Americans have increasingly come to receive, and to expect, government insurance against disasters. Federal appropriations for disaster relief — mostly for weather-caused emergencies — have increased dramatically in recent decades.\(^1\) And a recent survey found that “consumers increasingly expect additional government support amid the COVID-19 pandemic.”\(^2\)

The desire for government-provided insurance is not surprising. People, being generally risk averse, are naturally inclined to seek insurance against disasters. And while private markets provide insurance for certain kinds of disasters — such as fires and floods — they do not offer many policies against certain other kinds of disasters, including pandemics. Indeed, American history may be viewed as one where, faced with inadequate private solutions, the government has gradually expanded its role as an insurance provider.\(^3\)

Since March, the federal government has taken many measures to provide support in response to the COVID-19 pandemic. Many of these measures — mandated by the coronavirus relief bill — specifically address the needs of individuals and families. These measures include expansions to unemployment insurance, income tax rebates, debt service and rent forbearance measures, and direct food aid. Other programs have been specifically targeted at small- and medium-sized businesses. These programs include the coronavirus relief bill Payment Protection Program (PPP) and various measures to encourage debt service forbearance for businesses. As Congress debates a new round of stimulus, this essay will review some of the programs that have already been implemented and some of the challenges they have faced. It will also discuss some ideas that have been proposed by economists to improve the implementation of disaster relief.

**Programs Targeted at Individuals and Families**

**Unemployment Insurance**

The coronavirus relief bill expanded unemployment eligibility for individuals affected by the coronavirus. In addition to the preexisting program for laid off workers, unemployment insurance was extended to employees with reduced hours, employees with a limited work history, and self-employed individuals with reduced pay due to the coronavirus. Moreover, the coronavirus relief bill expanded insurance to those who are quarantined, unable to work due to exposure risk, or unable to work due to the need to care for an ill family member.

Initial claims for unemployment insurance under the preexisting program began to spike in the third week of March, and the number totaled 48.8...
million over the 18-week period ending July 18. The weekly average of 2.7 million initial claims during the period vastly surpassed the previous year’s weekly average of just over 200,000.\(^4\)

However, these headline claims numbers appear to have understated actual employment losses. In particular, the headline numbers did not include claims under Pandemic Unemployment Assistance (PUA), which extended benefits to self-employed and part-time workers. Over 13 million individuals were filing continuing benefit claims under this new program by July 11.\(^5\)

The administration of unemployment insurance has varied substantially across states. By the end of April, all states had implemented the $600 weekly increase in unemployment benefits that was mandated by the coronavirus relief bill, but it took more time for some states to accommodate the expanded eligibility criteria under PUA. Only 12 states — representing just 21 percent of the U.S. labor force — were paying out extended benefits by the end of April. In the Fifth District, expanded benefits under PUA were first paid on April 27 in South Carolina, May 1 in Virginia, May 5 in the District of Columbia, May 8 in North Carolina and West Virginia, and May 9 in Maryland.

The unprecedented number of claims created administrative challenges, sometimes delaying the processing of claims, according to news reports and our contacts in the Fifth District. Processing delays often created a three-week or greater gap between filing for benefits and receiving funds. In some cases the “digital divide” came into play, and individuals without online access had to dial into overwhelmed call centers. Based on a survey conducted in April, the left-leaning Economic Policy Institute found that for every 10 people who had successfully filed for unemployment insurance, there were about five who were unsuccessful because they couldn’t get through or found the process too difficult.\(^5\)

Despite such implementation problems, much aid was delivered. The Brookings Institution found that monthly benefits increased by $45 billion between February and April — an amount that offset roughly half of the estimated loss in private wages and salaries during the same period.\(^7\) This overall “replacement ratio” of roughly 50 percent compared favorably to the pre-pandemic range of 30-55 percent.

Recent research suggests, however, that replacement ratios have varied greatly across job categories. According to research by Peter Ganong, Pascal Noel, and Joseph Vavra that appeared in the July 2020 issue of the NBER Digest, the median replacement ratio was over 150 percent for food-service workers, janitors, and medical assistants who received unemployment insurance but less than 100 percent for nurses and therapists, managers, and information technology workers.\(^8\)

**Tax Rebates**

The coronavirus relief bill mandated direct rebates of $1,200 for individuals ($2,400 for joint filers) with a phaseout for incomes higher than $75,000 ($150,000 for joint filers). As with unemployment benefit delivery, the scale of planned disbursements was enormous. In April, the IRS estimated that it would be making 171 million rebate payments under the coronavirus relief bill.\(^9\) And while the IRS initially had difficulty delivering refunds to individuals with out-of-date addresses or bank accounts as well as to those who used third-party tax preparation firms in 2018 or 2019, within a couple of months it had made considerable progress. As of July 17, 159 million checks had been distributed for a total of $267 billion.\(^10\)

**Debt Service Forbearance and Tenant Protection**

The coronavirus relief bill provided debt service and rent relief for individuals and families, including a six-month deferment of student loan debt service payments and some degree of debt service forbearance for consumer borrowers affected by the pandemic. In addition, the legislation sought to ease debt service burdens associated with federally-backed mortgages by:

- Prohibiting foreclosures on federally-backed mortgages for a 60-day period
• Providing 180 days of forbearance on federally-backed mortgage loans for people experiencing hardship related to the COVID-19 pandemic
• Providing up to 90 days of forbearance for multifamily borrowers with a federally backed multifamily mortgage loans, under the condition that borrowers receiving forbearance not evict or charge extra fees to late-paying tenants
• Prohibiting landlords with federally-backed loans from initiating legal action against late-paying tenants for 120 days

These provisions raised questions. The first has to do with the structure of mortgage forbearance. Will deferred mortgage payments be tacked on to the end of loans, or will some individuals face balloon payments later this year? There is no single answer to this question, but it appears that many mortgage servicing firms are allowing for considerable flexibility, including the option of avoiding catch-up payments by extending mortgage durations.

Ambiguities also exist with regard to eviction protections, especially since the federal moratorium expired in late July, and Congress is now considering an extension. In Virginia, a state moratorium on evictions expired at the end of June, although courts in Arlington and Fairfax counties have issued their own moratoriums. In Richmond, there are about 3,800 pending eviction cases, according to the RVA Eviction Lab at Virginia Commonwealth University. Richmond Mayor Levar Stoney’s administration has pledged to use coronavirus relief bill funding for eviction diversion and rent assistance, but activists remain concerned about a sharp rise in evictions in the coming months.  

And in Maryland, for example, the state’s eviction and foreclosure moratorium, imposed initially by Gov. Larry Hogan, remains in effect. However, the Maryland Court of Appeals issued an updated administrative order permitting eviction and foreclosure proceedings to start again in a limited capacity on July 25.

Programs Targeted at Small Businesses

Paycheck Protection Program

The coronavirus relief bill PPP was intended to help keep workers on employer payrolls. With an initial allocation of $349 billion — which was soon increased to over $650 billion — the program was designed to distribute U.S. Small Business Administration (SBA) loans to businesses, sole-proprietors, independent contractors, and certain other entities. The PPP's zero-interest loans were designed to cover up to eight weeks of an entity’s average payroll cost up to a maximum of $10 million, and loans were to be forgiven, provided that at least 75 percent of loan amount was used to fund payroll costs.  

The program’s initial funding was allocated in a mere 14 days. Yet the program was almost immediately met with criticism. The first major issue was the perception that a great deal of money was allocated to entities that did not appear to be “small.” Another concern was the perception that PPP incentivized banks to make large loans to a relatively small group of existing customers, rather than making a greater number of smaller loans to qualified small businesses irrespective of their previous affiliation with banks.

The rollout of PPP created substantial confusion for businesses. Some had difficulty with the paperwork and its payroll calculations. And many firms did not apply for PPP funding because they were uncertain about the program’s terms, especially those pertaining to loan forgiveness. PPP application forms request that applicants certify that “current economic uncertainty makes this loan request necessary.” This raised the questions about which criteria would have to be met to comply with the program and raised questions such as: Will I be penalized if I cannot rehire my laid off workers?
Although the SBA sought to clarify some of these issues, many firms remained apprehensive. One food and beverage distributor in the Fifth District stated that she had received a $200,000 program loan but worried so much about it she gave it back, saying, “I’d rather sleep at night.”

Still, PPP appears to have been successful in reaching a large number of businesses quickly. After the first round was taken up quickly, a substantial portion of the second round of $310 billion was still untapped at the end of June, according to the SBA. Some observers interpreted the second round’s slower take up as a sign that the demand for PPP loans had largely been satiated. Indeed, the program had achieved a broad reach. According to the U.S. Census Bureau’s Small Business Pulse Survey, 69 percent of respondents reported that they had received PPP loans by May 23 — a substantial increase from the 38 percent that had received loans by May 2.

Based on anecdotal reports from businesses in the Fifth District, it appears that for firms that still had revenue coming in, PPP was a useful lifeline and did exactly what it was intended to do. But for many firms — particularly in the restaurant and hotel business — that were almost completely shut down by the pandemic, the program was largely irrelevant.

Loan and Rent Forbearance
To encourage banks to make PPP loans and to provide forbearance options to their clients, the coronavirus relief bill mandated the relaxation of certain bank regulatory and accounting rules. The legislation allowed the Office of Comptroller of Currency to exempt certain transactions, including PPP loans, from counting against financial firms’ lending limits. Moreover, the legislation allowed financial institutions to suspend generally accepted accounting principles for loan modification related to COVID-19 that would otherwise be considered troubled.

Formal data sources cannot easily gauge the need for forbearance. However, many signs indicate that forbearance is needed by many businesses. As the pandemic has unfolded, the Richmond Fed has gathered information from a wide range of businesses in the Fifth District. Based on a survey of small-business lenders during the last week of March, 39 percent of respondents reported that they had received a significant number of “accommodation requests from small-business borrowers as a result of their inability to service debt due to COVID-19.” Another roughly 48 percent of respondents had received a “moderate number of requests,” and only 13 percent had received “minimal” or “no” requests.

Observers in the Fifth District have reported that regulators have taken a relatively flexible stance during the current crisis. Regulators now have the attitude that “we know you came into this crisis relatively healthy, do what you need to do to lend on good credit, and we won’t ding you for it in exams later,” according to one of the Richmond Fed’s banking contacts.

Businesses in the Fifth District have had a mixed experience with rent forbearance. One commercial real estate firm reports that they called their bank and asked how much forbearance the bank was willing to grant, and the bank said that they would grant six months of forbearance. The firm immediately turned around and called its tenants and passed the forbearance onto them (in exchange for extending the lease by the same number of months on the back end). Of course, there also are landlords approaching this in a much less collaborative way. However, some observers have noted a general recognition that it is in the interest of tenants and landlords to work together based on the shared perception that both could do a lot worse if they can’t reach an agreement and businesses are forced to fail.

Insuring a Pandemic: “Macro Markets” and “After-the-Fact” Conditions
The scale of the policy response documented above makes it natural to ask: What improvements are possible? One issue is what role, if any, the private sector might play in disaster insurance, and another is how even a purely public response might be made better.
It’s perhaps hard to see any alternative to the massive risk-bearing assumed by the government across all levels. But is the current system the only conceivable one? In particular, what are the prospects for alternatives that leverage the know-how of private-sector insurers when it comes to marketing, pricing, and delivering insurance relief? After all, private insurers, taken as a whole, manage hundreds of millions of insurance contracts daily.

Interestingly, one aspect of large-scale disasters could actually make them easier (in principle) to insure through private contracts. In a well-known 1998 monograph *Macro Markets*, Nobel Laureate Robert Shiller advanced the idea of creating insurance markets to provide protection to individuals based on objective and quantifiable macroeconomic criteria. Because macroeconomic outcomes are beyond the control of any one individual, or often, of any group, Shiller’s insight was that such transparent contracts could side step many of the informational barriers that often block the formation of insurance contracts. COVID-19 is potentially a candidate for such private-sector solutions, particularly if payments are set to be triggered by events beyond an individual’s control, such as a state’s virus case level.

However, macro-based contracts may still have limited viability on a broad scale, for a different reason. Insurers generally do not write contracts unless they can hedge their risk, and for disaster policies (e.g., fire insurance), the hedging is often based on the notion that with enough policyholders, the total payouts are predictable. But macro risks, by their very nature, have (highly) correlated outcomes, and as the group of insured parties expands, the risk increases that insurance writers may be unable to meet their contractual obligations when disasters strike. This problem seems to have particular relevance for insurance against pandemics — imperfectly understood biological processes with devastating potential.

In addition, insurance is attractive to purchase when it is seen as an assured payoff should disaster strike. But in the case of COVID-19, there may be uncertainty. In at least one case, pandemic-related claims were denied as the contract was said to cover “direct physical loss or damage,” and not “loss of income due to market conditions, a slowdown of economic activity or a general fear of contamination.” Disputes over these contracts are likely to be tied up in litigation for years, and the mere threat of claims being denied in the future could dissuade consumers from taking out such policies in the first place.

These challenges facing private-sector disaster insurance are perhaps seen most plainly by the lack of existing policies that explicitly cover pandemics. Arguably, private-sector market failures have created the need for a substantial government role in disaster insurance. According to David Moss of Harvard Business School, a long history of imperfections in private insurance markets has spawned a host of government programs, ranging from federal disaster relief programs to unemployment insurance. While not perfect, these programs serve important functions.

While private insurance against major disasters may prove inadequate — at least for now — how might the public sector as insurer expedite disaster relief? Harvard University’s Greg Mankiw has proposed a program that would radically streamline the delivery process based on quick relief payments with “after-the-fact” validation. The idea is to send out relief checks with few preconditions, ensuring both comprehensiveness and timeliness, but to subsequently levy tax surcharges on individuals or businesses to the extent that they turn out to have not needed the aid (verified by comparing their taxable income in 2020 to that of 2019). In principle, such a program could provide an attractive combination of speed and conditionality. In practice, however, even such an apparently simple approach would likely face some of the same logistical problems as those encountered by the income tax rebate program. Still, the basic principle of “pay now and audit when you have the time” is worth keeping in mind.

The COVID-19 pandemic has prompted an unprecedented fiscal response and has highlighted the challenges of designing and implementing large-scale disaster relief and stabilization policies. The wide array
of programs described above have a common aim: to buffer households and businesses in the face of a major shock. That is, they all aim to provide insurance. The government has been the central insurer and has operated on an unprecedented scale.

Taken as a whole, there is little doubt that the measures taken in recent months have provided sizable relief from the effects of social distancing for both households and firms. The coming months and years will no doubt yield insight on how to further improve on what has been done this time, including how society might make the public response more nimble and how we might combine the private sector’s capability to deliver insurance with the government’s ability to hedge risks.

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Endnotes

4 Initial claims numbers are not seasonally adjusted. Source: Department of Labor via FRED.
11 Suarez, Chris. “Richmond activists keep focus on evictions as more statues come down.” Richmond Times-Dispatch, Jul. 9, 2020.
12 As per Peter Dolkart of the Richmond Fed.
14 Including, for example, Potbelly’s, Shake Shack, Ruth’s Chris Steak House, and the Ritz-Carlton, Atlanta.
15 “Paycheck Protection Program (PPP) Report Approvals through 06/30/2020,” U.S. Small Business Administration.
19 Two key barriers to private insurance arise from parties having different information. One is so-called “moral hazard,” where the insured party takes greater risk once insured that the insurer cannot see. The other is “adverse selection,” where the parties most susceptible to the risks — again in ways the insurer cannot see — sign up for the coverage.

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