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Regulating in Pandemic: Evaluating Economic and Financial Policy Responses to the Coronavirus Crisis

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REGULATING IN PANDEMIC: EVALUATING ECONOMIC AND FINANCIAL POLICY RESPONSES TO THE CORONAVIRUS CRISIS

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ABSTRACT

The United States is currently trying to manage a fast-moving public health crisis due to the coronavirus outbreak (COVID-19). The economic and financial ramifications of the outbreak are serious. This Working Paper discusses these ramifications and identifies three interrelated but potentially conflicting policy priorities at stake in managing the economic and financial fallout of the COVID-19 crisis: (1) providing social insurance to individuals and families in need; (2) managing systemic economic and financial risk; and (3) encouraging critical spatial behaviors to help contain COVID-19 transmission. The confluence of these three policy considerations and the potential conflicts among them make the outbreak a significant and unique regulatory challenge for policymakers, and one for which the consequences of getting it wrong are dire.

This Working Paper—which will be continually updated to reflect current developments—will analyze the major legislative and other policy initiatives that are being proposed and enacted to manage the economic and financial aspects of the COVID-19 crisis by examining these initiatives through the lens of these three policy priorities. It starts by analyzing the provisions of H.R. 6201 (the "Families First Coronavirus Responses Act") passed by the house on March 14, 2020. By doing so, this Working Paper provides an analytical framework for evaluating these initiatives.

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INTRODUCTION

The United States is currently trying to manage a fast-moving public health crisis due to the coronavirus outbreak (COVID-19).[1] The economic and financial ramifications of the outbreak have been serious and for many will likely prove devastating.[2] In this Working Paper, we discuss these ramifications and their implications for law and regulation in the United States. We outline three important, interrelated policy concerns that demand increasing attention and that will need to be addressed by regulators managing the pandemic and its economic and social fallout. These are:

1. *Social Insurance*. How to financially help individuals who have contracted or been exposed to COVID-19 (for example, those who are ill and have to stay home from work), or who are otherwise negatively affected (for example, workers caring for infected loved ones or facing layoffs). Current predictions suggest that lost wages and jobs may be staggering in some regions and sectors, resulting in an overwhelming economic toll on some of society's most financially precarious members. Social insurance will be necessary to smooth consumption shocks caused by the public health crisis and responses thereto, but design and delivery decisions will have distributional effects, which could maintain or exacerbate existing wealth and resource inequalities.

2. *Broader Economic and Systemic Risk Management*. How to ensure continued functioning of the financial and economic system, such as by providing stimulus against recession and preventing systemic failure. This is especially important in an environment in which businesses are experiencing sudden standstill and precipitous drops in business, supply chains are disrupted, and the stock market is in turmoil. Certain economic sectors—transportation, restaurants, hotels,

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[1] Ray Sanchez, *This Past Week Signaled a Turning Point in America's Health Emergency*, CNN (Mar. 15, 2020), https://www.cnn.com/2020/03/15/us/coronavirus-pandemic-us/index.html.

[2] McKibbin & Fernando (2020) (noting that in case of a global pandemic, economic costs of COVID-19 may be significant); Bonaparte (2020); Ben Casselman et al., *Coronavirus Cost to Businesses and Workers: 'It has All Gone to Hell'*, NY TIMES (Mar. 15, 2020, https://www.nytimes.com/2020/03/15/business/economy/coronavirus-economy-impact.html; FT Staff, *Fed cuts rates to zero as part of sweeping crisis measures*, FINANCIAL TIMES (Mar. 15, 2020), https://www.ft.com/content/a9a28bc0-66fb-11ea-a3c9-1fe6fedcca75 (noting threats of COVID-19 crisis to economic growth and financial stability).

entertainment—are at risk of collapse than others, but direct bailouts of non-financial firms do not necessarily substitute for social insurance measures.

3. *Spatio-Behavioral Management*. How to incentivize and ensure that people abide by behaviors normally viewed as anti-social and recession-enhancing but have immediate social welfare benefits in the current crisis, such as social distancing, shelter-in-place, and staying home while sick (what we term "spatio-behavioral management"). Policymakers must tailor existing policy tools (designed to encourage behaviors that are socially beneficial and economically productive in normal times) that if applied under pandemic conditions, may have large negative spillover effects from a public health and possibly even an economic standpoint by spreading infection and prolonging the crisis.

The confluence of these three policy considerations make the COVID-19 crisis truly unique from the standpoint of economic and financial regulation. Moreover, policymakers at all levels of government (as well as trade groups, businesses of all sizes, and individuals) are making decisions on the fly, in response to fast-moving and devastating medical realities, which include potentially severe medical system shortages, potentially high death rates if medical systems prove unable to keep up with infection rates, and a fast-rippling and potentially catastrophic economic and financial fallout.[3]

This Working Paper does two things. First, it argues that the COVID-19 crisis presents a nearly unprecedented policy challenge for financial and economic regulation for the reasons stated above—the need to juggle social insurance, broader economic and systemic risk management, and spatio-behavioral management. These three policy concerns may come in tension with one another given the distinctive behavioral agenda and crisis backdrop against which policy decisions must be made. These tensions highlighted by our framing reveal the need for innovative and wide-ranging policy solutions that contend with multiple, competing policy goals and the unique contextual constraints.[4]

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[3] Priyanka Dayal McCluskey, *Mass General President: We Should be in 'War-Like' Preparations to Combat Coronavirus*, BOSTON GLOBE (Mar. 15, 2020), https://www.bostonglobe.com/2020/03/15/business/mass-general-president-compares-coronavirus-crisis-time-war/.

[4] *See, e.g.*, Saez & Zucman (2020) (calling for government to act as buyer of last resort).

Second, the Paper—which will serve as a working document to be continually updated to reflect real-time developments—analyzes the major legislative and other policy proposals that are being proposed and/or enacted through the lens of the analytical framework articulated above. While obviously not every policy solution can satisfy each and every policy concern identified, analyzing the proposed policy solutions through the framework articulated in this paper is critical. It illuminates, for example, when a policy solution that might be social welfare-enhancing in an ordinary time may actually create negative effects (such as socially-harmful consumption behaviors) in the current public health emergency. Moreover, it highlights precisely where decisions driven by compelling public health exigencies are pushing financially vulnerable workers into crisis or leading to system-wide economic risks, and where policy responses driven by social insurance and systemic economic concerns may be causing public health problems.

The remainder of this paper proceeds as follows:

Part I sets forth an analytical framework for understanding and conceptualizing the COVID-19 crisis, conceptualizing it as a regulatory challenge with a distinctive underlying behavioral agenda that is crucial but (hopefully) temporary. Part II takes a deeper dive, outlining the unique challenges COVID-19 presents for designing policy that provides critical social insurance, ensures financial and economic stability, and spatio-behavioral management. Part III identifies multiple other key theoretical and policy tensions that may arise, such as the need for sectorally-targeted policymaking; coordination, non-coordination, or competitive dynamics among different actors (e.g., global vs. federal vs. state; public vs. quasi-public vs. private); choice of policy instrument (e.g., taxation vs. direct delivery vs. command and control; cash-based vs. in-kind; supply-side vs. demand-side); tensions between systemic stability and fairness considerations; and public finance and monetary policy concerns. Combined, these tensions point to the insufficiency of existing theoretical paradigms in economic and tax policy to respond to the current public health and economic crisis. Part IV serves as a running update of proposed and enacted legislative and other policy solutions to COVID-19 through the lens of our framework.

I. The COVID-19 Policy Challenge

A. A Regulatory Challenge with Spatio-Behavioral Constraints

The dire policy challenge presented by the COVID-19 crisis can be described in more detail as follows:

Unlike countries such as South Korea, Israel, and Singapore (which are engaging in some combination of widespread monitoring and testing, temperature-taking, and/or contract-tracing),[5] the U.S. approach has focused on travel restrictions, home quarantines, "social distancing" (closing schools, museums, and other spaces, and cancelling events with large crowds),[6] and, ultimately, "shelter-in-place" public health orders requiring residents to remain home "except for essential needs."[7] These measures have become increasingly draconian and this trend is likely to continue. These measures—like those in Europe—have an important behavioral and spatial component. They generally recognize that certain behaviors, which in normal times would not be particularly blameworthy or *per se* harmful, and would even be socially and economically beneficial, are now very risky. But these measures designed to improve public health outcomes also risk causing large financial losses to big and small businesses (like the travel, airline, cruise, restaurant, entertainment, and sports industries) and significant job and wage losses to individuals. Ultimately, they may trigger economic recession or widespread financial meltdown.[8] This is particularly so because the COVID-19 crisis is likely to stretch for months.

These facts lead to an economic and social policy conflict: the anticipated economic slowdown is the inevitable outcome of the precise form of public health response the United States is pursuing—one that temporarily discourages risky social and economic

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[5] Benjamin Cowling & Wei Wen Lim, *They've Contained the Coronavirus. Here's How*, NY Times (Mar. 13, 2020), https://www.nytimes.com/2020/03/13/opinion/coronavirus-best-response.html.

[6] Centers for Disease Control and Prevention, *Interim US Guidance for Risk Assessment and Public Health Management of Persons with Potential Coronavirus Disease 2019 (COVID-19) Exposures: Geographic Risk and Contacts of Laboratory-confirmed Cases*, https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html (definition and guidelines on social distancing) (last updated Mar. 7, 2020).

[7] "Stay home except for essential needs, SF.gov. (Monday, March 16, 2020) (reporting: "On Monday March 16, San Francisco with Health Officers from the Bay Area announced a Public Health Order that requires residents to stay home except for essential needs" starting March 17, 2020), https://sf.gov/stay-home-except-essential-needs.

[8] Casselman et. al, supra note 2; Julia Horowitz, Here's What Could Really Sink the Global Economy: $19 Trillion in Risky Corporate Debt (Mar. 14, 2020, https://www.cnn.com/2020/03/14/investing/corporate-debt-coronavirus/index.html

behaviors until the COVID-19 threat abates. Under normal circumstances, consumptive behaviors like attending a sporting event or concert, sitting in a crowded bar, or going to work or a restaurant or a party are socially and economically important and may help *avoid* recession. But in the current public health crisis, these behaviors risk accelerating the spread of the virus and potentially perpetuating recession if they cause the public health crisis to be prolonged.[9] Among the social behaviors of greatest concern is that workers without paid sick leave—including self-employed workers—may face significant financial burdens if they do not work and that these burdens may incite them to go to work (which involves being in public places) while ill. This prospect is particularly concerning in light of growing medical evidence that virus transmission can happen even while asymptomatic.[10] Accordingly, such individual utility-maximizing decisions could give rise to large negative externalities and trigger a systemic public health crisis, increasing virus transmission, overwhelming the medical system, and causing others to get sick or die.

Thus, the current crisis suggests three interlocking policy goals, which are likely to come into in conflict: (1) providing social insurance for individuals who may experience job and wage loss due to the COVID-19 outbreak; (2) ensuring financial and economic system robustness and stability; and (3) crucially, *achieving the above goals while also advancing a critical overarching spatio-behavioral management agenda*—that of encouraging behaviors like social distancing and discouraging behaviors like congregating in large numbers or going to work while sick. These risks can be pictorially depicted as follows:

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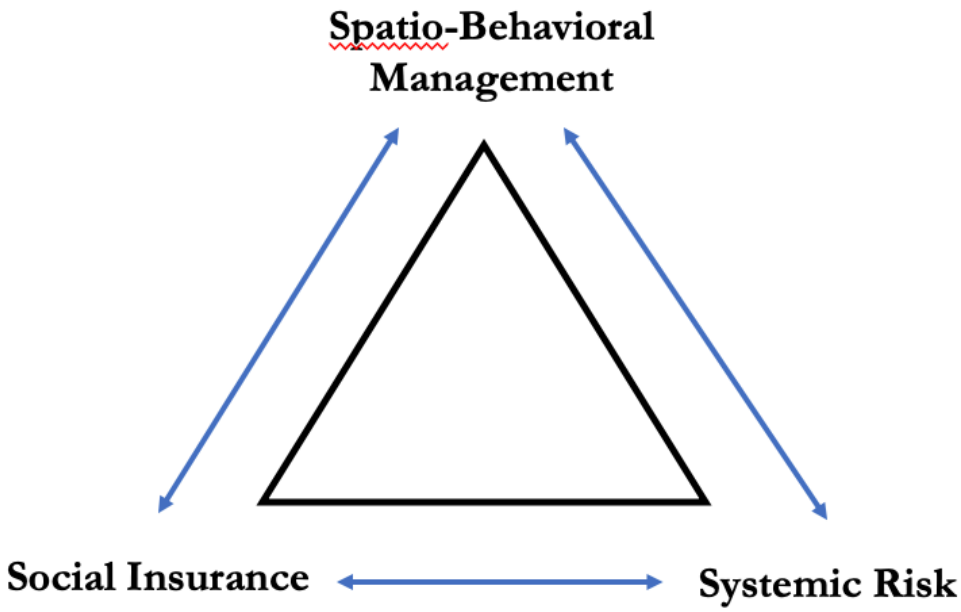
[9] Guy Chazan & Sam Fleming, *Germany Wields "Bazooka" in Fight Against Coronavirus*, FINANCIAL TIMES (Mar. 13, 2020), https://www.ft.com/content/1b0f0324-6530-11ea-b3f3-fe4680ea68b5.

[10] Elizabeth Cohen, *Infected People Without Symptoms Might be Driving the Spread of Coronavirus More than We Realized,* CNN (Mar. 15, 2020), https://www.cnn.com/2020/03/14/health/coronavirus-asymptomatic-spread/index.html.



Unlike other economic crises in which general stimulation of consumer confidence to avoid recession may have been a priority and a viable policy tool,[11] the COVID-19 crisis presents a case in which the types of available economic policy instruments may be constrained by behavioral, spatial, and other considerations. In particular, policies must disincentivize certain *temporarily harmful behaviors* that center around "socially-intimate consumption" and engagement with others.

This framing of the policy challenge suggests the need for carefully crafted, highly interdisciplinary solutions. It reveals the fact that financial and economic management of the COVID-19 crisis will require input from experts across a wide swath of legal and policy fields (including social insurance, tax, labor and employment, financial regulation, monetary law, consumer protection, and business law). It also suggests that the usual policy tools of social insurance and fiscal stimulus need to be carefully tailored in order to work well in the current context. Yet, the very seriousness of the economic fallout may mean that nuanced approaches are impossible and "bazookas" might end up being used.[12]

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[11] Shapiro & Slemrod (2009); Jason Furman, *The Case for a Big Coronavirus Stimulus*, WALL. ST. J. (Mar. 5, 2020), https://www.wsj.com/articles/the-case-for-a-big-coronavirus-stimulus-11583448500.

[12] *See* Chazan, *supra* note 9; *compare* Omarova & Feibelman (2008) (noting risks of conflating crisis management with regulatory reform).

It will become clearer over time how the three policy priorities we have identified rank, and their ranking may also shift over time. For example, we may envision a scenario in which the risks of financial collapse are so profound that they eclipse spatio-behavioral and social insurance considerations in designing policy responses. Or alternatively, we may see strands of each policy interest displayed in a given piece of legislation. This Working Paper aims to identify how these policy priorities surface and conflict in the economic and financial management of the COVID-19 crisis, to identify shifts in prioritization that may occur, and to derive insights from such prioritization and its shifts.

II. A Deeper Dive into Three Key Policy Challenges

This Part takes a deeper dive into the three, interrelated policy goals identified above. The discussion is not comprehensive but rather aims to cast a broad net over key theoretical and policy issues.

A. Social Insurance

Social insurance systems essentially involve the transfer of pooled risk from citizens and taxpayers to governments in exchange for a price on those insured.[13] While there is no universal definition, social insurance is usually mandatory (hence "social").[14] As is the case with private insurance, the risk transfer occurs upon a "covered event," which might include financial shocks experienced upon retirement, loss of a job, or a medical crisis.[15] The price might be extracted from citizens in various ways: directly through taxation or indirectly through reduction in social welfare benefits received, inflation, or national borrowing that must be repaid in the form of interest.[16] Social insurance can be delivered through various vehicles, some more obvious than others. For example, unemployment insurance, Medicare, and disability insurance may seem obvious delivery mechanisms. But scholars have also suggested, for example, that consumer bankruptcy,

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[13] *See, e.g.*, Lester (2001); Willett (1951)

[14] Krueger & Mayer (2002).

[15] Marmor & Mashaw (2007); Oei (2012).

[16] Oei (2012).

forgiveness of tax debts, and spousal support might be construed to perform a partial social insurance function.[17]

Provision of government-provided social insurance is especially appropriate where private insurance is not available on the market for the risk in question.[18] Moreover, some argue that the government may be especially well-positioned to provide social insurance because of its unique ability to spread risks intergenerationally (as is the case with some social security systems).[19] In a crisis like the COVID-19 crisis, it makes sense for governments to provide social insurance and an expanded social safety net because they are uniquely positioned to spread infection risk across the population and, perhaps more importantly, across generations (given that a large swath of the population may be affected by the virus and need to draw on the insurance).

While social insurance and social welfare are not identical, they are related because they are two key ways in which the government provides security to its citizens.[20] Moreover, because the mechanism of extracting the social insurance "premium" is not always visible, it can be difficult to distinguish the two. In any case, in delivering social insurance and social welfare, a critical question presented in the existing literature concerns whether such insurance should be provided *directly* (for example, through cash infusions such as a universal basic income (UBI), food stamps) or *indirectly* (through tax expenditures or some other means).[21] Tax expenditures generally denote spending that occurs through the Tax Code, such as the earned income tax credit (EITC)[22] or other deductions and credits that deviate from a "normal" tax baseline.[23] Another related question is how much such social safety net benefits should be tied to *work*.[24] Examples of social-insurance benefits tied to work are employer-provided health insurance and paid

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[17] Adler, Pollack & Schwartz (2000); Feibelman (2005); Lawless et. al (2008); Oei (2011, 2012); Sullivan, Warren & Westbrook (2020).
[18] Braucher (2003).
[19] Marmor & Mashaw (2007); Brown (2010).
[20] Oei (2012).
[21] Avraham & Logue (2002); Alstott (1995); Weisbach & Nussim (2003).
[22] Alstott (1995). The EITC provides income support for the working poor but is claimed by filing a tax return.
[23] Surrey (1970); Bittker (1969); Bittker (1969); Thuronyi (1988); The tax expenditure definition is contested and has been widely criticized, and the definition is more complicated than this. For detailed discussion, see Joint Committee on Taxation (2008); Kleinbard (2010).
[24] Estlund (2018); Oei & Ring (2019).

sick leave benefits. In the context of the COVID-19 crisis, yet another important question will be whether support for individuals impacted by the crisis is delivered to the individuals *themselves* (either via direct cash, in-kind benefits, increased unemployment benefits, or via a tax credit) or to the businesses *employing* them (again, either via direct cash or indirectly through the tax system) to help avoid layoffs.

A central question raised by this Paper's analytical framework is how the answers to these choice-of-delivery questions *may have to change or be varied* in situations in which we want to encourage certain types of behaviors (e.g., staying home) but discourage others (e.g., going to crowded spaces), where time is of the essence, and where broader systemic and other economic considerations are also in play.

B. Systemic and Economic Considerations

Systemic Risk in Financial Regulation. Scholars of financial regulation have long been attuned to the need to manage systemic risk.[25] Systemic risk refers to the risks of financial contagion—the cascading or domino effects of bank failure. The 2008 financial crisis, for example, spread quickly and with devastating effect from subprime mortgages and their securitization,[26] concerned creative financial instruments and derivatives (such as CDOs),[27] and led to a full-scale banking crisis.[28] Major financial institutions needed to be bailed out, but bailout was reserved for institutions regarded as systemically important.[29]

Systemic Risk in Non-Financial Regulation. Although much is yet unknown, the COVID-19 crisis is likely to present systemic risk challenges to *non*-financial firms and economic sectors.[30] These challenges are likely to be different and potentially more widespread than those presented in 2008.[31] Most materially, contagion and domino effects are likely to occur in and across industries—not just the financial sector—and lead to

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[25] Omarova (2008, 2013); McCoy (2009); Levitin (2010); Posner (2009); Ricks (2016).
[26] Engel & McCoy (2007); McCoy (2009), Pavolv & Wachter (2009),
[27] Omarova (2008).
[28] Ayotte (2009); Levitin (2010).
[29] Ayotte (2009); Casey & Posner (2015); Levitin (2010); Stern & Feldman (2004).
[30] FT Staff, *supra* note 2; Albulescu (2020); Ramelli & Wagner (2020).
[31] *Compare* Krippner (2011) (characterizing turn to finance in the 1960s and 70s as inadvertently resulting from the nation state's attempts to solve other social economic and political problems); Omarova & Feibelman (2008) (calling for post-crisis evaluation of financial market architecture before reforming institutional structure).

cascading ripple effects and system failures. These failures may well have feedback effects on the financial sector. While the precise pathways are still unknown, in the past few weeks, we have seen turmoil in the financial markets, tripping of financial circuit breakers, intervention by the Federal Reserve as lender of last resort (dropping interest rates and pumping over a trillion dollars into the financial system), pain in the airline and cruise industries, Boeing and other companies rushing to raise cash, and sectoral layoffs.[32] Some commentators also predict potential corporate debt defaults, a wave of bankruptcies, business inability to pay workers, widespread layoffs, and declining consumer and investor confidence.[33]

These types of developments suggest that there may be different, *non-financial pathways* through which systemic contagion manifests. For example, closures of universities and colleges and cancellation of graduations have led to a wave of hotel room cancellations, which may lead to layoffs in the hotel industry. Mandatory restaurant closures may have cascading effects due to reduced demand for linens, laundry services, equipment rentals, food, and workers.[34] This may lead to widespread problems like business inability to pay rent on property and equipment or inability to service corporate debt. The end result may be waves of business collapse across certain industries.

Supply Chain Risk. One potentially important source of systemic risk is supply chain risk. Vertical disintegration and decentralized supply chain networks for inputs and outputs has created a network of production and distribution highly sensitive to transportation delays, spatial constraints in movement because of quarantines or other movement restrictions, and longer-term storage costs. These can cause breakdowns in

[32] Nick Timiraos & Julia-Ambra Verlaine, *Fed to Inject $1.5 Trillion in Bid to Prevent 'Unusual Disruptions' in Markets*, WALL ST. J. (March 12, 2020), https://www.wsj.com/articles/fed-to-inject-1-5-trillion-in-bid-to-prevent-unusual-disruptions-in-markets-11584033537; Liz Hoffman, Diary of a Crazy Week in the Markets, Wall. St. J. (Mar. 14, 2020, https://www.wsj.com/articles/diary-of-a-crazy-week-in-the-markets-11584143715; Molly Smith et al., C*redit Market Stress Deepens with Companies Racing to Raise Cash*, BLOOMBERG (Mar. 11, 2020), https://www.bloomberg.com/news/articles/2020-03-11/europe-s-corporate-bond-market-re-opens-as-stimulus-begins; Shwanika Narayan & Chase DeFeliciantonio, Bay Area Layoffs Mount Swiftly Amid Coronavirus Outbreak, S.F. Chron. (Mar. 13, 2020), https://www.sfchronicle.com/business/article/Bay-Area-layoffs-mount-amid-the-coronavirus-15128141.php.

[33] *Id.*; *see also, e.g.*, Horowitz, *supra* note 8; Binder (2020).

[34] Massachusetts Governor's Order regarding Restaurant Closures and Restrictions (Mar. 15, 2020), https://www.boston.com/news/local-news/2020/03/15/charlie-baker-order-gatherings-25-dining-in-restaurants.

supply chains that can quickly lead to systemic collapse of entire industries and across economic sectors.[35] This is true both in supply chains that service consumption of necessary as well as luxury commodities and services.[36] Supply-chain resiliency has become thinner as more firms have become dependent—through innovations in logistics and technology—on highly efficient systems of transportation and storage to which they can turn for just-in-time delivery.[37] For example, health-care providers rely extensively on supply chains for just-in-time delivery of medicines, keeping limited supplies on hand to prevent wasted value on stock shelves.

While supply chain networks can be efficient in ordinary times, they create risks of economic collapse in times of pandemic like the COVID-19 crisis that demand movement constraints.[38] The risk we are concerned with here is truly systemic in the sense of potentially producing breakdowns in supply chains as well as widespread national shortages with cascading effects (such as layoffs or debt defaults) that can ultimately propel systemic collapse, as opposed to simply a risk-management issue for individual firms.[39] We are already seeing evidence of supply chain problems as the COVID-19 crisis unfolds, including car manufacturing plants in other countries being shut down due to shortage of parts from China, and potential drug shortages due to countries that are producers of ingredients limiting exports in crisis time.[40] If there is system-wide breakdown in supply chains—particularly of the stripe that causes widespread national or international shortages

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[35] *See, e.g.*, Tom Linton & Bindiya Vakil, *Coronavirus is Proving We Need More Resilient Supply Chains*, HARV. BUS. REV. (March 5, 2020), https://hbr.org/2020/03/coronavirus-is-proving-that-we-need-more-resilient-supply-chains; Peck (2006).

[36] *See, e.g.,* Weil (2014); Abernathy, Dunlop, Hammond & Weil (1999).

[37] Wagner & Bode (2012) (examining how supply chain characteristics—including firm dependence on customers and suppliers, degree of single sourcing, and reliance on global supply sources—affect firms' supply chain risk; noting tradeoffs between efficiency and risk management).

[38] *See, e.g.*, Christopher Rowland & Ariana Eunjung Cha, *Surge in Coronavirus Patients Threatens to Swamp U.S. Hospitals*, WASH. POST (Mar. 14, 2020), https://www.washingtonpost.com/business/2020/03/14/hospital-doctors-patients-coronavirus/; Chuck Green, *Hospitals Turn to Just-in-Time Buying to Control Supply Chain Costs*, HEALTHCARE FINANCE NEWS (May 6, 2015), https://www.healthcarefinancenews.com/news/hospitals-turn-just-time-buying-control-supply-chain-costs.

[39] Much of prevailing literature appears to focus on risk to firms themselves. Ho, Zheng, Yildiz & Talluri (2015). Peck (2005, 2006).

[40] Katelyn Polantz, *Health care and consumer industry groups concerned about supply shortages during coronavirus pandemic*, CNN (Mar. 15, 2020), https://www.cnn.com/2020/03/15/politics/supply-chain-shortages-coronavirus-pandemic/index.html; *BBC News, Nissan to shut Japan factory due to shortage of Chinese parts*, BBC NEWS (Feb. 11, 2020), https://www.bbc.com/news/business-51441344.

of necessities—this suggests that supply chain regulation needs to be approached as a systemic matter, not just as a risk-management matter for individual firms.

Lessons from 2008 and New Questions. We can draw some lessons and common threads from regulatory management of the 2008 financial crisis. One core issue emerging from the 2008 crisis is the extent to which *ex post* bailouts should be used, and, if so, whether they should be used *only* for actors presenting truly systemic risk—in the sense of being "too big to fail" or likely to cause economic contagion and financial collapse—or more broadly as a matter of fairness and social insurance.[41] And, of course, a key question is how to weigh competing considerations in making that judgment and what procedures should be put in place to facilitate these decisions. Related important issues are whether selective bailouts (for example, letting small, systemically unimportant businesses collapse while propping up systemically important actors) are fair, whether they raise moral hazard concerns, and whether existing bankruptcy regimes that are known about and priced in *ex ante* are preferable to using bailouts.[42]

But the COVID-19 crisis presents novel concerns never addressed in the 2008 financial crisis. As noted, in this pandemic environment, "systemic risk" no longer merely concerns banking industry collapse but may be triggered from multiple potential sources and take several different paths. This multi-sourced systemic risk raises a number of questions, not least the limits of the Federal Reserve's ability to stem the current crisis.[43] Another key question for our purposes is how to manage potential conflicts and tensions between systemic risk concerns and those of social insurance and spatio-behavioral constraints.[44] For example, if there are widespread business failures across many smaller businesses, should these businesses be kept afloat by government intervention even though individually they may not be "too big to fail"?[45] Not only might such an intervention be advisable on social insurance grounds, but it is also possible that a widespread wave of small business failures—even if they are not individually systemic actors—may ripple

[41] Ayotte (2009); Kaufman (2014); Levitin (2008, 2010); Stern & Feldman (2004).
[42] Ayotte (2009); Levitin (2008, 2010); Omarova (2013); Tuch (2017); Casey & Posner (2015).
[43] Neil Irwin, *The Fed Deployed Its 2008 Arsenal All in One Weekend*, NY TIMES (Mar. 15, 2020), https://www.nytimes.com/2020/03/15/upshot/coronavirus-fed-crisis-playbook.html.
[44] See discussion *supra* Part II.A and *infra* Part II.C.
[45] Ayotte (2009); Levitin (2010); Casey & Posner (2015).

across other parts of the economy and eventually trigger contagion and collapse. Relatedly, should businesses be given cash support to prop them up—the sort of incremental bailout currently being suggested in Germany?[46] Such a solution might help keep businesses afloat and prevent widespread defaults, while also not encouraging harmful types of socially-intimate consumption. More broadly, what is the role of consumers and consumption in preventing recession in the COVID-19 context, and how should this be managed in light of the spatio-behavioral constraints discussed above?[47]

Looking longer term, we will also have to assess whether financial and other deregulation (including deregulatory moves *since* the 2008 crisis) may cause or exacerbate economic and systemic problems *now*, and what policy responses might be appropriate.[48]

System-Wide Problems that are Not "Systemic." It is true that not all system-wide failures will necessarily present systemic risks in the sense of causing contagion, industry collapse, or monetary crisis. However, system-*wide* risks create significant hardship. Further, it is difficult to know when cascading ripple effects will occur. Thus, it may make sense for policymakers to err on the side of false positives—adopting policies that safeguard against potential systemic risks on an *over*inclusive basis—even if those system-wide risks end up being non-systemic.

C. Spatio-Behavioral Management

Finally, the COVID-19 crisis in the United States has an important and distinctive spatio-behavioral component. The current crisis involves the public health need to maintain "social distancing" to avoid infecting others, "flatten the curve" to avoid a medical facilities crunch, and generally minimize COVID-19 spread.[49] The social distancing measures in place have become increasingly more draconian over time and are likely to become even more so. The need to socially distance has resulted in school, university, and restaurant closures, cancellation of sporting events, employers' displacement of workers to remote work or telework arrangements, and city-wide "shelter-in-place" orders enforcing

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[46] Chazan & Fleming, *supra* note 9.
[47] *Id.*
[48] See, e.g., Brewin (2014).
[49] Nicholson, Shah, Ogawa & Nat'l Academies of Sciences, Engineering, and Medicine (2019) (discussing strategies to flatten the pandemic curve).

distancing, among other consequences.[50] Moreover, these developments are truly national in scope, and they also take place amid similar concurrent developments occurring across the globe. These facts make the current crisis different from other disasters, such as the 2008 financial crisis, 9/11, the 1995 Chicago Heat Wave, Hurricane Katrina, the Oil Embargo of 1972, the polio crisis of 1950, and even World War II.[51]

Managing a public health crisis under these new spatio-behavioral constraints introduces significant risk that improper tailoring of stimulus funds and systemic risk management could result in significant and cascading social and economic effects. Contrary to standard economic patterns, spatially-intimate behaviors are the very triggers instigating a widespread economic slowdown (by accelerating the spread of the virus). As such they now constitute a serious public health risk. But much of existing economic policy, including macroeconomic and fiscal stimulus policies, is designed for non-pandemic environments and has presumed that these exact behaviors are socially valuable and economically productive.

This policy/environment mismatch suggests the need for specifically-tailored policy solutions and raises important vehicle and design questions. For example, might we want to use Pigouvian taxation to temporarily disincentivize certain behaviors? Or more direct behavioral "nudges"?[52] Or still more direct "command-and-control" regulation?[53] How inadequate might indirect nudges be during times of crisis?

Or, take the case of worries about economic distortions in choosing between tax rules and legal rules in redistributing income.[54] While in a "normal" situation we might worry about inefficiencies and economic distortions in choice of a taxpayer's activities (including labor-leisure distortions), the COVID-19 crisis might present a case in which some types of labor-leisure distortion (tilting in favor of staying home) may be desirable, and, moreover, in which additional inefficiencies and distortions in certain sectors might not be a bad thing.

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[50] *See supra* note 6.
[51] See, e.g., Lipman (2003); Klinenberg (1995).
[52] Gamage & Shanske (2011); Thaler & Sunstein (2009).
[53] Galle (2013, 2017); Masuer & Posner (2015).
[54] Kaplow and Shavell (1994); Avraham, Fortus & Logue (2003); Sanchirico (2000).

Importantly, the spatio-behavioral outcomes the United States will want to see, and the available policy tools to achieve them, will in part reflect the underlying society in which we live and the existing legal and regulatory structure. For example, the United States is not a country in which the government is prone to frequent distributions of toilet paper, substantial direct cash aid, or serving as a buyer of last resort, although such in-kind distributions do occur in emergency situations and may be necessary now.[55] Furthermore, most spatial restrictions are being initiated by private actors or state and local government authorities, at least at the outset, though there is also federal authority to mandate quarantine.[56]

III. KEY THEORETICAL AND POLICY TENSIONS

We predict that several other key theoretical and policy ideas and tensions will be important in analyzing and managing the economic and financial aspects of the COVID-19 crisis:

A. The New Sectoral Policymaking

The current crisis may require new ways of thinking about or targeting specific sectors of the economy. For example, we might normally classify firms into manufacturing vs. retail or health vs. education. But in the current crisis, we are likely to see winners and losers divided along different lines. For example, massage therapists and restaurants are likely to face more and sooner impacts due to "social-distancing" measures than, say, psychotherapists (who can be further from clients or conduct online sessions). Businesses with significant PPE (property, plant, and equipment) obligations through leases or other liability requirements may find those harder to terminate than cutting costs by laying off

[55] Nik DeCosta Klipa, *Mitt Romney Proposes Sending Every American Adult a $1,000 check as Part of Coronavirus Response*, Boston.com (Mar. 16, 2020),https://www.boston.com/news/politics/2020/03/16/mitt-romney-coronavirus-response. [Can maybe cite to the Saez piece here].

[56] Public Health Service Act, Pub. L. No. 78–410, 58 Stat. 682; Larry Gostin, https://www.healthaffairs.org/do/10.1377/hblog20200310.824973/full/.

workers. Given these disparities, the current crisis may require new ways of thinking about how to economically target relief for different industries or sectors.

These new sector-specific considerations may present challenges in meeting the three policy goals that we outlined above (social insurance, economic and systemic considerations, and spatio-behavioral considerations). For example, it may be the case that supporting or bailing out a certain type of business aligns with the goal of managing systemic and economic risks, if the industry in question is a significant one whose collapse is likely to trigger financial contagion, sector-wide or cross-sector collapse. On the other hand, sectoral targeting considerations may be justified for social insurance reasons but not be a priority from the perspective of systemic risk management. As another example, the need to support certain sectors may also run contrary to spatio-behavioral management goals in enabling or encouraging certain types of consumption (e.g., online spending or continued access to daily necessities such as groceries and medicines) but constraining others (e.g., "socially-intimate" spending such as going out to bars and restaurants). It may turn out that a combination of direct regulation (such as local restrictions on restaurant capacity, hours, or modes of operation) and indirect measures (such as cash transfers or transfers through the tax system) may best advance these goals.

B. Policy Complementarities and Conflicts

Relatedly, we also predict that the policy challenge confronting us will sometimes give rise to tensions and conflicts but may also present opportunities for policy complementarities. An example of a complementarity may be where measures that deliver social insurance by delivering benefits (such as tax cuts or credits) to hiring firms to help them stay afloat and encourage them to not lay off workers *also* serve important systemic functions like preventing widespread bankruptcies and debt defaults, maintaining important supply chains, and preventing financial contagion. An example of a regulatory tension might be a case in which social insurance measures that boost pay to workers leads to the kinds of undesirable "socially-intimate" consumption that is especially harmful in the current context.

Another regulatory tension comes when considering shorter- versus longer-term policy impacts. For example, in the current environment in which widespread social-distancing measures are already in place and many businesses are closing, employer-side measures may be valuable in helping to prop up businesses to keep them running (thereby potentially providing social insurance *and* managing systemic risk), but over the longer term, may have the effect of transferring even more power to hiring firms and increasing their monopsony power over workers to reduce hiring and suppress wages (thereby leading to diminished employment and purchasing power).[57]

C. Who Acts and with What Instrument?

Theoretical and policy tensions also emerge between the sets of *actors* triaging the crisis and the respective *instruments* they deploy.

1. A Range of Different Public and Private Actors

Since COVID-19 is both a national and global crisis, we are seeing interventions by public actors (at the global, federal, state, and municipal levels) as well as by private actors (trade groups, firms, nonprofits, private foundations, and individuals).[58] The federal government has tasked itself with enacting legislation and granting authority to administrative agencies to administer benefits and waivers.[59] It is also collaborating directly with State governments through block grants for unemployment and health insurance.[60] States have used emergency powers to declare "States of Emergency," and both States and municipalities have deployed their licensing and other authority to mandate "shelter-in-place" restrictions, limit public gatherings, and order school, restaurant, entertainment, and recreational facility closures. Private actors have organized at the level of industry associations or private business organizations to pool resources and lobby for relief bills, but private efforts at triage have extended down to the local and interpersonal level with GoFundMe pages for local restaurants and college faculty Paypalling students travel funds to return home after campus closures. Private actors also rely on existing forms

[57] See generally Manning (2003); Naidu & Posner (2019).
[58] *See generally* Hockett & Omarova (2014, 2016) (conceptualizing finance as public-private partnership).
[59] See infra Part IV.
[60] Id.

of financial pooling, whether in the form of private savings, retirement benefits,[61] social security, and others.

Coordination costs between all of these actors are astronomically high. There have been and continue to be tensions emerging among public actors in terms of their respective jurisdictions, their policy priorities (demand- vs. supply-side relief, local vs. systemic relief, spatio-behavioral management vs. stimulus, etc.), and their valued instruments for administering relief. Additionally, tensions will emerge—and likely escalate—between private and public actors, not only with regard to the delivery of social insurance by private vs. public actors, but also with regard to equitable allocation of scarce resources *between* private actors.

2. A Range of Different Policy Instruments

Additionally, each of these public and private actors have and are deploying different *instruments* for advancing their chosen policy priorities. There are several well-recognized options: Pigouvian taxation, command-and-control approaches, "cap-and-trade" approaches (i.e., maximum limits on the amount of a negative behavior, paired with a marketplace for trading rights to engage in that behavior), behavioral nudges, cash grants, in-kind benefits, or tax expenditures.

Going forward, an open question will be how the various actors deploy these policy instruments in managing the crisis. For example, Federal, state, or municipal governments may use command-and-control approaches in a pandemic to contain or quarantine communities (e.g., New Rochelle, New York) or individuals (e.g., cruise passengers) as well as to disincentivize public gatherings (e.g., closing local businesses and limiting group gatherings). But governments may more directly mandate *specific* behaviors—mandatory testing, curfews, and so on.[62] Some countries (such as the U.K.) have opted against instituting bans and closures (at least in the early stages) in favor of a range of behavioral

[61] Shnitser (2016).
[62] These measures have not yet been implemented in the United States but have been utilized abroad.

nudges: educational campaigns on hand-washing and not touching your face, visually reinforcing social distancing in all public announcements, and so on.[63]

Timing may also play a role in determining the choice of, effectiveness of, and interplay between policy instruments. At the height of a pandemic, when quarantines or general lock-downs (i.e., direct behavioral controls) are being implemented by State or local governments, economic policies such as expanded paid sick leave that encourage ill workers to stay home may play a more incremental, supporting role in furthering spatio-behavioral management. For example, such provisions may encourage sick workers to comply with lock-down regulations and not seek to skirt the rules in order to earn wages. But as the public health crisis begins to abate and governments gradually lift their lock-down rules, well-designed social insurance policies may play a more central role in encouraging sick or potentially exposed workers to follow best practices despite the lifting of direct restrictions on their movements.

The three policy priorities this Paper identifies—social insurance, systemic risk management, and spatio-behavioral management—may be more and less aggressively pursued by the range of public and private actors discussed, and may be more or less effectively advanced by the various policy instruments. For example, States may emerge as predominantly using command-and-control regulation through their police and licensing powers (which may trigger unemployment), while the federal government may prioritize systemic risk management. But federal government actions may conflict with state and local regulation or policy priorities. And systemic risk management may ignore or enhance the delivery of social insurance. For example, macroeconomic measures coupled with paid sick and family leave mandates and unemployment insurance may try to cure unemployment, but they are not tailored to differential types of spatio-behavioral consumption that could spread the virus with longer-term economic and health effects.

[63] These approaches have been justified on public health—to increase "herd immunity"—and economic grounds. https://www.theguardian.com/commentisfree/2020/mar/13/why-is-the-government-relying-on-nudge-theory-to-tackle-coronavirus.

D. Regulatory Triage

Another key and related point is the lack of a "central planner"[64] to coordinate across policy fields. To be sure (as we discuss below), a national state of emergency has been declared in the United States, and a federal relief bill is in the works. But even at the federal level, we have yet to see a coordinated policy approach on designing and implementing the optimal mix of financial stability, social insurance, public health, or spatio-behavioral incentives for coping with the public health, socio- economic, and financial ramifications of COVID-19.

Nor is it clear that there is time to think through the optimal combination of policy instruments for managing the economic and financial aspects of the COVID-19 crisis, something we might want to do in an ideal world. For example, we might theoretically want to consider what might be the "right" combination of tax expenditures as opposed to directly-delivered social insurance or economic support benefits. Or, we might want to consider how a payroll tax credit might interact with a directly-delivered cash benefit. In current conditions, however, choice of instrument may turn out to be piecemeal or driven primarily by political compromise or crisis-magnitude at certain moments rather than what is theoretically optimal or optimal long-term.

What we are likely to see, then, is a state of regulatory triage in managing the regulatory challenge as legislators, government leaders, and regulators struggle to identify and implement the optimal mix of policy instruments.

E. Systemic and Aggregate vs. Efficiency and Fairness Considerations

Another important tension that we envision is the interplay of systemic considerations against more "static" considerations of efficiency and fairness. Scholars of financial regulation are familiar with addressing systemic considerations—like risks of financial contagion or multiple bank failures—and many recognize that, in certain "second-best" crisis scenarios, systemic considerations may have to take precedence over considerations of fairness.[65] Meanwhile, scholars of social insurance and social security

[64] While a COVID-19 task force has been assembled, it is not clear the extent to which it is serving a coordinating function among the different federal, state, local, industry, and private actors.
[65] See discussion and sources cited supra Part II.C. *But see* Casey & Posner (2015).

are also familiar with the idea that premiums paid for such insurance or security (however extracted) tend not to be perfectly risk-adjusted and may in fact be borne primarily by groups other than those most likely to draw on the insurance (e.g., future generations), but that, in the aggregate, such insurance is important.[66] However, in other fields (including taxation, public finance, and labor law) and among lay people, considerations of equity and fairness may be more prominent, and large-scale interventions that only benefit systemically-important actors may be perceived to be unfair.[67]

The fact of the matter is that the regulatory solutions and relief policies used to manage the COVID-19 crisis will likely have large distributive and fairness effects, whether they are direct measures put in place to ensure public health or financial and economic relief measures enacted to respond to the crisis.[68] Moreover, even if we fail to put in place any social insurance or relief policies whatsoever, we will still see large redistributive effects due to the differential impacts of the COVID-19 outbreak on different actors and sectors.

F. Public Finance and Monetary Policy

Another set of issues that will gradually become apparent are those concerning public finance. We are operating in a time of large federal deficits and national debt.[69] Tax and public finance scholars have expressed concern that recent tax reforms (including the 2017 tax reforms) will exacerbate this.[70] But concerns over deficits and the national debt are not universal.[71] Heterodox monetary policy approaches (such as modern monetary

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[66] See discussion and sources cited supra Part II.A.
[67] Auerbach & Hassett (2002); Kaplow (1982, 2000); Musgrave (2002).
[68] For example, the City of Boston has imposed new rules requiring that boston bars and food establishments must halve their capacity and close by 11 pm. These rules are likely to have significant negative impacts on restaurant revenues and business. Christopher Gavin, *Marty Walsh Imposes New Rules on Boston's Restaurants, Bars Amid Coronavirus Outbreak*, Boston.com (Mar. 15, 2020), https://www.boston.com/news/local-news/2020/03/15/boston-restaurants-bars-new-rules-coronavirus.
[69] Congressional Budget Office (2019) (predicting federal budget deficit exceeding $1 trillion each year beginning in 2022; and predicting that federal debt held by the public is projected to reach 93% of GDP in 2029 and 150% of GDP in 2049).
[70] Howard Gleckman, *What Trillion Dollar Deficits In An Era of Full Employment Look Like*, TAXVOX (Jan. 7, 2020), https://www.taxpolicycenter.org/taxvox/what-trillion-dollar-deficits-era-full-employment-look.
[71] Buchanan (2011a, 2011b); *see also* Howard Gleckman, *The Federal Deficit Is Headed For $1 Trillion. Should We Care?*, TAXVOX (Jan. 29, 2019), https://www.taxpolicycenter.org/taxvox/federal-deficit-headed-1-trillion-should-we-care; Jason Furman and Lawrence H. Summers, *Who's Afraid of Budget Deficits?*,

theory) argue that monetary policy is far more important than tax policy in managing and financing the economy, and some note that government can simply print money, spend it, and issue bonds due to its monopoly hold on currency, subject only to the limits of inflation.[72]

The choice to use monetary policy instruments rather than tax policy instruments or government borrowing to fund relief or bailouts raises important issues of democracy, governance, and distribution, and structures relationships of power.[73] Likewise, the choice of increasing taxes as opposed to running a federal deficit or printing money raises similar issues, as well as issues of intergenerational cost spreading.[74] In essence, the question will be how the United States pays for the cost of social insurance, stimulus, and bailout solutions deployed in the COVID-19 crisis, and who the winners and losers will be.

G. Insufficiency of Existing Theoretical Paradigms

We anticipate that existing theoretical paradigms may prove insufficient as analytical tools capable of identifying the right policy solutions and may have to be modified and extended to analyze our "new normal." For example, with respect to social insurance delivery, the existing literature examines whether delivery should be done directly (such as through food stamps or a UBI) or indirectly (for example, via indirect tax expenditures or through tax administration or the consumer bankruptcy system)[75] and has also framed the issue as one of institutional choice.[76] But these frameworks may not be nuanced enough to encompass the considerations identified here. For example, the existing literature does not provide a framework for thinking about social insurance delivery in a time of critical spatio-behavioral constraints and supply-side demands. Specifically, the current challenge is to provide social safety net support in a way that enables continued individual spending on the "right" things (such as rent and necessities), while discouraging people from

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FOREIGN AFFAIRS (March/April 2019), https://www.foreignaffairs.com/articles/2019-01-27/whos-afraid-budget-deficits.

[72] Under that rubric, taxation would then be regarded as primarily redistributive or an inflation control. Visser (1991).

[73] Desan (2005, 2015).

[74] Buchanan (2009).

[75] Alstott (1995); Feibelman (2005); Fleischer & Hemel (2017, 2019); Graetz, Mashaw & Mashaw (1999); Leff (2019); Levitin (2010); Oei (2011, 2012)

[76] Weisbach & Nussim (2003).

engaging in the "wrong" kind of consumption (consumption that might compromise "social distancing" and lead to COVID-19 spread). Moreover, the policy decision is complicated by the fact that the socially undesirable behavior in question is not *per se* undesirable (e.g., violent crime, drug use, or child abuse) but would in fact be relatively blameless or even economically and socially beneficial—growth-enhancing—in ordinary times. This may test the effectiveness of our current understanding of the choice between direct and indirect delivery mechanisms, or of the operation of institutional divisions and boundaries in performing effective social insurance delivery while threading the behavioral needle. It may also raise particularly vexing design and policy choice issues in a situation in which the systemic economic risks are real.

IV. COMMENTARY ON COVID-19 INITIATIVES

A. Initial U.S. Legislative Response to COVID-19: H.R. 6201

Congress made its initial foray into legislative responses to COVID-19[77] with a House bill—the Families First Coronavirus Response Act (H.R. 6201)—passed early on March 14, 2020.[78] H.R. 6201 addresses a range of health, employment, and business concerns. Here, we walk through the basic policy choices that Congress made and examine their likely success in achieving and balancing the key policy concerns of social insurance, systemic economic and financial risk management, and spatio-behavioral management.

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[77] According to the CDC, the 2020 outbreak of respiratory disease is being caused by a novel coronavirus. The virus, now named "SARS-CoV-2" causes the disease named "Coronavirus disease 2019",or "COVID-19." Centers for Disease Control and Prevention, (Updated March 15, 2020), https://www.cdc.gov/Coronavirus/2019-ncov/cases-updates/summary.html. In some places, H.R. 6201 defines a covered health emergency as "the declaration of a public health emergency, based on an outbreak of SARS-CoV-2 or another coronavirus with pandemic potential." (see H.R. 6201 Division A – Second Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020). In the amendments to the Family and Medical Leave Act, the legislation defines coronavirus by reference to the language in the Section 506 of the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 ("the term 'coronavirus' means SARS–CoV–2 or another coronavirus with pandemic potential").

[78] H.R. 6201, 116th Cong. § 3102 (2020), available at, https://docs.house.gov/billsthisweek/20200309/BILLS-116hr6201-SUS.pdf; House Appropriations Committee Summary at, https://appropriations.house.gov/sites/democrats.appropriations.house.gov/files/Families%20First%20Summary%20FINAL.pdf

1. Overview

H.R. 6201 includes seven major response categories:

(1) *FMLA expansion:* emergency-based expansion of Family and Medical Leave Act benefits;

(2) *Paid sick leave*: introduction of a new employer requirement to provide paid sick leave in connection with the COVID-19 pandemic;

(3) *Special short-term tax benefits*: tax credits for paid sick leave and family medical leave;

(4) *Stabilizing unemployment benefits programs:* special funding for states' accounts in the Unemployment Trust Fund and authority for states to relax existing requirements for applicants;

(5) *Free testing*: a requirement for group health plans and insurers (along with Medicare, Medicaid, CHIP, and other government health coverage programs) to provide coverage of COVID-19 testing and related services at no cost;[79]

(6) *Nutrition program waivers:* ensuring continued and expanded access to SNAP (supplemental nutritional assistance program) and to school lunches (following school closures); and

(7) *Special funding and waivers for several food and other social services government programs:* These programs include the Women, Infants and Children (WIC) program, the Commodity Assistance Program, Department of Defense Health Program, Taxpayer Services at the Internal Revenue Service, Indian Health Services, DHHS Aging and Disability Services Programs, Public Health Social Services Emergency Fund, and Veterans Health Administration Medical Services.

Three of the major provisions (Categories 5-7) provide increased financial support for and more flexible access to government benefits programs already in place that are designed to provide food, health, and other social services to vulnerable populations.

[79] The emphasis on no-cost COVID-19 testing aims to eliminate one friction to identifying those who are ill —the costs associated with testing, even with insurance. At the time of proposal, however, the actual availability of tests remains a major limitation.

Although such programs can indirectly impact the private sector (for example, through health care or other expenditures), they are primarily government-based. Thus, they reinforce the policy goals of social insurance and spatio-behavioral management by providing social assistance and support to individuals who have contracted or been exposed to COVID-19 (for example, those who are ill and need to stay home from work), or who are otherwise negatively affected (for example, workers caring for ill family members or facing layoffs), which will hopefully incentivize desirable spatial behaviors that limit disease transmission. For example, relaxed requirements for unemployment benefits may enable workers to qualify for benefits even if they are not actively seeking work at a time when aggressively pursuing new employment may run counter to public health officials' recommendations on social distancing, reducing business operations, and reducing public transit use. Similarly, access to funds substituting for school lunches after school closures may advance social insurance and spatio-behavioral policy goals by alleviating financial pressures while avoiding contagion in school environments.

The remaining four provisions involve businesses, workers, and commercial markets, and thus likely reach a far greater number of actors, networks, and systems across society. Thus, in designing these provisions, Congress has to make critical policy tradeoffs between social insurance, systemic risk management, and spatio-behavioral considerations. We now examine the four major private sector provisions along these dimensions.

2. Congressional Action in the Market

a. Family and Sick Leave Emergency Provisions Generally

Two provisions of the House Bill (Categories 1-2) introduce language granting paid leave and related coverage for workers who experience work-related interruptions due to COVID-19. Together, they address social insurance concerns in ways that appear to further spatio-behavioral goals: encouraging socially beneficial behaviors during a pandemic and reducing behaviors that could escalate the crisis. That said, however, certain features of the provisions may limit these impacts and ultimately advance neither goal.

b. Expansion of the Family and Medical Leave Act

The first provision, the Emergency Family and Medical Leave Expansion Act, expands the Family and Medical Leave Act of 1933 ("FMLA")'s coverage.[80] H.R. 6201 amends sections 101 and 102 of the FMLA to ensure expanded access to its twelve-week guaranteed unpaid leave by: (1) relaxing the definition of eligible "employees"[81]; (2) expanding the definition of "parent"[82] to allow FMLA benefits to kick in when the worker provides care for a broader range of family members; and (3) including qualifying needs related to the announced public health emergency as grounds for a leave request.[83] Qualified employees covered under the COVID-19 public health emergency-basis for leave are granted entitlements to the FMLA's existing *unpaid* leave benefits for an initial 14 days (for which the employee may opt to substitute any accrued vacation, personal medical, or sick leave). Thereafter, such employees are entitled to *paid* leave for the rest of their twelve-week FMLA leave period at an amount not less than two-thirds of their "regular rate" for the number of hours the employee "would otherwise be normally scheduled to work."[84]

On first impression, the Emergency Family and Medical Leave Expansion Act aggressively expands wage support for workers who need to take time off of work for their own COVID-19 health issues or those of a family member. Accordingly, the provision would introduce the kinds of social insurance for individuals that would offer a critical safety net in a period of significant economic dislocation. Additionally, by encouraging and facilitating affected workers' decisions to stay home, the new benefits would promote critical social distancing and isolation, whether by keeping a potentially infected worker at

[80] H.R. 6201, 116th Cong. § 3102 (2020) (Division C).

[81] Here Congress reduces the period of time the employee must have worked for the employer before becoming eligible from 12 months to 30 days. *See id.* at § 3102(b) (amending as Section 110(a)(1)(A)).

[82] *Compare id.* §3102(b) (amending as Section 110(a)(1)(C)), *with* definition in existing statute before amendments, 29 U.S.C. § 2611(7).

[83] H.R. 6201, 116th Cong. § 3102(a)(1) (amending as Section 102(1)(a)(F) (adding as basis for leave "a qualifying need related to a public health emergency")). This expansive public health emergency basis encompasses worker non-attendance in compliance with a Coronavirus-related order or recommendation from a public official or health care provider (whether grounded in the health issues of the worker or a family member). *See id.* § 3102(b) (amending as Section 110(a)(2)(A)).

[84] *Id.* (amending as Section 110(b)).

home or by keeping a potentially infected family member (such as minor children) at home as well.

However, three *additional* provisions in the amended FMLA language may dramatically reduce the scope of employees' access to the new leave benefits. First, the "employer" threshold for FMLA coverage shifts from its original "50 or more employees" to "fewer than 500 employees" under the House bill.[85] When understood with other amended language, this revision points in two different directions that may expand or reduce access to the Bill's extended support. On the one hand, shifting to "fewer than 500 employees" expands the scope of covered "employers" to smaller businesses with fewer than 50 employees. However, the cap at 500-employee cap leaves employees at larger firms ineligible for leave requests under the new COVID-19 public health emergency-basis for requesting leave. Those employees are left to rely only on existing firm leave policies, and while some well-known large firms have voluntarily extended paid leave to employees impacted by the COVID-19, there is no obligation to do so and no evidence of universal adoption by big business.

While proponents of the Bill have yet to explain the "fewer than 500 employee" cap, it may be that firms with 500+ employees are exempted from the amended paid leave requirements as a means of balancing the social insurance goals with the desire to forestall a broader system-wide economic fallout. Allowing larger firms that may have debt liabilities to avoid incurring additional labor costs from having to compensate a large number of employees seeking COVID-19-related FMLA leave could help prevent them tipping over the edge, which could cause cascading economic effects. But President Trump, a number of Senators, and labor leaders have already expressed concerns about the 500+-employee cap.

Second, expanding leave requirements to firms with *fewer* than 50 workers, while facially allowing *more* employee access to leave benefits, does not guarantee it. The Secretary of Labor is granted authority under the Administrative Procedure Act to issue rulemakings and regulations granting "hardship waivers" that would exempt smaller businesses with fewer than 50 employees if the new requirements would "jeopardize the

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[85] *Id.* (amending as Section 110(a)(1)(B)).

viability of the business."[86] The Secretary of Labor can also issue regulations that would exclude certain health care providers and others from the definition of eligible "employees."[87] Thus, what appears to be a major legislative reform combining valuable social insurance for COVID-19-affected employees and that simultaneously advance spatio-behavioral management goals may turn out not to cover many employees in the United States. Ultimately, the real-world impact of the Emergency Family and Medical Leave Expansion Act will turn on what portion of workers are employed by small businesses and how readily the Secretary of Labor grants small businesses regulatory waivers to comply.

Third, the paid wages to which employees are entitled under H.R. 6201's FMLA expansion may not match their real-life weekly pay, thereby leaving them with a gap. The FMLA coverage provides pay at two-thirds of a formulaic rate under the Fair Labor Standards Act, Section 7(e). Given that the benchmark rate may be below the employee's actual hourly rate, and given that the paid leave is only for two-thirds of that amount, most covered employees will likely receive paid leave that does not equal their actual weekly pay.[88] For those workers already living paycheck to paycheck, the new paid leave—while certainly better than no paid leave—may render them unable to meet all of their regular bills and may make them vulnerable to pressure to keep working or come back earlier than public health needs would suggest. While the two-thirds' rate may be designed to prevent moral hazard (in which the worker takes unnecessary health risks *ex ante* due to the existence of the coverage), the gravity of the public health situation may counsel against such a reduced rate.

c. Emergency Paid Sick Leave Act

A companion to the above FMLA reforms—the Emergency Paid Sick Leave Act[89]—is an entirely new regime that guarantees employer-provided paid sick leave at "regular rates" for qualified employees needing time off for: (1) COVID-19 self-isolation;

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[86] *Id.* (amending as Section 110(a)(3)).
[87] *Id.*
[88] New section 110(b)(2)(B)(i) of the FMLA, added by H.R. 6201, Section 3102.
[89] H.R. 6201, 116th Cong. § 5101 *et seq.*

(2) medical diagnosis or care for symptoms; or (3) compliance with public official or health care provider recommendations or orders regarding COVID-19. Qualified workers are also entitled to paid sick days at *two-thirds* their "regular rate" of pay for any of the above regarding a *family member*.[90] Available paid sick time under the new provisions is capped at 80 hours for full-time employees. Such leave is in addition to any paid leave otherwise made available to employees by the firm. Similar to the new language for the FLMA, this Emergency Paid Sick Leave Act limits covered "employers" to those with fewer than 500 employees.

These new provisions sets forth a series of benchmark wage rates that serve as the minimum required compensation rate for pay under the new paid sick leave provisions.[91] These minimums are based on Fair Labor Standards Act minimum wage rates, "regular rate" calculations for overtime, or State or local minimum wage rates and in many cases may be below the hourly wage the employee generally receives. In such cases, the paid leave would not reach the level of the employee's usual hourly (and hence, weekly) pay and may render the worker unable to meet rent or utilities—similar to the situation that employees may face under the paid leave portion of the FMLA. Where the employee is receiving sick leave pay while caring for a family member, they are entitled to only 2/3 of the amount they would receive for their own personal sick leave.[92] The gap between the employee's usual weekly pay and the paid leave they receive under the Emergency Paid Sick Leave Act may potentially limit employee willingness to engage in desired social-distancing behaviors because it provides a more limited social safety net than non-paid leave wages. Again, the gap may be designed with the view of avoiding the moral hazard of workers, counting on receiving full paid sick leave, taking unnecessary health risks *ex ante*; but again, the gravity of the crisis and the spatio-behavioral considerations that crisis management entails calls the provision's design into question.

In summary, with the legislative introduction of the two new paid leaves detailed above, employees who are sick, at risk of being sick, caring for those who may be sick, or

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[90] *Id.* § 5110(9)(B)(ii).
[91] H.R. 6201 section 5102(b)(2). Full time employees, otherwise qualified under the provisions are entitled to this pay for 80 hours.
[92] H.R. 6201 section 5110(9)(b)(ii).

caring for students experiencing COVID-19 related school closures may be more willing to stay home and miss work.[93] In doing so, they will be supporting the broader public health interest in limiting transmission by ill or potentially ill individuals. But, to the extent that the pay granted by the new provisions falls short of their actual weekly pay, or more critically, are not required to be provided by their employer at all, then social insurance and spatial and behavioral goals are met only partially at best, or not at all, at worst.

d. Tax Credits for Paid Sick and Family Leave

Standing alone, the paid leave provisions just discussed would place the burden of providing employee social insurance exclusively on the firms themselves (or, in the case of self-employed individuals, would provide no external financial relief).

The new tax credits introduced in H.R. 6201 address that third prong of policy goals —trying to ensure continued functioning of the financial and economic system and reduce the risk of systemwide distress and broader contagion due to business failure—by providing relief for employers via a payroll tax credit.[94] Under these new tax provisions, a refundable tax credit would be allowed as an offset to payroll taxes under I.R.C. § 3111 (or as an offset to the income taxes for the self employed). The credit would be available for employers providing paid sick or family leave, and for self-employed individuals unable to work under comparable circumstances. Thus, businesses that may be experiencing lower revenues and higher wage costs would receive government financial support through a quarterly tax credit delivery mechanism.

i. Initial Presidential Proposal

The basic design of this tax relief stands in marked contrast to the administration's proposal of early March 2020: President Trump initially suggested a payroll tax cut, reducing the payroll tax rate to 0% for the remainder of 2020, as the primary form of

[93] OR even those dependents impacted by COVID-19 related closures, see H.R. 6201 Section 3201, adding new section 110(a)(2)(A)(iii). In the case of school closures, to the extent that these paid leave provisions work as imagine, they could reduce community resistance to school closures, making it easier for public health officials to pursue appropriate public health policies.

[94] H.R. 6201, §§ 7001 et seq. (Division G).

business and worker relief.[95] This recommendation was envisioned as a mix of market stimulus, business relief and assistance to workers. However, the proposal's mechanism was poorly targeted for meeting the core policy considerations underlying effective COVID-19 crisis management for several reasons: (1) a payroll tax cut benefits everyone, not just the workers and businesses impacted by COVID-19, and thus may be a waste of tax dollars that may lead indirectly to dismantling of the social security safety net;[96] (2) if the primary mission of a payroll reduction is providing social insurance to workers, then the reduction in the firm's side of the payroll tax offers little relief if the benefit is not passed on (and there is no guarantee it will be); (3) the benefit of the payroll tax to the business (as a buttress against reduced revenues) may be small if payroll taxes are low (for example, if most of the business's costs are in expenses other than wages); (4) as the primary worker benefit, the reduction in payroll tax would be poorly timed, too limited, or not available to key populations because the reduction in payroll taxes is a benefit that is capped at the amount of the worker's payroll tax, is distributed over-time (as payroll taxes otherwise due are no longer withheld from the paycheck), and is only available to the currently employed (and not to workers who are laid-off due to a business downturn).

The President's proposed payroll tax cut may have intentionally sought to provide widespread financial relief to workers regardless of whether they were experiencing personal or family illness, in an effort to boost broad consumer spending. This interpretation seems consistent with the administration's messaging about consumer spending and economic stimulus.[97] But as we have noted in in Parts I and II of this paper,

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[95] Jim Tankersley, T*rump's Payroll Tax Cut Would Dwarf the 2008 Bank Bailout*, NY TIMES (Mar. 12, 2020), https://www.nytimes.com/2020/03/12/business/trump-tax-cut-coronavirus.html ("Mr. Trump and his top advisers have pitched the cut as a much-needed lift for consumers and businesses at a time when the spreading virus is beginning to chill economic activity. 'The payroll tax holiday is probably the most important, powerful piece of this,' Larry Kudlow, the director of the National Economic Council.").

[96] Id.

[97] See Tankersley, supra note 95; Donald J. Trump, https://twitter.com/realDonaldTrump/status/1238442385048305664?s=20 Twitter (Mar. 13, 2020) ("If you want to get money into the hands of people quickly & efficiently, let them have the full money that they earned, APPROVE A PAYROLL TAX CUT until the end of the year, December 31. Then you are doing something that is really meaningful. Only that will make a big difference!"); Mike Patton, *Trump Administration Considers Reducing Payroll Tax to Zero*, FORBES (March 10, 2020), https://www.forbes.com/sites/mikepatton/2020/03/10/trump-administration-considers-reducing-payroll-tax-to-zero/#606471cd3188 ("The rationale [for the Trump administration payroll tax cut] is to put more money in the hands of consumers so they will spend more and keep our economy strong. This action is especially

policy instincts that may be appropriate in the time of normal financial and business crises pose special risks when the precipitating event is a pandemic. The spatial and behavioral practices needed to best manage the COVID-19 crisis may counsel against fiscal packages that encourage traditional consumer spending. In the current crisis, the short-term goal is to encourage individuals to engage in increased social distancing and to reduce traditional forms of consumer spending that involve public gatherings (travel, sports and entertainment, sit-down restaurants, bars, etc). Of course, socially intimate consumption may be discouraged by pairing fiscal stimulus with draconian direct restrictions on human contact and movement (which are increasingly being put in place). But such direct spatial restrictions may suppress the potential positive impacts of the fiscal stimulus.

On the flip side, if the primary goal of the proposal is to free up cash for struggling businesses (as opposed to provide spending cash to individual workers or consumers), then the payroll tax cut is a good tool (at least the employer portion) because it helps businesses save cash on a quarterly, ongoing basis. Thus, while a payroll tax cut may fulfill limited elements of our unique COVID-19 policy goals, it does not fulfill others, may actively undermine some, and may be unduly expensive. Thus, as pandemic crisis management legislation, the proposed payroll tax cut constitutes a poor policy tool. Some of these critiques of the proposed payroll tax cut were publicly discussed, and may have helped guide the design of the H.R. 6201 payroll tax credit.

ii. Payroll Tax Credit in the House Legislation

The payroll tax credits in H.R. 6201 are provided through four provisions that track the new paid leave sections that we discussed above.[98]

(1) *Employer credit for new paid sick leave*: Section 7001 of H.R. 6201 provides a credit for employers against payroll taxes imposed by I.R.C. § 3111(a), where the credit is calculated based on paid leave granted under the new Emergency Paid Sick Leave Act.

(2) *Self-employed credit for amounts equivalent to new "paid sick leave"*: Section 7002 provides a credit for self-employed individuals based on the paid sick leave

on point since consumer spending accounts for nearly 70% of total GDP and has been the driving force behind our economic growth of late.").

[98] See discussion supra Part IV.A.2.a-c.

to which they would be entitled under the Emergency Paid Sick Leave Act, if they were employed.

(3) *Employer credit for new required paid family and medical leave under the revised FMLA:* Section 7003 provides a credit for employers against payroll taxes imposed by I.R.C. § 3111(a), where the credit is calculated based on qualified leave wages paid pursuant to the expansion of the FMLA in H.R. 6201.

(4) *Self-employed credit for amounts equivalent to new required paid leave under the revised FMLA:* Section 7004 provides a credit for self-employed individuals based on the qualified leave wages to which they would be entitled under the expanded FMLA in H.R. 6201, if they were employed.

Employer Credits. The two employer credits (Sections 7001 and 7003 of H.R. 6201) aim to reduce the burden on business of providing social insurance to employees through the new paid leave provisions. While the new paid leave provisions themselves addressed the direct issues of social insurance and encouraging desired spatial-behavioral practices, these tax credits recognize that businesses already facing significant losses due to the coronavirus outbreak may be ill equipped to fully bear the costs of social insurance. Although the credits have caps, the amount of paid leave actually provided under the expanded FMLA and the new emergency paid sick leave rules are likely to be below the caps for the group of workers for whom the provisions are most intended—low wage employees.[99] Thus, many businesses providing the newly required paid sick leave may find that the credits are sufficient to cover their sick leave payouts, even if the employees find that the sick leave itself is somewhat less than their usual paycheck. The tax credits may even help support the social insurance and the spatio-behavioral goals of COVID-19 crisis management: businesses may be less resistant to providing paid leave to workers and less likely to challenge their workers' entitlement to the benefits when their direct financial costs are fully compensated.

[99] *See* discussion *infra*. Compare H.R. 6201 section 7001(b) setting the maximum wages for which a credit is permitted at $511 per day for sick leave due to the worker's own health condition (and $200 per day for sick leave to care for a relative) for a maximum of 10 days, with H.R. 6201 section 5110(9)(B) (setting forth a series of benchmark wage rates that serve as the minimum required compensation rate, all of which are based on some version of minimum wage or Fair Labor Standards Act rates for overtime) and with H.R. 6201 section 5102(b)(2) (sick pay is for 80 hours for full time employees).

Self-Employed Credits. The two credits for the self-employed are more akin to the paid leave for employees in their impact. The credits provide a financial benefit to workers when they need to take time off for COVID-19 related reasons and are unable to work. Seen that way, these credits both provide social insurance for the self-employed and encourage such workers to stay home when COVID-19 illness renders it prudent for them to do so for public health reasons. Thus, although the relief to the self-employed structurally mirrors that provided to employers (credits based on the new statutorily mandated paid leave amounts for employees), the impact of the self-employed taxpayer's tax credits more closely tracks the direct benefits provided in H.R. 6201 to employees.

Refundability. All four of the credits are designed to be refundable. Thus, in contrast to the total maximum value of the President's proposed reduction of the payroll tax to 0% until the end of 2020, these new tax credits are not limited by the amount of tax owed by the employer (or the self-employed individual). At a more detailed level, however, the precise design of both the employer and self-employed tax credits will dictate exactly how much economic support it offers business and how much social insurance it actually provides the self employed. As noted above, both the expanded FMLA benefits and the new sick pay provisions have limits on the size of the employers to whom they apply and utilize a formulaic approach to determining the amount of paid leave.

Moreover, employers paying these workers are more likely to find that their new tax credit fully offsets the paid leave they are required to offer. For example, they are entitled to a credit for 100% of the qualified FMLA leave wages paid for the quarter, with a cap of $200 per day and $10,000 per quarter for the worker. At that level, even with the cap, the employer's credit should generally cover the required FMLA paid leave for low-wage workers who are the primary intended beneficiaries of the legislation.[100]

Summary. Ultimately, the new legislation, with its combined package that includes new required paid sick or family leave for workers and tax credits for employers providing those wages, responds to the three key goals of (1) social insurance for workers, (2) preventing widespread market distress and waves of business collapse, and (3) encouragement of good spatial and behavioral practices in a time of pandemic. Yet, the balance among the three goals may not be equal. At least with respect to the paid leave portions of the House Bill, the benefit to employees may not be as robust as the benefit to the employers—suggesting a prioritization of the market concerns or moral hazards concerns over both social insurance and spatial and behavioral goals.

CONCLUSION

This Working Paper identifies and discusses the ramifications of three interrelated but potentially conflicting policy priorities in regulating during the COVID-19 crisis: (1) providing social insurance to individuals and families in need; (2) managing systemic economic and financial risk; and (3) encouraging critical spatial behaviors to help contain COVID-19 transmission. We will continually update this Paper as a working document to incorporate our analysis of legislation and policy proposals as the crisis unfolds.

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