bottom of the income spectrum and those with the least savings will bear a disproportionate share of the burden

Our Policies' Role in Overcoming the Economic and Health Impacts of COVID-19 and Reframing our Approach to Growth

a. Our expectations for the state of the US entering January 2021:

    i. COVID-19 infection rates continue to rise and fall through the remainder of 2020 as states experiment with reopening measures then re-implement social-distancing measures as outbreaks form. The resulting volatility creates significant uncertainty for consumers and businesses, who pull back on spending

    ii. The US has enough testing capacity to run approximately 900,000 to 1 million tests per day nationwide, but distribution of testing is suboptimal, and regional shortages persist based on when and where new outbreaks happen

[59] https://www.theatlantic.com/ideas/archive/2020/05/bridge-post-pandemic-world-already-collapsing/611089/
[60] https://www.bloomberg.com/news/articles/2020-05-28/big-bankruptcies-sweep-the-u-s-in-fastest-pace-since-may-2009?sref=R04HIFIp
[61] https://www.reuters.com/article/levloan-decade/leveraged-loan-market-size-doubles-in-ten-years-private-credit-explodes-idUSL1N28U0QQ
[62] https://www.spglobal.com/marketintelligence/en/pages/toc-primer/hyd-primer#:~:text=After%20growing%20rapidly%20over%20the,bond%20market%20(%243.7%20trillion

iii. A vaccine or successful treatment will be necessary to bring about a full reopening and eliminate any remaining need for social distancing

1. An antibody therapy appears most likely to be approved in 2020, but antibody therapies only bring about temporary protection and are most useful for at-risk populations
2. Widespread vaccine availability will require 2 or more approvals and commercial production which will not likely occur until mid-2021. It now appears that the FDA will not approve a vaccine for emergency use until early 2021[63]
3. Some scientists estimate that up to 70% of the population will need to be vaccinated in order to generate herd immunity – it may take up to 6 months to distribute the vaccine to enough of the population to relax social distancing measures

iv. Unemployment rate between 20-25%, contingent on the magnitude and timing of fiscal stimulus

v. Run-rate annualized personal income has declined by over 5% and run-rate annualized personal consumption expenditures down ~10-15% from pre-COVID-19 baseline

vi. >10% of small businesses remain closed or are operating below capacity as community transmission of the virus continues without a fully effective treatment or vaccine

vii. We expect the size of the total intervention necessary to support both supply and demand within the economy through a recovery to be in excess of $20 trillion (including support measures already put into place)

b. Upon Chris Florquist's inauguration to the office of the Presidency in January 2021, he and his staff will immediately begin working with legislators to implement its Economic Support Solution (please refer to the Economic Growth Plan for details).

i. Immediate support structures

1. Direct consumer payments – Up to $60,000 per person in income replacement for the unemployed or income support for the underemployed to ensure uninterrupted consumption of needs
2. Direct business support – Treasury / Fed joint program to create a longer-term loan / grant program that will support companies' cash flows, contingent on their participation in our Community Needs Assessment process and other criteria
3. Banking System Support – Treasury / Fed maintain joint programs created to maintain financial system stability

[63] https://www.barrons.com/articles/new-fda-guidance-covid-19-vaccine-51593611145

4. State & Local Government Support - Grants to States and Municipalities to provide support and enable retention of critical employees such that other federal stimulus efforts can be implemented
5. Support to hospitals - Grants to hospitals, with specific support for rural hospitals, to support ongoing operations and fund continued treatment for patients with COVID-19
6. Fiscal stimulus targeting shovel-ready federally funded infrastructure projects and other "needs-based" infrastructure-like proposals
7. In coordination with medical and scientific experts, create and release a specific plan for a safe, phased reopening that has contingencies for controlling local outbreaks
8. Triage / Vaccine delivery program – Upon formal approval, vaccines will be deployed to all citizens who want a vaccine
    a. Medicare will be the channel through which Tests and Vaccines will be distributed
        i. See **Test / Vaccination Regime** on page 25 of the Healthcare Plan
    b. Decentralized approach converts local institutions (DMVs, Religious Gathering Places, Post Office, DMVs) into "triage centers" to distribute tests and vaccines
        i. See **Deployment of the Pandemic Readiness and Response Program** on page 15 of the Healthcare Plan
    c. Volunteers will be pulled from community organizations (Health Organizations, Religious groups, etc) to staff triage centers and administer tests and vaccines

ii. Implementation of the immediate support structures provides stability to the economy as cash continues to flow throughout the economy and the impact of mass unemployment is blunted by the direct consumer payments and direct business support

iii. The Triage / Vaccine process will facilitate the distribution of COVID-19 tests and vaccines to regions that have the highest needs, and facilitate a rapid and targeted roll-out of the vaccine to the population

iv. As communities receive the vaccine and administer it to their population, they can begin a phased reopening process (developed in coordination with medical and scientific experts) that safeguards all citizens from localized outbreaks without the need for reinstitution of partial or total lockdowns

v. Immediate support structures will be phased out once the economy can successfully reopen and the infrastructure underlying the Federal Opportunity Investment Fund ("FOIF") has been built:

   1. Throughout 2020 and into 2021, Florquist's team will be gathering data through the Community Needs Assessment
   2. Private Sector Needs data will also be gathered voluntarily and through the direct business support programs
   3. Through this data-gathering process, the team will facilitate the inclusion of any US citizen who wishes to participate as well as aid in coordination of local resources
   4. The Needs Assessment process will be used to determine ways in which each community can utilize federal funds (via the FOIF) to invest in innovations that provide real goods and services that serve humanity's needs (healthcare, food, housing, water, technology infrastructure), as defined by each participating citizen
   5. Through the Needs Assessment process, regional communities (cities, counties, states) will be encouraged to collaborate to identify shared needs that can be satisfied via joint resources and investments
   6. FOIF funds would be appropriated based on business proposals arising from the Needs Assessment process. Businesses that participate in the Needs Assessment process will receive priority in the bidding process
   7. The FOIF will partner with banks and provide loan incentives and guarantees for loans that conform to certain underwriting guidelines and target investments that generate real economic returns by increasing humanity's ability to meet future needs
   8. The FOIF will partner with companies that have excess cash to distribute funds via loans to communities in support of investments that generate real economic returns

vi. Deployment of capital into the economy via the FOIF will drive an economic recovery in 2022 and beyond, with real long-term growth and increasing consumption that significantly increases our country's ability to service the debt burden incurred as a result of the COVID-19 crisis

c. In the long run, the purpose of the FOIF is to facilitate sustainable long-term economic growth by framing growth as a result of human collaboration, as opposed to today's framing of growth as a result of the application of asymmetric information:

   i. In the past, our society has advanced using debt (which pushes the cost of investment into the future) to facilitate today's growth – and while these debt-funded investments have facilitated our society's growth to this point, with a better-framed approach to economic growth, our society could improve the lives of every one of its members

ii. Repeated iterations of economic transactions that apply asymmetric information to drive growth also generate economic crashes and recessions. Early on, the costs of these crashes were borne as incurred by the most marginalized elements of society

iii. As humanity has advanced and innovated, we have increasingly been able to externalize the costs of recessions to the future. To do so, we have utilized government debt to finance monetary and fiscal stimulus which has been invested without a mechanism for accounting for the future returns on those investments to humanity

iv. The purpose of the FOIF is to reframe growth via collaboration with the aim of ultimately eliminating the need to implement monetary and fiscal stimulus as it has been used in the past

v. The FOIF's success will be measured broadly by asset prices, which should increase in the long run at the pace of economic growth

    1. While today, success of the economy is measured by the stock market, share prices are no longer an accurate reflection of the economy's ability to better the lives of every participant in society

    2. The true measure of the FOIF's success will be the total return on US government bonds

        a. If the FOIF is successful in deploying capital and incentivizing collaboration, as economic growth accelerates, demand for "safe assets" will be reduced relative to other financial asset classes

            i. Investors will continue to chase yield consistent with their approach to maximizing reward / risk

            ii. Financial assets other than government debt will have higher total return potential and therefore will attract more investor capital at the expense of Treasurys

            iii. Lower demand for Treasurys will drive a reduction in price, leading to an increase in Treasury yields and therefore higher total returns on US government debt

        b. If the FOIF is not successful in deploying capital and incentivizing collaboration, that will be reflected in lower US government bond yields

i. Investors will continue to demand “safe assets” at elevated rates
ii. Investor demand and fund flows will lead to higher prices of Treasurys, driving yields and total returns down