

A Plan to Reform the Unemployment Insurance System in the United States

Arindrajit Dube



MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers—based on credible evidence and experience, not ideology or doctrine—to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.





A Plan to Reform the Unemployment Insurance System in the United States

Arindrajit Dube

University of Massachusetts Amherst, and National Bureau of Economic Research

April 2021

This policy proposal is a proposal from the author(s). As emphasized in The Hamilton Project's original strategy paper, the Project was designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. The author(s) are invited to express their own ideas in policy proposal, whether or not the Project's staff or advisory council agrees with the specific proposals. This policy proposal is offered in that spirit.

BROOKINGS

Abstract

The unemployment insurance (UI) system has played an important role in delivering relief during the current pandemic. At the same time, this experience has highlighted the important challenges facing the UI system due to poor and underfunded administrative capacities, too few unemployed workers qualifying for UI benefits, inadequate levels of regular UI benefits, lack of effective triggers to tie benefit duration to economic conditions, and meager utilization of work sharing programs. In this proposal, I suggest remedies for each of these problems, and argue that these remedies are best achieved through converting the UI system to a fully federal program.

Contents

Introduction..... 1

Background on UI in the United States 2

Challenges with the Current System..... 6

Proposals for Reform 10

Proposal Costs 16

Questions and Concerns 18

Endnotes 20

Author and Acknowledgments 21

References 22

Appendix A: Framework for Analyzing UI..... 24

Appendix B: Frequently Used Acronyms..... 30

Introduction

Unemployment insurance (UI) in the United States was established in 1935 as a federal-state system. The last major changes were put in place in 1976, making the system in great need of major reform. Following the Great Recession, there was widespread agreement among experts that the UI system in the United States required substantial changes. There were numerous reports with detailed recommendations for reform (e.g., O’Leary and Wandner 2018), but unfortunately these recommendations were not implemented at the federal level. The Covid crisis has led to an unprecedented reliance on the UI system to deliver relief, income support, and fiscal stimulus in modern times. Importantly, the crisis has highlighted the serious strains on the UI system—with its patchwork of state rules and often impoverished administrative capacity from chronic underfunding. At the same time, it also demonstrated how the federal government can provide generous relief during a crisis through the UI apparatus.

Between the second week of March and the second week of May 2020, the number of individuals on UI jumped from 1.8 million to 24.9 million, as many employers (especially in hospitality, travel, and other service sectors) put their workers on temporary layoffs and most state governments enacted stay-at-home orders. Moreover, the federal government extended the potential benefit duration (PBD) and provided generous wage replacement over the course of the crisis. This included an unprecedented (federally funded) \$600/week boost to UI benefits (Federal Pandemic Unemployment Compensation, or FPUC) that lasted through July 2020, followed by five weeks of \$300/week boost (“Lost Wages Assistance”), then a further eight months of \$300/week boost starting in January 2021. In addition, there was a dramatic increase in eligibility through the Pandemic Unemployment Assistance (PUA) program that was designed to extend benefits to those who may not qualify for UI due to limited work history or hours, or because they are self-employed. In the week ending January 30 of this year, for instance, 7.7 million of the total 18.3 million individuals receiving benefits received them through the PUA, demonstrating the importance of the program.

The fact that we were able to expand UI eligibility and benefits and provide relief to tens of millions of families during the crisis is a success story and demonstrates the potential to do more than we had in past downturns. At the same time, the implementation of the pandemic UI programs showed the limitations of the state-based UI system. One example of such limitations was the serious delay in processing UI claims in many states, which led to substantial drops in consumption (Farrell et al. 2020). In some states, those delays were created by major backlogs (Goodman, Cohen, and Chandler 2020). Additionally, archaic software infrastructure in many

states made it impossible to change the benefit replacement rate or maximum benefit levels easily, leading Congress to use a flat dollar boost. The minimum and maximum benefit amounts vary greatly between states, creating difficulty in ensuring sufficient benefit amounts. There were numerous fraud attempts, which led some states (e.g., California) to halt all payments for some time. Short-time compensation (STC; also called work sharing) was not available in around half the states; even where they were available, lack of information and administrative hurdles kept the number of workers covered by work sharing at an extremely small number. These and many other limitations exposed the challenges for our current federal-state system.

The last major reforms in the UI system were enacted in 1976. Much has changed in the labor market since then, and we have learned much more about the possibilities and limitations of our current UI system. This especially includes the experience from the Great Recession as well as the current Covid crisis. This policy paper builds on other thoughtful and important proposals for reforming UI, including Chodorow-Reich and Coglianese (2019), O’Leary and Wandner (2018), West et al. (2016), Bennet (2020), and others. In this policy paper I have tried to synthesize some key aspects of the existing proposals, while updating and adding some elements in light of the experiences with UI during the Covid crisis.

There are five key components of my proposal:

- Make UI a fully federal program, similar to Social Security.
- Expand eligibility by reducing eligibility earnings thresholds, and increase the types of workers who qualify for benefits.
- Tie the PBD to state and national triggers for total unemployment rates (TURs).
- Make the replacement rates depend on the level of earnings, raise the rates substantially for those at the bottom of the pay scale, and add a recession boost.
- Revamp STC.

In this policy paper I begin with a background on UI, including the goals of the policy and how those goals are currently administered in the United States. Next, I discuss the challenges facing the current program. Following this, I lay out my proposed reforms to the UI system. Finally, I address possible questions and concerns that may arise about the proposed reforms.

Background on UI in the United States

HOW UI IS CURRENTLY STRUCTURED IN THE UNITED STATES

UI provides partial income support to workers who lose their jobs for a period of time. The maximum length of time an individual can collect UI is known as the potential benefit duration, or PBD, while the share of income that is replaced by UI benefits is known as the replacement rate.

Under the 1935 Social Security Act, the UI system is a federal-state partnership, administered by each state. Because administration of the program is left to the states, there is tremendous variation in eligibility and replacement rates across states, and some variation in the PBD as well. In general, in all states eligibility is based on an earnings test, so only workers with sufficient earnings over a base period are eligible. The base periods vary across states. In some states, eligibility determination is based only on the standard base period, which is typically the first four of the previous five completed quarters prior to a UI claim. This ignores most-recent work history and puts weight on older earnings. Other states allow for an alternative base period where qualification is based on the immediately preceding four quarters in some states, which tends to increase eligibility rates.

The determination of the benefit also varies greatly across states. While most states typically start with replacing around 50 percent of income, there are wide variations in maximum benefit levels: currently the maximum weekly benefits range from \$240 in Arizona to \$855 in Massachusetts. Some states also have minimum benefit levels, though many do not; in Washington State, for example, the 2021 minimum benefit amount is \$201. Factoring in the differences in rules, and averaged over all recipients, the replacement rate in Louisiana in 2019 was 35 percent, while it was 50 percent in the state of Washington. Moreover, the choice of quarters in the base period can also affect the determination of benefits and can adversely affect workers who have a more limited work history.

In normal times, most states typically provide 26 weeks of benefits, though as of 2021, seven states provide benefits for a shorter period (ranging between 16 and 22 weeks). During recessions, the PBD is typically longer. The federal government's Extended Benefits (EB) program uses triggers to extend the PBD during downturns. In particular, there are two tiers to the EB program: Tier 1 extends PBD by 13 weeks and

Tier 2 extends it by an additional 7 weeks. In addition, Tier 2 is optional and depends on the state's decision to participate. The EB program is based on thresholds on a combination of the insured unemployment rate (IUR, based on UI filings) and the TUR (based on a household survey). However, as a practical matter, nearly all of the triggers onto EB during the Great Recession and its aftermath occurred via TUR triggers. These triggers are as follows:

- Tier 1: TUR of 6.5 percent, and 110 percent of the minimum rate during the last two years of the reporting period
- Tier 2: TUR of 8 percent, and 110 percent of the minimum rate during the last two years of the reporting period
- Under current law, the federal government typically covers half of the cost of the EB program in Tiers 1 and 2. During downturns, some parts of EB have fully federally financed. In addition, during the two most-recent recessions, the federal government has introduced emergency programs to further extend benefit durations. I will discuss the use of these emergency programs and the EB programs in greater detail in the section titled *Challenges with the Current System*.

COSTS AND BENEFITS OF PROVIDING UI

With the current structure of UI benefits in mind, it is worth thinking about the costs and benefits when designing an ideal UI program. Economists typically approach the design of UI as balancing two factors. On the benefit side is the goal of smoothing consumption of workers and family members by preventing large drops in consumption after job loss. Too low an unemployment benefit would lead to inadequate consumption smoothing if individuals do not have sufficient other sources of insurance or savings, and are not able to easily borrow against future income. On the cost side is the possibility of moral hazard from providing a transfer tied to someone not working. Too generous a benefit may be costly because it could lead workers to reduce their effort to find a job since they are receiving a benefit without having to work. This can reduce the rate at which workers exit out of unemployment, thereby prolonging spells of joblessness and costing taxpayers additional resources.

A key consideration here is that if consumption drops are larger—say because more workers are consuming what they receive in income—the value of insurance is greater for a given level of moral hazard. One implication of this reasoning is that poorer workers—who typically have fewer disposable assets and are closer to subsistence level—are particularly benefited from a more-generous unemployment benefit. In general, distributional concerns should push us toward providing more insurance for low-income earners. So, if a 50 percent benefit replacement rate during normal times is reasonable for the typical unemployed worker, it may be inadequate for those at the bottom.

One important aspect of the moral hazard costs is that they are smaller during downturns. Why? Because during downturns jobs are rationed, and there are many more workers searching for jobs than there are vacancies. As a result, if a generous UI benefit leads one worker to forgo taking a particular vacancy, it is very likely to be filled by a different worker; there is a positive search externality from a more generous UI during downturns. The musical chairs aspect of job finding during downturns means that, whatever we think is the right level of generosity in normal times, it can (and should) be higher during downturns (Landais, Michaillat, and Saez 2018a). In addition, the insurance value of UI is likely longer in downturns, since unemployment spells are longer in those periods. It is easier to draw on savings or to borrow to keep up consumption when facing a 5-week-long spell as opposed to a 20-week-long one.

Finally, besides the microeconomic objective of consumption smoothing, UI also has a macroeconomic role in stimulating consumption and serving as an automatic stabilizer (Chodorow-Reich and Coglianesi 2019). In particular, those who are unemployed have a high marginal propensity to consume (MPC), which makes transfers to UI recipients a very effective form of stimulus (Ganong and Noel 2019). Factoring in this aggregate demand externality further supports the idea of increasing UI generosity during downturns.

There is a large body of literature that has used quasi-experimental methods to evaluate the impact of benefit generosity (both PBD and replacement rate) on job-finding rates as well as on consumption smoothing. In appendix A I both lay out the theoretical framework that is used in public finance to analyze optimal UI policies and review in detail the microeconomic and macroeconomic employment impact of UI policies. Prior to the current crisis, the micro evidence (tracking individual unemployed workers and their exit out of UI reciprocity) suggests a moderate degree of responsiveness of UI spells to PBD and replacement rates. Summarizing across studies, a 10 percent increase in PBD typically raised the average UI spell length by 0.1 to 6 percent, with a midpoint around 3 percent. For a typical UI spell length of around 10 weeks, this would translate to two additional days, which is a fairly modest sized impact. The evidence on replacement rate is both thinner and somewhat more mixed. Across studies, a 10 percent increase in benefit level typically

raised the average UI spells by 1 to 9 percent, with a midpoint around 5 percent.

However, these micro elasticities may substantially overstate how responsive macrolevel employment is to UI benefit generosity, especially in downturns, since they do not factor in search and aggregate demand externalities. In recent years we have seen a number of studies provide a macro employment impact of the extension of PBD to 99 weeks during the Great Recession. On the whole, most (though not all) macro estimates from the Great Recession suggested smaller employment losses than micro studies. Overall, this pattern is consistent with the importance of search externality and stimulus effects during downturns.

There is also evidence on the benefits side of UI. First, a range of studies have documented consumption declines following job loss, with food or nondurable consumption dropping between 6 and 9 percent. More-recent work using high-quality bank account transaction data has also found that nondurable consumption drops by 12 percent when UI benefits are exhausted (Ganong and Noel 2019). Importantly, Ganong and Noel find sharp drops in spending for necessities like groceries, goods from drugstores, and medical copayments. Those authors also document that, when the state-level replacement rate is lower, the drop in consumption from unemployment is larger, highlighting the importance of an adequate benefit replacement amount. Moreover, the reduction in spending they find for necessities has implications for the possible distributional heterogeneity in the insurance value: for those families close to survival constraints, the reduction in these necessities is likely to come at a very high cost in welfare. Consistent with this point, the consumption drop is found to be much larger for households with low liquid assets. Since lower-income families tend to have lower assets, this is another rationale for providing relatively more-generous benefit levels to those with lower incomes.

Another important finding is how sensitive spending is to UI benefits. Overall, Ganong and Noel's findings suggest an MPC out of UI spending of around 0.8, meaning that \$0.80 of each dollar of UI benefits is spent. This is quite high, showing substantial barriers in access to credit among those who are unemployed. This also suggests that UI is likely to be well targeted for the purpose of providing stimulus during downturns.

WHAT WE HAVE LEARNED ABOUT UI DURING THE COVID CRISIS

The UI system played a very important role during the Covid crisis in delivering relief to those who were not able to work during the lockdown period, and to both short- and longer-term unemployed workers subsequently. FPUC extended the PBD initially to 39 weeks, though this was subsequently extended further by another 24 weeks in December 2020.

Importantly, the FPUC also expanded the benefit level by an unprecedented \$600/week beyond the usual benefit level, fully funded by the federal government between March and July of 2020. As shown by Ganong, Noel, and Vavra (2020; henceforth GNV), the FPUC increased the benefit level by an unprecedented amount. Averaged across states, the median replacement rate rose from 48 to 145 percent. The goal of this increase in benefits was to allow most workers to receive at least close to their usual earnings during the period when individuals were laid off due to the onset of the pandemic and (initially) due to the lockdowns that mandated business closures in most states. This \$600/week boost expired at the end of July and was not renewed via legislation at that time due to lack of political consensus on the terms of renewal. However, the Trump administration created a temporary Lost Wages Assistance program that provided a \$300/week boost to those who were unemployed via agreements with states typically for the five weeks following the expiration of FPUC, covering most but not all UI recipients. While the exact timing of receipt of the payments varied across states, it covered payments for the period of unemployment during August and early September, so by the middle of September the median replacement rate had fallen back sharply to pre-pandemic levels, averaging around 48 percent across states. Finally, under legislation passed in December 2020, the FPUC benefit boost was renewed, albeit at \$300/week instead of \$600/week.

How did workers and family members respond to job loss, to the FPUC, and to its subsequent expiration? Farrell et al. (2020) find that spending among those losing jobs dropped by 20 percent prior to receiving UI. At the same time, following UI receipt recipient spending *rose* by 10 percent as compared to the pre-job-loss consumption level, in spite of the loss in earnings. The \$600/week boost helped turn what would have been a very sharp and protracted reduction in spending into a gain in spending from the baseline. Relatedly, upon the expiration of the FPUC in July 2020 spending declined by 14 percent in August. (Importantly, the consumption drop was substantial even though recipients had built up savings from the \$600 boost.)

The unprecedented expansion of the benefit level also created concerns about *unintended* consequences. In particular, the fact that many unemployed workers were receiving benefits in excess of their usual earnings was considered problematic by many observers. While such benefit levels were seen as tolerable during a very short-term (one to two months) period where many workers were unable to work during lockdowns and closures in the hospitality sector, many in Congress and statehouses argued that the benefit boost was too generous (Iacurci 2020), and slowed down the reopenings in the summer months. This was an important factor behind the lapse in the FPUC payment at the end of July, which was expected to aid the labor market recovery by incentivizing work.

The evidence so far, however, suggests a very limited impact of the UI policies on employment outcomes. Early in the Covid crisis a number of papers evaluated the impact of the \$600 boost by comparing the trajectory of employment typically between March and June across groups with very different replacement rates (due to differences in earnings). These papers used a number of new high-frequency datasets, including Homebase and the Census Pulse Survey, but found little systematic evidence that the higher replacement rates were associated with lower employment recoveries (e.g., Altonji et al. 2020; Bartik et al. 2020; Dube 2020b).

The best evidence comes from three studies that leverage the sharp expiration of the FPUC at the end of July 2020 and the fact that the replacement rates fell differently for different groups from the expiration of the flat \$600 boost. Finamor and Scott (2021) use personnel data from Homebase, a scheduling service whose clients tend to be small businesses, especially restaurants. They assess whether those who were not employed by their employer (or by another Homebase employer) return to employment following the FPUC expiration, and find no relationship between the change in replacement rates (based on pre-pandemic earnings) and change in reemployment. Ganong et al. (2021) use transaction-level data of individuals with a bank account at JP Morgan Chase. They consider unemployment duration of individuals receiving UI benefits, and find little change in the exit rate out of unemployment following the expiration, and that this change was only slightly larger in states where workers saw larger drops in the replacement rate. Their estimates suggest duration responses that are smaller than indicated in existing literature.

In contrast to these microlevel estimates, Dube (2021) uses the Household Pulse Survey to study the impact of the July expiration of the FPUC \$600 boost on *aggregate* employment probability, using cross-state variations in the change in median replacement rates following the expiration. Dube does not find any evidence of increased employment in states where the benefit replacement rate fell more. Jobs actually rose slightly less in states where the replacement rate fell more, though this difference was not statistically significant.

Overall, the evidence from the pandemic shows a surprisingly small impact of benefit generosity on employment—both at micro and macro levels. Needless to say, the Covid crisis has had unique features—including a very high share of unemployed workers who were on temporary layoffs and then were recalled, especially in the earlier part of the crisis. At the same time, the fact that the employment effects were elusive in spite of the unprecedented level of benefit replacement suggests policymakers worried about negative incentives have more latitude to provide more-generous benefits, especially during downturns when the moral hazard cost is less due to other compensating factors.

What are some takeaways from the consumption response to UI during the Covid crisis, and what implications do those takeaways have for policy design? From a purely insurance perspective, the \$600/week supplement not only smoothed consumption but actually boosted it, with a small to no efficiency loss in terms of employment. Even though some of the circumstances during this downturn are unusual, the evidence from experience nonetheless suggests we can likely raise benefit levels, especially for those at the bottom, to allow much lower consumption drops than have occurred in the past. Moreover, the strong consumption response supports the macro-stabilization goal of boosting UI benefits during downturns.

Challenges with the Current System

STATE ADMINISTRATION IS INEFFECTIVE

The state administration of this program has created a patchwork of rules that have little benefits but many costs. At a basic level, a state-based system prevents insurance across states. For example, if a particular state is hit harder by a downturn, it will be in a deeper hole when it comes to rebuilding its trust fund and will therefore need to raise payroll taxes by a greater amount. Moreover, a state-based system does not allow easy adaptation to new circumstances, such as changing benefit levels—as demonstrated during the current crisis. And perhaps most importantly, state administration makes it more difficult to ensure that systems in all 50 states (and the District of Columbia) are aligned with program objectives, including adequate eligibility benefit standards, efficient processing of applications and timely benefit payments, and use of linked earnings and income data for benefit calculation and verification. As demonstrated during the current crisis, there was substantial variation in the timing by state; this variation was costly in terms of consumption loss (Farrell et al. 2020).

Along with benefit levels, the employer taxes vary tremendously across states. There is wide variation in the definition of the taxable wage base across states, and states have often been reluctant to raise taxes to sufficiently fund adequate benefits (O’Leary and Wandner 2018). As a result, taxes ranged between \$50 per beneficiary in Florida to \$631 in Oregon in 2020 (DOL 2021). The tax variation puts employers in very different positions in different states. A DOL report in 2020 found that around half of the states’ UI trust funds were underfunded (DOL 2020). At the same time, when tax rates are raised they happen right after downturns—but this can potentially hamper the recovery in the labor market. As Johnston (forthcoming) shows, these tax increases after the Great Recession reduced hiring and employment and prolonged the recovery. By insufficiently smoothing the taxation over the business cycle, states have also hampered effective recoveries. Finally, because employers pay the entire payroll tax, they have put pressure on state governments to not raise the tax rates, contributing to the underfunding.

In the case of UI, allowing state administration and a hybrid federal-state partnership for financing has not produced any clear gains. In contrast, the patchwork of rules and pressure to cut benefits for budgetary reasons has produced a system that is inadequate and arbitrary.

TOO FEW UNEMPLOYED WORKERS ARE ELIGIBLE FOR BENEFITS

One of the key failures of the current UI system is how few workers who are unemployed received assistance through the program prior to the Covid-19 recession. In 2019 only 28 percent of all unemployed workers in the country received UI benefits. Moreover, this percentage varied tremendously across states: in 2019 a mere 9 percent of unemployed workers in North Carolina received UI, while the share in New Jersey was 59 percent (DOL 2019).

What are the key factors that drive the eligibility problem? There are several important contributors. The most important one is that the thresholds of minimum earnings exclude many workers who lose jobs. The thresholds vary across states, which in part explains the reciprocity variation. When the thresholds are too high (as they often are), many low-wage, part-time, seasonal, and volatile-schedule workers are excluded even when they lose their jobs. Relatedly, in some states, much greater weight is put on older earnings, even if more recent earnings are higher. A solution to this problem is through additionally allowing an alternative base period where qualification is based on earnings from the immediately preceding four quarters, as is done in the majority of states today. By taking the greater of earnings from the alternative base period or standard base period, allowing alternative base period helps increase eligibility.

Currently, UI is available primarily to those workers who were involuntarily separated. While this is sensible in most cases, there are some workers who voluntarily separate for whom UI eligibility makes sense. The first set of such good cause voluntary separations include those who may see substantial changes in their work conditions due to reasons that are beyond the worker’s control (such as a large drop in hours, or erratic scheduling). In addition, a second set of voluntary separations involve extenuating family circumstances, include own or family member health reasons, or when child-care arrangements cannot be secured, or when a spouse or partner relocates. Many states have some form of these good cause exceptions, but many states do not, leading to reduced reciprocity (see West et al. 2016). The importance of these factors (such as caring for family members, or inadequate child care) have been made even more prominent during the pandemic.

Finally, there are a set of unemployed individuals (like gig workers, self-employed individuals, or those entering the labor force for the first time) who would fall through the cracks of regular UI. The inadequacy of the current eligibility standards is also highlighted by how many unemployed workers have relied on the PUA program that allowed many otherwise ineligible workers to receive assistance. For example, for the week ending December 12, 2020, 8.5 million of the total 19.6 million individuals receiving some benefits did so through the PUA. While reforming the eligibility rules can certainly help with this, nonetheless there may be a role for a more permanent assistance program to help reach these individuals. There are some challenges in providing assistance to workers who have direct control over their hours, like the self-employed. It opens up the possibility of moral hazard, where any self-employed person who wants to stop working for a period can receive unemployment assistance during that time.

LACK OF EFFECTIVE, AUTOMATIC TRIGGERS

As I discussed in the *Background* section, there are compelling reasons to expand UI PBDs during downturns. The economic costs stemming from reduced job finding are low when the labor market is slack, due to both search and aggregate demand externalities. While the federal government's EB program is, in principle, equipped to do this, in practice some key program details prevent it from being effective. Unfortunately, the look-back provisions of requiring current TUR to exceed 110 percent of the minimum TUR over the past two years greatly diminishes the value of the EB program. As Chodorow-Reich and Coglianese (2019) show, most workers losing jobs during the early part of downturns have lower benefit durations, so the EB does not apply to them. The EB is really more relevant later in a downturn and during early recovery periods. However, precisely in this case, the look-back provisions lead the EB to trigger off prematurely. Moreover, even with the two tiers the EB program would allow PBD to rise to at most 46 weeks, which is insufficient for deeper downturns.

As a result of the inadequacy of the EB program, historically the federal government has introduced emergency programs to extend benefit durations. This included the Emergency Unemployment Compensation program in the Great Recession that extended PBD to as much as 99 weeks. During the Covid crisis, the Pandemic Emergency Unemployment Compensation extended the PBD initially by 13 weeks and subsequently by additional numbers of weeks. Moreover, while the federal government typically pays half of EB costs, the emergency extensions have been fully federally funded. The problem with this discretionary approach—as exemplified during the current crisis—is that each extension is often contentious, and decisions revolve around vagaries of politics at least as much as economic conditions. Moreover,

unlike the state-level determination in the EB program, the emergency provisions are blunter, since they are uniform nationally, which prevents them from adequately addressing differential severity of downturns across states.

The haphazard way in which the FPUC expired and passed temporarily, and then was revived partially in December (and may be extended further under the Biden administration) highlights the problems with discretionary policy that is not tied to economic indicators. A successful reform proposal would produce a policy that would allow these extensions in PBD to occur in a more automatic fashion based on economic realities.

INADEQUATE BENEFIT LEVELS

Currently, a combination of factors makes the regular UI benefit levels inadequate for most unemployed workers. First, in most states the current benefit replacement rate averaged over all recipients is below 50 percent. Beyond that, states have widely varying maximum benefit levels, which lead to extremely low replacement rates in some states. For example, averaged over all recipients, the replacement rate in Louisiana in 2019 was only 36 percent, while it was 51 percent in the state of Washington. Moreover, the choice of quarters in the base period can affect the determination of benefits and can adversely affect workers who have a more limited work history.

At a broad level, I would argue that the 50 percent replacement rule is inadequate for many workers. Many optimal UI calculations from an insurance approach suggest that a 50 percent wage replacement may be reasonable as a general rule (Chetty 2008; O'Leary and Wandner 2018). To be sure, under different assumptions, such as workers placing a greater value on insurance, the optimal replacement rate is estimated to be higher. Still, a 50 percent replacement rate may work adequately for a representative worker in the middle of the wage distribution experiencing short or medium unemployment spells.

But if we approach social insurance from a more holistic perspective, we need to better address distributional concerns. Those concerns suggest greater replacement rates for workers at the lower end of the wage distribution. In particular, low-wage workers who are much closer to subsistence level have much greater difficulty over the unemployment spell; under a wide range of normative assumptions, a 10 percent reduction in consumption has very different welfare implications for low-wage workers who are close to their survival constraint than it does for those at the middle or the top. To give an example, a single mother of two children, working full time at \$10/hour, would be at roughly 90 percent of the federal poverty level. If she loses her job and qualifies for UI, her annualized income would place her at below 50 percent of the federal poverty level, or in deep poverty. A moderately

long unemployment spell can have devastating consequences for lower-income families.

As discussed in the *Background* section, the evidence suggests much larger drops in consumption among those with lower liquid assets; this is much more common among lower-wage workers. That evidence provides a prima facie argument for providing a greater replacement rate at the bottom of the distribution. Moreover, low-wage workers are likely closer to survival constraints, which may mean they reduce the consumption drops using very costly mitigation strategies—like reducing investments in health and education in order to pay for more-immediate necessities.

In addition, there are also strong, evidence-based, rationales for raising the optimal benefit levels in recessions. Despite that evidence, prior to the Covid crisis we had not boosted benefits sufficiently during downturns. As discussed in the *Background* section, there are three distinct rationales for raising benefits in recessions. First, transfers to UI recipients are well targeted to be spent and increase demand. The unemployed have much higher MPCs, making transfers to this group a very effective form of stimulus. Moreover, a boost to benefit *levels* provides a substantial boost to aggregate demand early in downturns by providing greater transfers to all unemployed individuals (not just to longer-term unemployed individuals, as is the case through PBD extensions) as soon as, say, the national TUR exceeds a threshold. This makes the automatic stabilizer aspect of UI much more meaningful than is typically implemented, since the boost in benefits would kick in much faster than the boost from the longer duration of benefits during a downturn (Chodorow-Reich and Coglianesse 2019).

In addition, as I described above, the cost of providing more-generous benefits is lower during downturns because of search externalities. The moral hazard cost of workers not looking hard for a job is lower during downturns when jobs are rationed, since one worker finding a job is more likely to prevent someone else from finding a job during downturns. Finally, workers are likely to stay unemployed longer during downturns, which makes it harder to cover expenses by drawing down savings or borrowing more, which increases the insurance value of more-generous benefit levels during downturns.

The inadequacy of the regular benefit levels was laid bare during the Covid crisis, which led the federal government to provide a \$600/week boost in March 2020, and a smaller \$300/week boost in December of 2020. As discussed in the *Background* section, the consumption and employment responses suggest that this was a highly successful policy in boosting spending with minimal job loss. This was true even though the average median replacement rate under the \$600 boost was much greater than 100 percent (and stood at 148 percent averaged across states.) At the same time, it is worth recognizing that the flat boosts were in part a reflection of the inability of the federal government to implement

higher earnings replacement rates due to antiquated software and administrative hurdles. Ideally, a reformed UI program would provide higher replacement rates, especially at the bottom, and provide a recessionary boost, while preventing replacement rates from greatly exceeding 100 percent of usual wages in order to avoid elevated moral hazard problems.

INADEQUATE UTILIZATION OF WORK SHARING

Economic downturns lead to inefficient dissolution of productive matches between workers and employers. Ideally, we want to encourage workers to remain linked to their workplaces during temporary downturns, returning to work when demand picks up. While temporary layoffs (during which workers collect UI benefits) can partly accomplish this objective, it is an imperfect solution. For example, many temporary layoffs may become permanent, and that uncertainty may lead workers to move on and possibly end in a job that is a worse match.

One way to avoid this eventuality is through STC. Under STC, instead of laying off workers, employers reduce their hours by as much as 40 percent to 60 percent, depending on the state. Then the UI system helps provide benefits to partly compensate for the lost hours through a pro-rated share of the workers' weekly benefit amount. In this way, workers and employers can stay attached, and the reduced earnings are shared across workers more broadly. Moreover, by reducing the number of active jobseekers, STC can mitigate the reduction in labor market tightness during downturns, thereby helping unemployed workers as well. Especially when coupled with an adequate benefit replacement, the human costs of recessions can be greatly mitigated through STC. A particularly successful example is Germany, where use of STC has greatly mitigated the rise in unemployment during downturns.

Currently, 27 US states have STC programs. However, the participation rate in STC has been very low. For example, in the week ending January 30, 2021, about 0.5 percent of the 18.3 million continuing UI claims were through STC. The share was virtually the same prior to the pandemic. Those businesses that use STC are overwhelmingly satisfied with the program (Balducci et al. 2015). However, as von Wachter (2020) notes, the main hurdle to increased STC participation appears to be lack of employer awareness and administrative bottlenecks. Lack of awareness is a major problem, but there are simple solutions. For example, Houseman et al. (2017) conducted demonstration projects in two states and found that disseminating information about STC significantly raised use of that option.

Besides lack of awareness, administrative hurdles are also a barrier. Employers typically must fill out and mail a form with a list of affected workers and their information to the

state agency, which then processes the forms and decides on approval. In most cases during the pandemic, approvals were slow, and the state agencies have not been provided adequate funding and administrative capacity to streamline the process. These barriers prevent greater use of STC.

Finally, as Abraham and Houseman (2014) point out, there are several other disincentives for use of STC. First, employers may not cut worker hours more than 40 to 60 percent (depending on the state), which may be too restrictive in some cases. Second, employers are required to pay for full health insurance benefits for workers using STC. This makes it more costly for employers to use STC instead of laying off workers.

Proposals for Reform

In light of past evidence on the costs and benefits of the UI system, and to address some of the key existing shortcomings in the current UI system, I propose five key changes, which I discuss in detail here.

PROPOSAL 1: MAKE UI A FEDERALLY FINANCED AND ADMINISTERED PROGRAM

Under my proposal, UI will be made a fully federally administered program, like Social Security. Part of the costs of the program—reflecting regular benefits paid during normal times—would be paid using a federal payroll tax, while the balance would be paid using general federal revenue. I recommend that the payroll tax be levied on both employers and employees, similar to Social Security. Since the current system is based only on employer taxes, there will be some added costs on workers. However, note that even when employers nominally pay a payroll tax, it is partly paid for by workers through lower wages. In other words, if all of the added taxes needed to pay for the proposed benefits were nominally on employers, some of those taxes would be passed through to workers as lower wages. At the same time, the pass-through of employer taxes to wages is likely to be incomplete, which is why employers often lobby against increases in the tax rates. Importantly, as O’Leary and Wandner (2018) argue, moving away from an employer-only system could reduce some employer opposition to changes in benefit generosity.

Under my proposal, the payroll taxes would be set to pay for expenses during normal times, not downturns, and should be within a range that does not vary by the business cycle. (The range allows for some degree of experience rating, whereby taxes depend on the extent of use of benefits among workers laid off by a particular firm.) To be specific, the payroll tax rate schedules should be set to allow revenues to equal to outlays for benefits under Tiers 1 and 2 of benefit durations, as described in Proposal 2 below; in brief this means funding up to 33 weeks of UI spells. All of the cyclical financing should come from general funds. The lack of cyclical changes in tax rate schedule can help in the economic recoveries. In addition, the use of general funds from the federal budget to pay for cyclical UI helps provide greater stimulus during economic recoveries. Moreover, this automatically increases revenue collection during extended booms (without any pressure to cut the rates), thereby stabilizing activity.

Finally, the federal government should use all available earnings sources from UI employment and earnings data (ES-202 filings by employers) to automatically calculate the benefit levels. (The formula the federal government would use to automatically calculate those levels is described in Proposal 4.) Employers should also be required to report workers’ hours and not only earnings as they do currently in four states. When they file for UI, applicants should automatically be shown the default benefit level based on their earnings records on file.

PROPOSAL 2: EXPAND ELIGIBILITY

In order to increase reciprocity, I make the following recommendations.

Reduce the earnings eligibility threshold, setting the minimum earnings requirement at \$1,000 in one quarter and \$500 in a second quarter during the base period, allowing for both standard and alternative base periods. These thresholds are substantially lower than those used in most states. Having a more-realistic and more-consistent earnings eligibility threshold can go a long way toward raising eligibility. Both reducing the earnings thresholds and allowing for the alternative base period increase the odds that an unemployed worker qualifies for UI. These thresholds should be indexed to the median average weekly wage (AWW), similar to suggestions made by O’Leary and Wandner (2018).

Allow good cause voluntarily separating workers to be eligible for UI. This allowance would include workers who may see change in work circumstances (such as wage or hour cuts) that are beyond the worker’s control; and workers who have to quit due to extenuating family circumstances, such as own or family-member health reasons, or when child-care arrangements cannot be secured, or when a spouse or partner relocates. This recommendation is similar to suggestions in West et al. (2016) and Bennet (2020). Moreover, most of these conditions are covered by provisions that are already in place in at least some states, but under my proposal these provisions would be applied uniformly across the country.

In order to raise awareness and reduce the cost of application, the federal government should automatically send a letter to employees about potential eligibility when they separate from an employer.

Finally, the federal government should implement a Jobseeker's Allowance (JA) program for those who are unemployed and searching for work, but who do not qualify for regular UI, closely following the proposal in West et al., 2016. This group would include those who are self-employed, those with inadequate earnings history, new entrants, and reentrants to the labor market.

A key requirement would be that these individuals are actively seeking employment; to mitigate abuse the work search requirements should be more stringent for this group of workers than for regular UI recipients. Another way to mitigate concerns of abuse of the program is through making the assistance substantially less generous than regular UI, and by imposing a time limit of receipt (see West et al. 2016 for a detailed presentation of a JA plan). Under my proposal, the JA benefit level would be set at 20 percent of the AWW. The JA PBD in ordinary times would be 13 weeks (or half of usual length of regular UI benefits). The JA PBD would also respond to the same state and national triggers that would determine the regular UI PBD, as discussed in Proposal 3 below. In particular, the JA PBD should be set at UI PBD less 13 weeks. However, there would be additional limits on collecting the JA, with a 52-week total limit in any rolling five-year period. The JA program would be funded entirely out of regular federal funds.

Overall, how will these reforms affect reciprocity rates? While it is difficult to answer this precisely, I estimate that combination of reforms could lead to a reciprocity rate among the unemployed of around 55 percent, which was double the reciprocity rate in 2019 nationally. For reference, in 2019 the three states with the highest reciprocity were New Jersey (59 percent), Massachusetts (50 percent), and Connecticut (47 percent), averaging at 52 percent. I am assuming that the combination of reform will push the national reciprocity rate to the current frontier across states. While it is difficult to project take-up of a new program, I estimate that JA would cover an additional 10 percent of the unemployed, based on the use of PUA during the pandemic.

PROPOSAL 3: TIE PBD TO STATE AND NATIONAL TRIGGERS

The key recommendation is to reform the current EB program to accomplish three objectives: (1) remove the look-back period, (2) add more tiers to allow for adequate increases in the PBD during downturns, and (3) include both national and state triggers to allow for a robust response at the national level while allowing for heterogeneity across local areas. Since the IUR triggers have largely been irrelevant for EB triggers, following Chodorow-Reich and Coglianese (2019) I recommend focusing on TUR triggers.

In particular, I recommend seven tiers of PBD for the proposed federal UI program, where the PBD will depend on the maximum of state or national TUR:

- Tier 1: Under 5 percent (26 weeks)
- Tier 2: 5 percent (33 weeks)
- Tier 3: 6 percent (46 weeks)
- Tier 4: 7 percent (59 weeks)
- Tier 5: 8 percent (72 weeks)
- Tier 6: 9 percent (85 weeks)
- Tier 7: 10 percent (98 weeks)

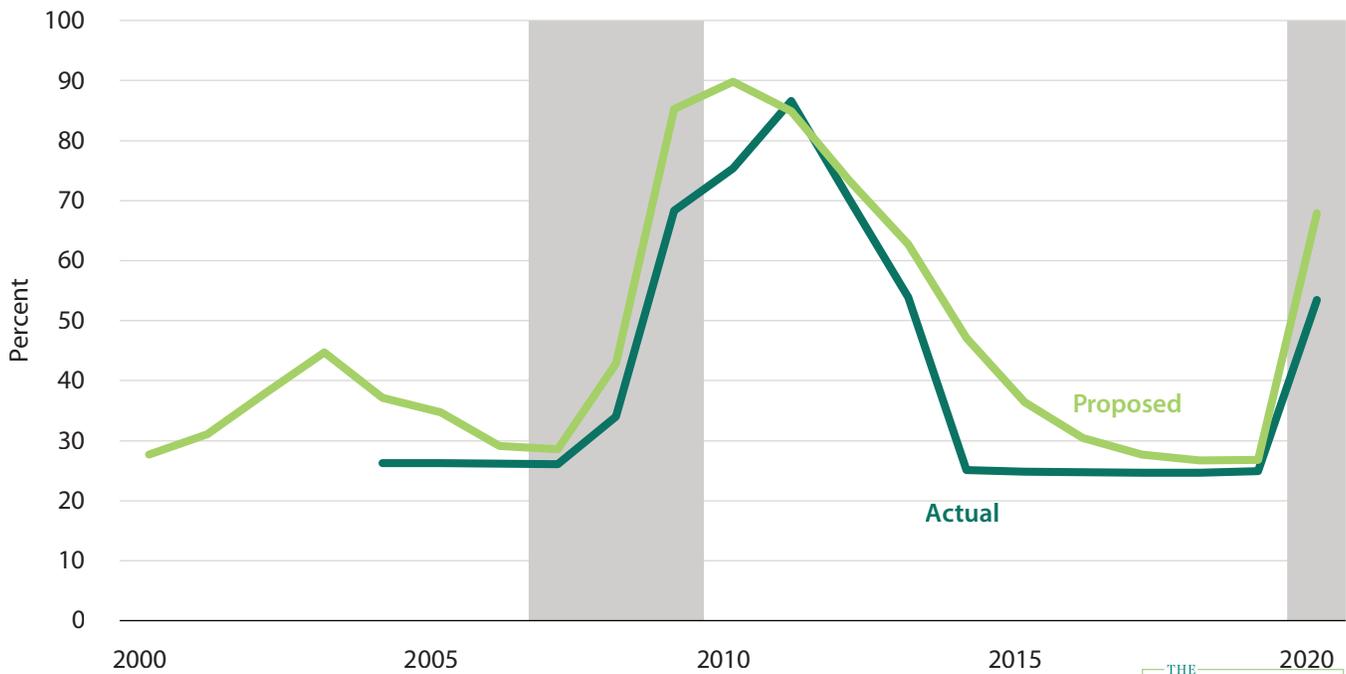
To be concrete, if someone is in a state with a 10 percent unemployment rate while the national unemployment rate is 7 percent or higher, they would be in Tier 7 (with a PBD of 98 weeks). Similarly, if someone is in a state with 7 percent unemployment rate while the national rate is 10 percent, they would also be in Tier 7. What is the rationale for a national-level trigger beyond just a state-level one? If there is a clear signal that we are entering a national recession, it is useful to provide broad-based support and not wait until a particular state has officially crossed a threshold. State and national unemployment are both imperfect proxies for local labor market conditions, but state-level estimates are noisier signals, especially for smaller states. For this reason, if we see national level unemployment rate climb above 5 or 7 percent, it provides important information about the likely trajectories of the local labor market.

If the proposed triggers were in place, what would the PBD have looked like in the United States over the past two decades? To answer this, I simulate state-specific PBD based on state and national triggers. Figure 1 plots the average PBD across the United States over time, along with the national unemployment rate.

As figure 1 shows, during the extended Great Recession period (2008–12), the proposed policy would have raised the (average) PBD to levels that are broadly similar to what was discretionarily achieved via Emergency Unemployment Compensation over that period. For example, in 2011 the average PBD across states was 87 weeks, while under my proposal it would have been 85 weeks. Seventeen states would have had greater PBDs and 34 states would have had lower PBDs under my plan. At the same time, under my proposal the PBD would have increased more quickly during the Great Recession, making it a better automatic stabilizer. Under the proposed rules, the average PBD would have increased from around 30 weeks to 85 weeks between 2007 and 2009. In contrast, the PBD in reality increased from 26 to 68 weeks between those periods, and it took until 2011 for the PBD to catch up to my proposed rule. Another benefit is that by using triggers the phasing out of extended PBD would be smoother. For example, the Emergency Unemployment Compensation expired in 2014 rather abruptly, leading PBD to fall from as much as 99 weeks to 26 weeks in some states. In contrast, under my proposal PBD would

FIGURE 1.

Simulated Average PBD under the Proposal, 2000–20



Source: Boone et al. (forthcoming); Center on Budget and Policy Priorities (2021).

Note: Recessionary periods are shaded in light grey.



have fallen more gradually based on both national- and state-level unemployment rates, falling to around 40 weeks by 2015 and to 26 weeks by 2017 when the labor market was considerably tighter.

Finally, in 2019—a year with a tight labor market—the average PBD was around 25 weeks while under my plan it would have been 27.

In general, my proposed triggers would match the severity of the crises. For example, in the aftermath of the shallower 2001 recession, average PBD would have risen to a little under 50 weeks for a brief period, and stayed mostly under 40 weeks during the recovery period. In contrast, during the onset of the current crisis, PBD would have shot up to 98 weeks, but fallen as the labor market improved. However, it would have been close to 60 weeks in February 2021, which is broadly similar to where we were in actuality (average of 58 weeks).

Overall, while the proposed changes would alter the distribution of PBDs across place and time (to better match economic necessity), it would only modestly increase the overall number of weeks. The average PBD in the 2015–19 period would have been 30 weeks under my proposal, while in reality it was 25 weeks. During the 2010–14 period, the average PBD would have been 71 weeks under my proposal, as compared to 62 weeks in reality.

PROPOSAL 4: RESTRUCTURE AND INCREASE THE BENEFIT REPLACEMENT RATE

I propose the following benefit replacement determination.

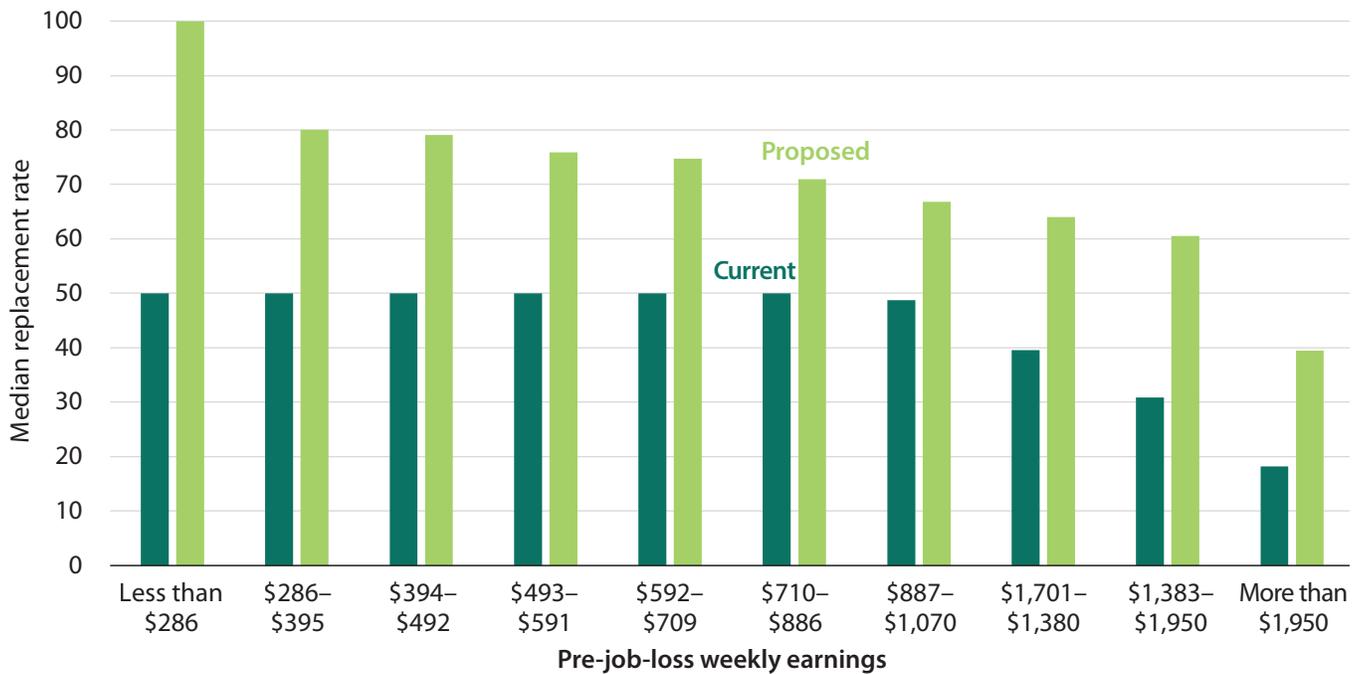
Regular UI benefits would be based on the AWW as follows (assuming that maximum and minimum benefits do not bind):

- First \$400 of AWW: 80 percent marginal replacement rate
- Next \$300 of AWW: 65 percent marginal replacement rate
- For additional AWW above \$700: 50 percent marginal replacement rate

I propose setting the maximum benefit level at 80 percent of AWW, and a minimum benefit level at 20 percent of AWW in the United States. For example, in 2020 this would have meant a maximum benefit of \$910 and a minimum benefit of \$230. This is close to what states with more-generous benefits currently do; for example, in Washington State the minimum benefit level is \$201 while the maximum benefit is \$844. In addition, replacement rates would be capped at 100 percent of earnings for all workers. The benefits would be calculated based on the high-quarter method, as is done in 29 states currently, which protects workers with

FIGURE 2.

Current and Proposed Replacement Rates: Baseline



Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author’s calculations.

Note: The benefits here are based on the assumption that the TUR is below 6 percent, and that there is no recessionary boost.



nonstandard and limited work histories. Specifically, this proposed change would take the highest quarter in the relevant base period for the purpose of benefit calculations.

To show how the current and proposed replacement rates look for different workers, figure 2 shows the average replacement rates by earnings deciles of those who are unemployed. These data are based on pre-pandemic 2019 unemployed workforce in the Current Population Survey (CPS), based on the methodology developed in GNV. More details are provided in appendix A.

As we can see, the average replacement rate for those in lower deciles is around 70–75 percent, declining to 40 percent at the top decile. In contrast, the current replacement rates (averaged across states) are around 50 percent for the bottom two-thirds of the workforce, declining to around 20 percent at the top. Moreover, the averages in the current replacement rates mask considerable heterogeneity by state. In contrast, under my proposal replacement rates would not vary by state for workers with the same earnings levels. Based on the simulations, the average weekly benefit levels in 2019 would have risen from \$338 to \$547 under my proposal, leading to an average replacement rate of 72 percent (as compared to the estimated current replacement rate of 44 percent).

In addition, I propose a boost to benefit levels during downturns to aid the automatic stabilizer role of UI policy, and because it is less costly (in terms of efficiency losses) to

provide more-generous benefits during downturns. In particular, the recessionary boost would entail

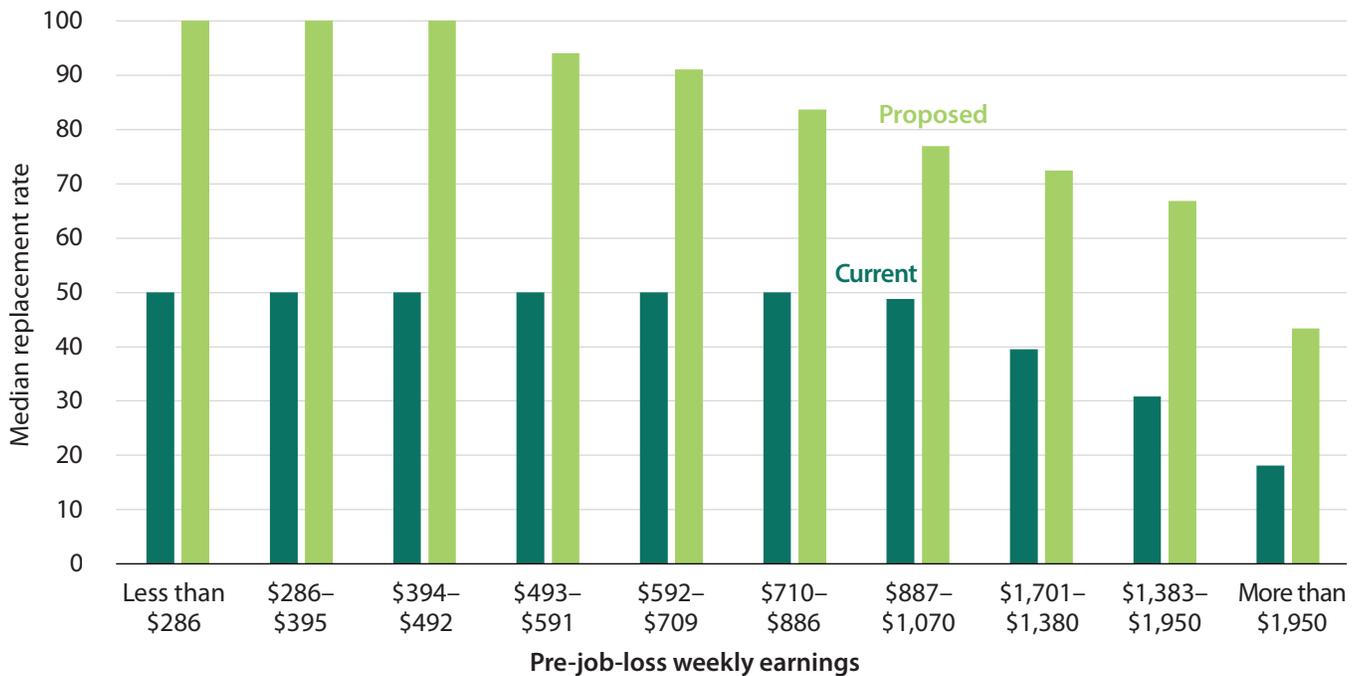
- An additional \$100/week boost above 6 percent national TUR; and
- An additional \$200/week boost above 8 percent national TUR.

Figure 3 shows the same distribution, but now with a recessionary boost of \$100/week. Here we see higher replacement rates throughout the distribution. A substantial portion of the beneficiaries in the bottom half of the distribution would be at the 100 percent replacement cap during downturns. The beneficial stimulus effects and the reduced cost of moral hazard (due to search externalities) allows a more-generous benefit level during downturns.

To estimate the resulting increase in outlays on UI benefits, I simulate the stimulus spending that would have occurred had the recessionary boosts been in place since 2000. To clarify, these are just the added spending from the recessionary boost assuming the reciprocity rates in this proposal; I will provide estimates for the overall added spending—including the change in regular benefit levels and reciprocity rates—in the subsection on proposal costs below. In addition, note that the estimates for 2020 do not account for payments from FPUC. Figure 4 plots the simulated annual federal spending from the recessionary boost over this period.

FIGURE 1.

Current and Proposed Replacement Rates: With \$100 Recessionary Boost



Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author’s calculations.

Note: The benefits here are based on the assumption that the TUR is between 6 and 8 percent, and that there is a recessionary boost of \$100/week.



Here are the key findings: During the extended Great Recession period (2008–14), the proposed recessionary boost would have provided an additional \$320 billion or so in added stimulus—or roughly \$45 billion per year. The proposed recessionary boost is proportionate to the size of the downturn: for example, it would have added a smaller boost of around \$35 billion during the 2001 recession. Finally, during the current crisis, the automatic recessionary boost would have provided around \$40 billion in added spending in 2020. In comparison, policymakers spent around \$250 billion toward the boost in benefits in 2020. However, this comparison does not factor in the added spending that occurs under my plan from more generous baseline benefits. Factoring those in, as I do in the proposal costs subsection below, suggests a total of around \$150 billion in added expenditures in 2020 from the proposed increase in benefit levels as compared to normal replacement rates (i.e., excluding FPUC or LWA).

It is also useful to keep in mind how UI income interacts with other safety-net programs to affect income after taxes and transfers. In particular, the Supplemental Nutrition Assistance Program (SNAP) is an important program that has important countercyclical properties. There is a strong distributional argument to exclude the UI recessionary boosts for the purpose of SNAP eligibility determinations in order to help those at the very bottom, to avoid SNAP eligibility reduction to crowd out the recessionary boost. Such an exclusion was adopted as part of the December 2020 relief bill,

but only temporarily. Under my proposal the UI recessionary boost income would be excluded for SNAP eligibility determination at all times.

PROPOSAL 5: STRENGTHEN STC

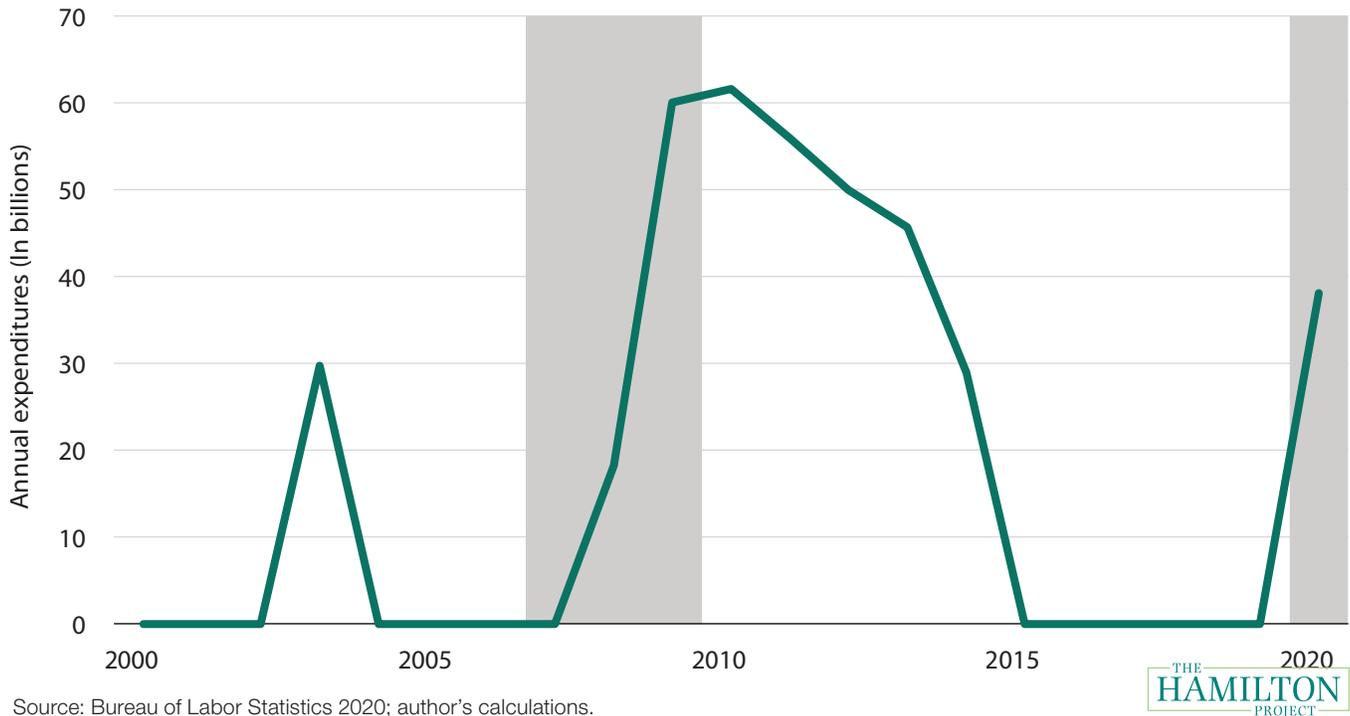
Incorporate STC into UI at the federal level, and substantially increase administrative capacity and funding to process applications in a timely fashion.

Streamline the employer application process by allowing online applications, using data from the regular employment and wage (ES-202) employer filings as a default, allowing employers to choose from the list of existing workers who they wish to enroll in STC. Information about hours should already be collected as part of the regular employer filings, making this process easier. Moreover, similar to what was suggested by von Wachter (2020), the federal government should allow employers to pay workers on STC directly, and should compensate employers for the cost through the STC program.

Increase awareness about the program through a major information campaign using strategies that have been found to work (as in Houseman et al. 2017), and test the efficacy of other messaging campaigns. This echoes the proposal made by Abraham and Houseman (2014).

FIGURE 2.

Simulated Additional Annual Federal Spending from the Proposed UI Recessionary Boost, 2000–20



Source: Bureau of Labor Statistics 2020; author's calculations.

Note: Recessionary periods are shaded in grey.



Allow employers to reduce hours by as much as 80 percent of enrolled workers, which will allow greater employer participation. This was proposed by then-candidate Biden in his 2020 position statement (Biden Harris 2020).

Provide financial incentives to employers to use STC by providing a refundable tax credit to reimburse employers for the added costs of providing full health benefits for workers during the period of reduced work hours. This also was proposed in the Biden position statement (Biden Harris 2020).

Proposal Costs

I provide two different cost estimates: one during expansionary periods, and another during downturns. I provide the incremental cost for each of the five proposals in the same order as the proposals discussed above. These are incremental costs and build on each other; added up, they provide the overall change in costs as compared to the status quo.

COSTS DURING EXPANSIONARY PERIODS

Averaged over the 2015–19 period, the actual average UI outlays were around \$30 billion/year. The federal administration of UI in Proposal 1 would not have any direct impact on program outlays. Under Proposal 2, I assume that reciprocity rates among the unemployed would rise to around 55 percent, while 10 percent of the unemployed would be enrolled in the JA. While there is a lot of uncertainty around these estimates, when I average over the 2015–19 period I estimate that the proposed increase in reciprocity rates would have led roughly to a \$42 billion increase in annual outlays, combining both regular UI and the JA.

The tying of PBD to triggers in Proposal 3 has a modest positive impact on overall PBD. In the 2015–19 period the average PBD would have increased from 25 to 30 weeks under my proposal. Assuming that actual benefit durations increase by around 2 percent for a 10 percent increase in PBD (midpoint in the literature), I find that this would have led to a \$3 billion increase in costs over the 2015–19 period.

To assess the impact of the benefit increases in Proposal 4, I simulate actual and proposed benefits in a non-recessionary year (2019), which were shown in figure 3 above. Averaged over the 2015–19 period, I estimate that outlays would have been around \$42 billion higher due to the higher benefit levels in my proposal.¹ To be clear, this is the incremental benefit of adding the changes to the replacement rate, factoring in the increases in reciprocity rates from Proposals 2 and 3. Put differently, without assuming the increase in the reciprocity rate to 55 percent (and another 10 percent through the JA), the incremental cost of higher replacement rates would have been about half as big.

The primary impact of Proposal 5 is changing the way in which workers experience reduced employment, and how they are compensated through the UI system. The added outlays would mainly be from the refundable tax credits to compensate for health benefits. It is difficult to estimate

specific costs given uncertainties about how much STC will actually be taken up by employers. I estimate that as much as 10 percent of the UI recipients may shift to STC as a result of the policy. Assuming that half the covered workers are receiving employment-based health benefits,² and an average cost of insurance (blending between single and family plans) of \$10,000, this would imply around \$2 billion additional annual outlays.

Overall, under my proposal, during expansionary periods, UI outlays would increase by around \$89 billion, reaching \$119 billion a year instead of the current \$30 billion annual outlay. The major cost increases are roughly half due to increased eligibility, and half due to increased benefit levels. However, note that this decomposition depends on the order in which we account for the proposals. Had I first considered the benefit levels and then the eligibility expansion, the vast majority of increased outlays would have been due to eligibility expansion.

Under my proposal, employee-based payroll taxes would pay for regular benefits that are part of Tiers 1 and 2; payroll taxes would not pay for any cost increases from the JA, or from the health-care subsidy costs of STC, all of which would be paid for by general revenue. As a result, the annual outlays that need to be paid for using payroll taxes would be less than the \$119 billion, and are likely closer to \$100 billion. During the 2015–19 period, average employer payroll taxes were around 0.6 percent of total wages. I estimate that the payroll taxes needed to cover the outlays under my proposal would amount around 2 percent of total wages.

COSTS DURING SEVERE DOWNTURNS

To estimate the outlays during a severe downturn or slack labor market, I follow a similar strategy as above, but now average over the 2008–12 period. The actual average UI outlays over this period were around \$102 billion/year, including the ad hoc changes to the programs that policymakers made during those years. The expansion of eligibility from Proposal 2 would add \$30 billion annually to the outlays during that downturn. The change in PBD from my Proposal 3, factoring in both mechanical and behavioral responses, would be around \$3 billion. To calculate the average benefit levels under my proposal during that period, I use the 2011 CPS. Incorporating the recessionary benefit boosts as well as regular UI benefit changes, I find that reforming the

benefit structure in Proposal 4 would cost \$132 billion more during that downturn than the cost of benefits in place in those years. The increased outlays from Proposal 4 are substantially greater during downturns, since the recessionary boosts will provide stimulus to the economy. Finally, I estimate STC health subsidies would cost around \$4 billion annually during downturns, using the same assumption on increased take-up as before. Overall, the average outlays would increase by \$170 billion/year relative to the outlays in those years, leading to total average outlays of \$272 billion under my current proposal during the 2008–12 severe downturn period. Of that \$272 billion, approximately \$152 billion of those benefits would be financed out of the overall federal budget and \$120 billion would be financed by the payroll tax revenue. Since all of the additional costs beyond regular UI benefits in Tiers 1 and 2 in my proposal are to be financed by general federal revenue, the combination of increased eligibility and benefit generosity would provide substantial amount of stimulus during downturns.

Questions and Concerns

Are any parts of the proposal feasible without federalizing UI?

Moving to a fully federally funded and administered system is a key plank of my proposal: there are few benefits and many costs of our current hybrid system. At the same time, transitioning to a fully federal system has costs and requires overhauling the administrative structure of UI. There are many institutional arrangements that can help facilitate the transition process. For example, state agencies and personnel can continue to play a role in administering benefits while UI becomes a federal program.

It is important to emphasize that much of my other proposals can be implemented under the current system as long as the federal government is able to provide financial incentives and support for the states to adopt these reforms. This includes adopting a uniform eligibility and benefit determination, STC, as well as the PBD tiers system as described above. This would require major funding to overhaul antiquated software, hire additional personnel, and adopt national standards. The federal government in return would fully fund the reformed EB system for (say) Tiers 3 and above, as well for the recessionary boosts and for costs associated with STC. Overall, the funding balance would strongly move toward the federal government, giving a substantial incentive for states to adopt the necessary standards. In this sense, the fully federal administration of the UI program—while greatly desirable—is also severable from the other key parts of this proposal.

What is the role of evidence and evaluations?

To evaluate the impact of more-ambitious policies, we have to first experiment with more-ambitious policies. We did that during the Covid crisis, which allowed us to expand our thinking about UI generosity. However, we will need to further evaluate any enacted changes, and use evidence to guide any course correction.

As part of any legislation, we should incorporate rigorous program evaluations over the course of one to two years following implementation. Researchers can use quasi-experimental approaches to study the impact of higher benefits on both micro and macro employment effects, as well as other outcomes during unemployment spells, including changes in consumption, savings, self-reported well-being, health,

and food security. The federal government can make high-quality matched administrative data (linked Longitudinal Employer-Household Dynamics [LEHD] data to UI reciprocity records and other outcome measures as feasible) available to researchers for this purpose. In addition, as I recommended in this proposal, all employers should be required to report employee hours and not just earnings; this is done currently in only four states. This requirement will aid the evaluation objectives as well. We should use these findings to finetune policy details, including possibly altering the benefit levels or PBD to achieve a better balance, should changes be needed.

Why only use TUR triggers and not IUR triggers?

In my main proposal, I suggest reforming the EB program using only TUR triggers. In practice, IUR triggers had rarely been activated for the EB program; moreover, TUR provides a more-accurate overall state of the labor market. For example, IUR will depend on take-up and eligibility of UI recipients, which varies greatly across time and space. It is difficult to know how to set effective IUR triggers without knowing what the impact of the proposed changes will be on actual reciprocity rates. At the same time, it is true that the IUR is calculated at a higher-frequency level, which is helpful for faster response. This was true during the Covid crisis, but is unlikely to be relevant in most downturns. As an alternative, we can further modify the proposal by allowing a national IUR trigger for rapid response.

If reforming the replacement rates is difficult and takes time, is it possible to implement a simpler reform to the benefit levels, especially in the short term?

In Proposal 4, I propose marginal replacement rates based on earnings brackets, which allows greater control over how the average replacement rate changes by the level of earnings. If this were infeasible, especially in the short run due to administrative constraints, an alternative would be to add a simple \$100 boost to all recipients in normal times, instead of the earnings bracket-based determination. The additional recessionary boosts of \$100 and \$200 would remain as is. In appendix A I show that the average replacement rates by earnings level from this simpler plan are broadly similar to what I suggest in the proposal.

Does the proposal target the right level of benefit generosity?

While 50 percent replacement may be sufficient for middle- and high-income workers with sufficient assets and access to credit, it is insufficient for those who are at the bottom of the pay scale. Those with low earnings may already have had difficulty meeting needs if they had low hours; in this case 50 percent of average earnings can be far too low for meeting basic needs. Moreover, while the replacement rates are higher during recessions due to the recessionary boost, the evidence suggests that even smaller downsides in terms of moral hazard, and more upside in terms of stimulus, from greater generosity during downturns. And finally, capping benefits at 100 percent of earnings (as long it is above the minimum benefit level) guards against overly dis-incentivizing work.

Will the increased benefit levels hold back recovery and growth?

Based on the evidence, the overall increase in the benefit level would likely have a moderate impact on the exit out of unemployment benefits and recovery, especially during normal times. During downturns, the employment effects would be even smaller since jobs are rationed, and would possibly be positive due to the stimulus effects.

Why use earnings and not hours-based threshold?

In this proposal, I have suggested using realistic earnings-based thresholds. This can help with expanding eligibility. At the same time, there are compelling arguments for eventually moving away from earnings toward an hours-based determination of eligibility. The hours-based thresholds can be 120 hours in one quarter and 60 hours in a second quarter. By collecting hours information from employers as part of UI tax reporting, as is done now in four states, we can make this easier.

Would having a single national standard for benefit determination lead to worsened standards in some states?

The proposed benefit levels would be more generous than those in any state. However, the federal program can accommodate states' desire to go above the federal standard. In that case, the payroll taxes for employers/employees in those states would need to be adjusted to cover the additional expenses.

Endnotes

1. The increases in outlays assume a behavioral response as well as mechanical increases in costs. In particular, I assume a duration elasticity with respect to benefit levels of around 0.5 which is the midpoint of the 0.1 to 0.9 range typically found in the literature. See appendix A for a discussion of the empirical evidence.
2. Employer-based health insurance participation rates among all employers in 2019 was around 61 percent; however, those losing jobs are less likely to have job-based coverage than workforce as a whole (Kaiser Family Foundation 2019).

Author and Acknowledgments

AUTHOR

Arindrajit Dube is a Professor of Economics at the University of Massachusetts Amherst. His work focuses on labor economics, along with health economics, public finance, and political economy. Some of his current areas of research include minimum wage effects on employment and inequality; the role of fairness concerns at the workplace; the nature and extent of competition in the labor market; the interplay of behavioral biases and labor market competition; the impact of fiscal policy in local labor markets; and the role of firm wage policies in explaining the growth in inequality. He has also conducted research on employer health mandates; unions and collective bargaining; outsourcing and sub-contracting; gun laws and violence; capitalization of private information in stock prices. He received his B.A. in Economics and M.A. in Development Policy from Stanford University, and his Ph.D. in Economics from the University of Chicago. Previously, he held positions of visiting Professor at MIT Department of Economics, and Boston University's Questrom School of Business. He is also currently a research associate at NBER and a research fellow at IZA.

ACKNOWLEDGMENTS

I would like to thank Wendy Edelberg, Kristen Broady, Lauren Bauer, Jesse Rothstein, Suresh Naidu, Ethan Kaplan, and participants of the Author's Conference for their feedback on this paper. Ihsaan Bassier provided excellent research assistance. I thank Alison Hope for her diligent copy edit, and any errors that remain are mine. I thank Stephanie Lu and Sara Estep for their research support. Lastly, I would like to thank Jeanine Rees for her help with the graphic design and layout of this document.

References

- Abraham, Katharine, and Susan Houseman. 2014. "Encouraging Work Sharing to Reduce Unemployment." In *Policies to Address Poverty in America*, edited by The Hamilton Project, chap. 12. Washington, DC: The Hamilton Project.
- Altonji, J., Contractor, Z., Finamor, L., Haygood, R., Lindenslaub, I., Meghir, C., O'dea, C., Scott, D., Wang, L. And Washington, E. 2020. *The Effects of the Coronavirus on Hours of Work in Small Businesses*, Yale Tobin Center for Economic Policy, New Haven, CT.
- Baily, Martin Neil. 1978. "Some Aspects of Optimal Unemployment Insurance." *Journal of Public Economics* 10(3): 379–402.
- Balducci, David E., Stephen Wandner, Annelies Goger, Zachary Miller, Sandeep Shetty, Cassandra Agbayani, and Jasmine Eucogco. 2015. *Employer Views about the Short-Time Compensation Program: A Survey and Analysis in Four States*. Final Report. Washington, DC: Employment and Training Administration, US Department of Labor.
- Bartik, Alexander W., Marianne Bertrand, Feng Lin, Jesse Rothstein, and Matt Unrath. 2020. "Measuring the Labor Market at the Onset of the COVID-19 Crisis." Working Paper 27613, National Bureau of Economic Research, Cambridge, MA.
- Bennet, Michael. 2020. "Reforming Unemployment Insurance to Automatically Respond to Deteriorating Economic Conditions." Technical report. US Senate, Washington, DC. https://www.bennet.senate.gov/public/_cache/files/7/1/714e9240-6cb5-4676-a348-a5eacef0aee9/35816AE97F63A1AD7FF2162338E08B34.ui-reform-plan-fact-sheet.pdf
- Biden Harris. 2020. "The Biden Plan to Scale Up Employment Insurance by Reforming Short-Time Compensation Programs." Biden Harris, Democratic National Committee. <https://joebiden.com/the-biden-plan-to-scale-up-employment-insurance-by-reforming-short-time-compensation-programs/>
- Boone, Christopher, Arindrajit Dube, Lucas Goodman, and Ethan Kaplan. Forthcoming. "Unemployment Insurance Generosity and Aggregate Employment." *American Economic Journal: Economic Policy*.
- Card, David, Andrew Johnston, Pauline Leung, Alexandre Mas, and Zhuan Pei. 2015. "The Effect of Unemployment Benefits on the Duration of Unemployment Insurance Receipt: New Evidence from a Regression Kink Design in Missouri, 2003–2013." *American Economic Review* 105(5): 126–30.
- Chetty, Raj. 2006. "A General Formula for the Optimal Level of Social Insurance." *Journal of Public Economics* 90(10–11): 1879–901.
- . 2008. "Moral Hazard Versus Liquidity and Optimal Unemployment Insurance." *Journal of Political Economy* 116(2): 173–234.
- Chodorow-Reich, Gabriel, and John M. Coglianesi. 2019. "Unemployment insurance and macroeconomic stabilization." In *Recession Ready*, ed. Heather Boushey, Ryan Nunn, and Jay Shambaugh.
- Chodorow-Reich, Gabriel, John Coglianesi, and Loukas Karabarbounis. 2019. "The Macro Effects of Unemployment Benefit Extensions: A Measurement Error Approach." *Quarterly Journal of Economics* 134(1): 227–79.
- Daly, Mary C., Bart Hobijn, Ayşegül Şahin, and Robert G. Valletta. 2012. "A Search and Matching Approach to Labor Markets: Did the Natural Rate of Unemployment Rise?" *Journal of Economic Perspectives* 26(3): 3–26.
- Dieterle, Steven, Ota'vio Bartalotti, and Quentin Brummet. 2020. "Revisiting the Effects of Unemployment Insurance Extensions on Unemployment: A Measurement-Error-Corrected Regression Discontinuity Approach." *American Economic Journal: Economic Policy* 12(2): 84–114.
- Dube, Arindrajit. 2020a. "Aggregate Employment Effects of Unemployment Benefits During Deep Downturns: Evidence from the Expiration of the Federal Pandemic Unemployment Compensation." Working Paper 28470, National Bureau of Economic Research, Cambridge, MA.
- . 2020b. "The Impact of the Federal Pandemic Unemployment Compensation on Employment: Evidence from the Household Pulse Survey." Preliminary. <http://reparti.free.fr/dube720.pdf>
- Elsby, Michael W, Bart Hobijn, and Ayşegül Şahin. 2010. "The Labor Market in the Great Recession." Working Paper 15979, National Bureau of Economic Research, Cambridge, MA.
- Farber, Henry S., and Robert G. Valletta. 2015. "Do Extended Unemployment Benefits Lengthen Unemployment Spells? Evidence from Recent Cycles in the US Labor Market." *Journal of Human Resources* 50(4): 873–909.
- Farrell, Diana, Peter Ganong, Fiona Greig, Max Liebeskind, Pascal Noel, and Joseph Vavra. 2020. "Consumption Effects of Unemployment Insurance during the Covid-19 Pandemic." JPMorgan Chase & Co., New York, NY. Available at SSRN 3654274.
- Finamor, Lucas And Dana Scott. 2021. "Labor Market Trends and Unemployment Insurance Generosity during the Pandemic." *Economics Letters* 199.
- Ganong, Peter, Fiona Greig, Max Liebeskind, Pascal Noel, Daniel M. Sullivan, and Joseph S. Vavra. 2021. "Spending and Job Search Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data." Working Paper 2021-19, Becker Friedman Institute for Economics, University of Chicago, Chicago, IL.
- Ganong, Peter, and Pascal Noel. 2019. "Consumer Spending during Unemployment: Positive and Normative Implications." *American Economic Review* 109(7): 2383–424.

- Ganong, Peter, Joseph Vavra, and Pascal Noel. 2020. "US unemployment insurance replacement rates during the pandemic." *Journal of Public Economics* 191, p. 104273.
- Goodman, Peter S., Patricia Cohen, and Rachel Chaundler. 2020. "European Workers Draw Paychecks. American Workers Scrounge for Food." *New York Times*, July 3, 2020.
- Gruber, Jonathan. 1997. "The Consumption Smoothing Benefits of Unemployment Insurance." *American Economic Review*, 87(1): 192–205.
- Hagedorn, Marcus, Fatih Karahan, Iourii Manovskii, and Kurt Mitman. 2013. "Unemployment Benefits and Unemployment in the Great Recession: The Role of Macro Effects." Working Paper 19499, National Bureau of Economic Research, Cambridge, MA.
- Hendren, N., 2017. "Knowledge of future job loss and implications for unemployment insurance." *American Economic Review*, 107(7): 1778–1823.
- Houseman, Susan, Frank Bennici, Katharine Abraham, Susan Labin, Chris O’Leary, and Richard Sigman. 2017. *Demonstration and Evaluation of the Short-Time Compensation Program in Iowa and Oregon*. Final Report. Washington, DC: Chief Evaluation Office, US Department of Labor.
- Iacurci, Greg. 2020. "The \$600 Unemployment Payments Are Likely Ending. Here’s Why." *CNBC.com*, July 17, 2020.
- Johnston, Andrew. 2021. "Unemployment-Insurance Taxes and Labor Demand: Quasi-Experimental Evidence from Administrative Data." *American Economic Journal: Economic Policy* 13(1): 266–93.
- Johnston, Andrew C., and Alexandre Mas. 2018. "Potential Unemployment Insurance Duration and Labor Supply: The Individual and Market-Level Response to a benefit Cut." *Journal of Political Economy* 126(6): 2480–522.
- Katz, Lawrence F., and Bruce D. Meyer. 1990. "The impact of the potential duration of unemployment benefits on the duration of unemployment." *Journal of Public Economics* 41(1): 45–72.
- Kekre, Rohan. 2016. "Unemployment Insurance in Macroeconomic Stabilization." *2016 Meeting Papers from Society for Economic Dynamics*, vol. 1184.
- Kaiser Family Foundation. 2019. "Employer Health Benefits: 2019 Annual Survey." <https://files.kff.org/attachment/Report-Employer-Health-Benefits-Annual-Survey-2019>
- Kroft, Kory, and Matthew J. Notowidigdo. 2016. "Should Unemployment Insurance Vary with the Unemployment Rate? Theory and Evidence." *Review of Economic Studies* 83(3): 1092–124.
- Landais, Camille. 2015. "Assessing the Welfare Effects of Unemployment Benefits Using the Regression Kink Design." *American Economic Journal: Economic Policy* 7(4): 243–78.
- Landais, Camille, Pascal Michailat, and Emmanuel Saez. 2018a. "A Macroeconomic Approach to Optimal Unemployment Insurance: Applications." *American Economic Journal: Economic Policy* 10(2): 182–216.
- . 2018b. "A Macroeconomic Approach to Optimal Unemployment Insurance: Theory." *American Economic Journal: Economic Policy* 10(2): 152–81.
- Meyer, Bruce D. 1995. "Lessons from the US Unemployment Insurance Experiments." *Journal of Economic Literature* 33(1): 91–131.
- Meyer, Bruce D., and Wallace K. C. Mok. 2014. "A Short Review of Recent Evidence on the Disincentive Effects of Unemployment Insurance and New Evidence from New York State." *National Tax Journal* 67(1): 219.
- O’Leary, Christopher J., and Stephen A. Wandner. 2018. "Unemployment Insurance Reform." In *Unemployment Insurance Reform: Fixing a Broken System*, 131. Kalamazoo, MI: WE Upjohn Institute for Employment Research.
- Rothstein, Jesse. 2011. Unemployment Insurance and Job Search in the Great Recession. Working Paper 17534, National Bureau of Economic Research, Cambridge, MA.
- Schmieder, Johannes F., and Till von Wachter. 2016. "The Effects of Unemployment Insurance Benefits: New Evidence and Interpretation." *Annual Review of Economics* 8: 547–81.
- US Department of Labor (DOL). 2019. "Unemployment Insurance Data." Office of Unemployment Insurance, US Department of Labor, Washington, DC. <https://oui.doleta.gov/unemploy/Chartbook/a13.asp>. Updated November 1, 2019.
- . 2020. "State Unemployment Insurance: Trust Fund Solvency Report 2020." Office of Unemployment Insurance, US Department of Labor, Washington, DC.
- . 2021. "Unemployment Insurance Data." Office of Unemployment Insurance, US Department of Labor, Washington, DC.
- Valletta, Robert G. 2014. "Recent Extensions of US Unemployment Benefits: Search Responses in Alternative Labor Market States." *IZA Journal of Labor Policy* 3(1): 1–25.
- von Wachter, Till. 2020. "A Proposal for Scaling Enrollments in Work Sharing, Short-Time Compensation Programs during the Covid-19 Crisis: The Case of California." Unpublished paper. http://www.econ.ucla.edu/tvwachter/covid19/Scaling_STC_memo_vonWachter.pdf
- West, Rachel, Indivar Dutta-Gupta, Kali Grant, Melissa Boteach, Claire McKenna, and Judy Conti. 2016. "Strengthening Unemployment Protections in America: Modernizing Unemployment Insurance and Establishing a Jobseekers’ Allowance." Center for American Progress, National Employment Law Project, and Georgetown Center on Poverty and Inequality, Washington, DC.

Appendix A: Framework for Analyzing UI

THEORY

Modern public finance argues that the optimal UI policy should balance between consumption smoothing on the one hand, against possible moral hazard problems caused from excessive insurance. The key insight of Baily (1978) and Chetty (2006) was that too little unemployment benefits would lead to inadequate consumption smoothing if individuals do not have sufficient other sources of insurance or savings, and are not able to easily borrow against future income. At the same time, too generous a benefit may be costly since it reduces search effort and exit out of unemployment, typically measured by the elasticity of the duration of unemployment with respect to unemployment benefit, ϵ^m . While there are different approaches to measuring the gains from consumption smoothing, under a wide range of assumptions these gains can be captured by the consumption drop $\left(\frac{\Delta c}{c}\right)$ times relative risk aversion (σ), leading to the canonical Baily-Chetty formula:

$$\sigma \frac{\Delta c}{c} \approx \epsilon^m$$

A key consideration here is that if consumption drops are larger, say because more workers are living hand to mouth (i.e., consuming what they receive in income), the value of insuring rises for a given level of moral hazard. There are several additional factors to keep in mind. First, Chetty (2008) refines this analysis by demonstrating that the responsiveness of unemployment duration to benefits is not solely due to moral hazard, but also due to liquidity constraints; in contrast, the optimal UI should depend only on the component of unemployment duration that is due to moral hazard. Chetty (2008) suggests an alternative way of capturing the consumption smoothing value that accounts for this based on sufficient statistics (relative response of search effort to income changes as opposed to UI benefit changes). Those statistics suggest greater gains from consumption smoothing than estimates assuming relative risk aversion coefficients of 2 or similar as done in some studies (see Schmieder and von Wachter 2016 for a discussion of this point).

However, as more-recent work has pointed out, the consumption smoothing approach of Baily-Chetty is incomplete for several reasons. First, there may be search externalities, whereby one person getting a job might reduce the chance of another person finding a job when jobs are

rationed; this may especially be the case during downturns. In such a context, incentivizing an unemployed person to seek a job imposes a negative externality on other unemployed workers, and can reduce labor market tightness. To put it differently, less-generous UI may make workers chase harder after a limited number of jobs during a downturn. These concerns have now been demonstrated using both experimental and quasi-experimental evidence in a number of different contexts.

The foundational work relating the search externality to the design of optimal UI program is by Landais, Michailat, and Saez (2018a, 2018b) who show that, when jobs are rationed, the micro elasticity, ϵ^m , overstates the cost of moral hazard. Specifically, they show that the Baily-Chetty formula has to be modified to account for the negative search externality, which tends to boost optimal UI during downturns. An additional reason to boost UI during downturn is the stimulus motive. In particular, those who are unemployed have a high MPC, which makes transfers to UI recipients a very effective form of stimulus (Ganong and Noel 2019). As shown in Kekre (2016), the canonical optimal UI formula has to be adjusted for this (positive) aggregate demand externality. We can summarize these various channels through the modified Baily-Chetty formula as follows:

$$\underbrace{\sigma \frac{\Delta c}{c}}_{\text{Cost of Drop in Consumption}} \approx \underbrace{\epsilon^m}_{\text{Moral Hazard}} + \underbrace{s}_{\text{Search Externality}} - \underbrace{AD}_{\text{Agg. Demand Externality}}$$

Here the cost of a drop in consumption is equated to the moral hazard—net of the search and aggregate demand externalities, both of which suggest a more generous optimal benefit during downturns.

Finally, it is worth keeping in mind a limitation of the insurance perspective in thinking about optimal UI: it does not fully factor in distributional concerns that may be important. In particular, if we move away from a representative agent framework, we would need to account for the heterogeneity in ability to borrow by income levels. Since credit constraints are much more likely to bind at the bottom, the labor supply responses for low-wage workers are more likely to reflect liquidity constraints than moral hazard (Chetty 2008). Moreover, the impact of consumption drops may be

more severe for low-income families, especially those near subsistence. In general, distributional concerns should push us toward providing more insurance for low-income earners. Even if a 50 percent benefit replacement rate during normal times may be reasonable based on overall evidence on risk aversion, consumption drops, and labor supply considerations, it may be inadequate for those at the bottom.

EVIDENCE

Micro Labor Elasticity

Schmieder and von Wachter (2016) provide a comprehensive review of evidence through the post–Great Recession period on how both the PBD and benefit replacement rates affect microlevel labor supply. There are older, classic studies on the topic by Katz and Meyer (1990), and Meyer (1995) that consider how unemployment duration responds to PBD. More recently, a number of studies exploit the major extension of PBD to 99 weeks during the Great Recession to estimate the micro duration elasticity (Daly et al. 2012; Elsby, Hobijn, and Şahin 2010; Farber and Valletta 2015; Johnston and Mas 2018; Kroft and Notowidigdo 2016; Rothstein 2011; Valletta 2014). The takeaway from these studies is that the micro elasticities typically ranged between 0.01 and 0.6, with most studies suggesting a modest, negative impact of PBD on the length of UI duration.

A separate set of studies consider how UI durations respond to benefit level changes (i.e., replacement rates). Chetty (2008) finds an estimate of around 0.5 using observational data, with a higher elasticity for those who are liquidity constrained. Meyer and Mok (2014) find estimates range between 0.1 and 0.2, using a difference-in-difference approach. Card et al. (2015) use a regression kink design, and find elasticity around 0.35, but higher in downturns. Finally, Landais (2015) also uses an regression kink design from five states and finds an average elasticity around 0.4. Overall, for replacement rates there is a fairly wide variation in the elasticities in the range of 0.1–0.9; the central tendency for elasticities for the benefit levels tend to be somewhat larger than for PBDs.

Macro Labor Elasticity

As explained above, micro elasticities may substantially overstate how responsive macrolevel employment is to UI benefit generosity, especially in downturns, since they do not factor in search and aggregate demand externalities. In recent years, we have seen a number of studies provide a macro employment impact of the extension of PBD to 99 weeks during the Great Recession. On the whole, most macro estimates from the Great Recession suggested smaller employment losses than micro studies (Boone et al. forthcoming; Chodorow-Reich, Coglianesi, and Karabarbounis 2019; Dieterle, Bartalotti, and Brummet 2020). The exception is a paper by Hagedorn et al. (2013), who find substantial, negative effects. However, problems with that approach

are explained in Boone et al. as well as in Dieterle, Bartalotti, and Brummet (2020). Boone et al. provide a full reconciliation of the differences in findings in Hagedorn et al., which they show to be driven by a combination of problems with data as well as with empirical specifications.

Boone et al. (forthcoming) also provide a sense of magnitudes in the difference between the micro and macro approaches. While the micro duration elasticities suggest that the 73-week extension in PBD during the Great Recession would have caused job losses between 0.1 million and 6 million, the macrolevel aggregate employment effect was a gain of 0.5 million. Overall, this pattern is consistent with the importance of search externality and stimulus effects during downturns.

Evidence on Labor Supply from the Covid Crisis

The unprecedented expansion of UI benefits since March 2020 naturally created concerns about unintended consequences. In particular, the fact that many unemployed workers were receiving benefits in excess of their usual earnings was considered problematic by many observers. While such benefit levels were seen as tolerable during a very short term (one to two months) where many workers were unable to work during lockdowns and closures in the hospitality sector, many in Congress and statehouses argued that the benefit boost was too generous (Iacurci 2020), and slowing down the reopenings in the summer months. This was an important factor behind the lapse in the FPUC payment at the end of July, which was expected to aid the labor market recovery by incentivizing work.

The evidence so far, however, suggests a very limited impact of the UI policies on employment outcomes. Early in the Covid crisis a number of papers evaluated the impact of the \$600 boost by comparing the trajectory of employment typically between March and June across groups with very different replacement rates (due to differences in earnings). These papers used a number of new high-frequency datasets, including Homebase and the Census Pulse Survey, but found little systematic evidence that the higher replacement rates were associated with lower employment recoveries (e.g., Altonji et al. 2020; Bartik et al. 2020; Dube 2020a).

However, there were several limitations with these early studies. In particular, the early period between February and March was both when the pandemic lockdowns began and when the FPUC was introduced, so the introduction could not be used as an informative policy change. Rather, most of the analysis was focused on the April–June period when there were reopenings. However, during this period there were no policy changes that could be used in a quasi-experimental design to estimate the impact of benefit generosity on employment.

The best evidence comes for three studies that leverage the sharp expiration of the FPUC at the end of July 2020, leveraging the fact that the replacement rates fell differently for different groups from the expiration of the flat \$600 boost.

Finamor and Scott (2021) use personnel data from Homebase, a scheduling service whose clients tend to be small businesses, especially restaurants. They assess whether those who were not employed by their employer (or by another Homebase employer) return to employment following the FPUC expiration, and find no relationship between the change in replacement rates (based on pre-pandemic earnings) and change in reemployment. Ganong et al. (2021) use transaction level data of individuals who have a bank account at JP Morgan Chase. They consider unemployment duration of individuals receiving UI benefits, and find little change in the exit rate out of unemployment following the expiration and that this change was only slightly larger in states where workers saw larger drops in the replacement rate. They interpret the evidence through a search model with recall, and find that the implied duration elasticities are around 0.02, which is far smaller than previous literatures.

In contrast to these microlevel estimates, Dube (2021) uses Household Pulse Survey to study the impact of the July expiration of the FPUC \$600 boost on *aggregate* employment probability, using cross-state variations in the change in median replacement rates following the expiration. In contrast to the microlevel estimates, the macro estimates additionally include any search externalities and stimulus effect along with possible vacancy creation effects, as discussed previously. Dube does not find any evidence of increased employment in states where the benefit replacement rate fell more. The point estimate for the implied duration elasticity is negative, while the confidence intervals rule out all but the lowest of the 0.1–0.9 range of typical micro elasticities from benefit level changes. This is consistent with the possible importance of search-and-demand externalities, although the reduced microlevel elasticities also likely played a role.

Overall, the evidence from the pandemic shows a surprisingly small impact of benefit generosity on employment—at both micro and macro levels. Needless to say, the Covid crisis has had unique features—including a very high share of unemployed workers who were on temporary layoffs and were recalled, especially in the earlier part of the crisis. At the same time, the fact that the employment effects were elusive in spite of the unprecedented level of benefit replacement informs our thinking about our ability to provide more-generous benefits, especially during downturns when the moral hazard cost is less due to other compensating factors.

Evidence on Consumption

To assess the insurance value of UI, we also need to consider evidence on the consumption loss that may occur due to job loss. The classic reference here is Gruber (1997), who found around a 7 percent drop in food consumption from entering into unemployment using survey data. Hendren (2017) augments this statistic to account for some anticipation effect, and finds around a 9 percent drop. More recently, Ganong and Noel (2019) use high-quality bank account transaction level data from the JP Morgan Chase Institute during the Great Recession, and provide high-frequency evidence on consumption response. They find a 6 percent drop in

nondurable spending at the onset of unemployment, a drop of less than 1 percent per month during the UI spell, followed by a 12 percent drop at UI benefit exhaustion. The initial drop is comparable to prior analysis, but the large drop at benefit exhaustion was a novel finding. Importantly, Ganong and Noel find sharp drops in spending for necessities like groceries, goods from drugstores, and medical copayments. This finding also suggests that the insurance value of extending benefits longer is particularly large, more so (dollar-for-dollar) for increasing benefit levels. However, as those authors also document, when the replacement rate is lower (as it is in Florida), the drop in consumption from unemployment is larger, highlighting the importance of an adequate benefit replacement amount. Moreover, the reduction in spending they find for necessities has implications for the possible distributional heterogeneity in the insurance value: for those families close to survival constraints, the reduction in these necessities is likely to come at a very high cost in welfare. Consistent with this point, the consumption drop is found to be much larger for households with low liquid assets. Since lower-income families tend to have lower assets, this is another rationale for providing relatively more-generous benefit levels to those with lower incomes.

Another important finding is how sensitive spending is to UI benefits and at various points in the spell. Overall, their findings suggest an MPC out of UI spending of around 0.8. This is quite high, suggesting substantial barriers to credit among those who are unemployed. This suggests that UI is likely to be well targeted for the purpose of providing stimulus during downturn, which motivates the idea of a recessionary boost to benefit levels.

We also now have additional evidence on consumption response to UI benefits from the Covid crisis period using the JP Morgan Chase Institute data. Farrell et al. (2020) find that spending among those losing jobs dropped by 20 percent prior to receiving UI. At the same time, following UI receipt, recipient spending *rose* by 10 percent as compared to the pre-job-loss consumption level, in spite of the loss in earnings. The \$600/week boost helped turn what would have been a very sharp and protracted reduction in spending into a gain in spending from the baseline. Upon the expiration of the FPUC in July 2020, however, spending declined by 14 percent in August. (Importantly, the consumption drop was substantial even though recipients had built up savings from the \$600 boost.)

What are some takeaways from the consumption response to UI during the Covid crisis, and what implications do those takeaways have for policy design? From a purely insurance perspective, the \$600/week supplement not only smoothed consumption but actually boosted it, with a small to no efficiency loss in terms of employment. Even though some of the circumstances during this downturn are unusual, the evidence from experience nonetheless suggests we can likely raise benefit levels, especially for those at the bottom to allow much lower consumption drops than have occurred in the past. Moreover, the strong consumption

response supports the macro-stabilization goal of boosting UI benefits during downturns.

DATA AND METHOD

We download the code and data provided by GNV, and supplement it with CPS data from the months before the pandemic (January to March 2020). While GNV are interested in pandemic-time replacement rates, our aim is to simulate the replacement rates in normal times. We use the idiosyncratic state-by-year replacement rules that they provide, as well as the pre-pandemic data.

In brief, GNV use three data sources:

- UI benefit rules: Estimates of unemployment benefits by state and year from DOL. The benefit amounts pertain to single unemployed persons with no dependents.
- Pandemic employment: Respondents in the basic monthly CPS for April–July 2020 also provided weekly earnings data for the Merged Outgoing Rotation Group in 2019. They focus on workers with an unemployment duration less than 26 weeks who were laid off from their prior jobs (no voluntary quits).
- Earnings history: Data from the 2019 Annual Social and Economic Supplement (ASEC), administered in February, March, and April 2019. This records each worker’s detailed earnings history over 2018. Only US citizens’ earnings above the federal minimum wage of \$7.25 with sufficient earnings history to qualify for benefits are included.

The reason GNV need ASEC data is that the CPS does not provide detailed earnings history. They link the CPS to ASEC data by a reweighting procedure, predicting unemployment in the CPS based on fixed effects for wage decile, state, occupation, and industry, and using these weights as probabilities of unemployment attached the workers with matching characteristics in the ASEC data. To be clear, the main dataset is ASEC, reweighted to reflect unemployment probabilities for April–July 2020.

We supplement these data with the equivalent CPS extracts for January to March 2020. That is, instead of the CPS April–July data, we use the CPS January–March data to predict the unemployment probabilities, and link these pre-pandemic weights to the ASEC data.

ALTERNATIVE METHODS FOR CHANGING BENEFIT REPLACEMENT RATES: PROPOSED AND SIMPLER VERSIONS

Version 1: Proposed Version

We show the current distribution of benefits b_i , and compare it to the proposed distribution. The main formula is as follows, featuring a step-function that decreases the

marginal replacement rate. The preliminary benefit $b_{i,pre}$ for a worker with weekly wage y_i is

$$b_{i,pre} = \begin{cases} 0.8 \times y, & \text{if } y_i \leq 400 \\ 0.8 \times 400 + 0.65 \times (y_i - 400), & \text{if } 400 < y_i \leq 700 \\ 0.8 \times 400 + 0.65 \times 300 + 0.5 \times (y_i - 700), & \text{if } y_i > 700 \end{cases}$$

This preliminary benefit is subject to a minimum (20 percent) and maximum (80 percent) of the federal AWW. In times of high unemployment, a flat boost is added to all paychecks. For moderate downturns when the unemployment rate is between 6 and 8 percent, there is a flat \$100 boost is added to all paychecks; during severe downturns when the unemployment rate exceeds 8 percent, a flat of \$200 boost is added to all paychecks. Finally, the benefit is subject to a 100 percent replacement rate cap on each worker’s weekly earnings.

The final benefit $b_{i,final}$ may be expressed as

$$b_{i,final} = \min(\min\{\max[b_{i,pre}, .2 \times AWW], .8 \times AWW\} + \text{boost}, y_i)$$

Figures A1, A2, and A3 show that, in general, the replacement rates under the proposal are higher. They still fall below the 100 percent replacement rate, as imposed by the cap; under high unemployment times, the benefits are at this ceiling for the bottom of the weekly earnings distribution.

Version 2: Simpler Rules

If there is a need for simpler rules, for example if there are administrative constraints, then we can consider following simpler proposal: 50 percent of weekly earnings (status quo) plus \$100/week boost during normal times, indexed to the AWW. The maximum of 80 percent of AWW, the additional downturn boosts (\$100/week for unemployment between 6 percent and 8 percent, \$200/week for unemployment above 8 percent), and replacement rate cap of 100 percent still apply.

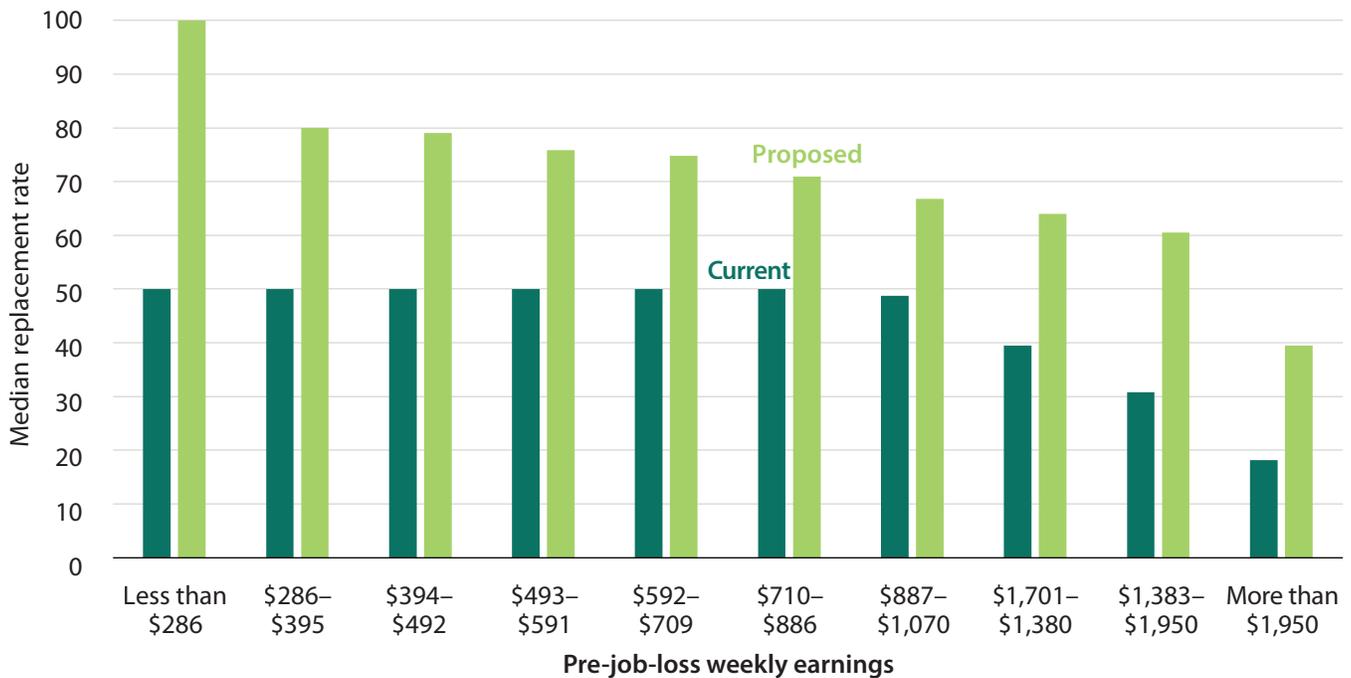
$b_{i,final}$ is calculated from $b_{i,pre}$ as above:

$$b_{i,pre} = 100 + .5 \times y_i$$

Here we show how the simpler, flat boost, rule affects the replacement rate during normal times (see figure A4). Overall, the resulting replacement rates are fairly similar to the proposed policy (Version 1), except at the very bottom where it exceeds 100 percent (as expected). This suggests that, for most unemployed workers, the \$100/week flat boost rule (indexed to the AWW) would provide a broadly similar average replacement rate as the proposed policy, and can be used as a proxy in the short term if necessary. On average, the replacement rate with Version 2 would be 76 percent, while under the proposed Version 1 it would be 72 percent.

FIGURE A-1.

Current and Proposed Replacement Rates: Baseline



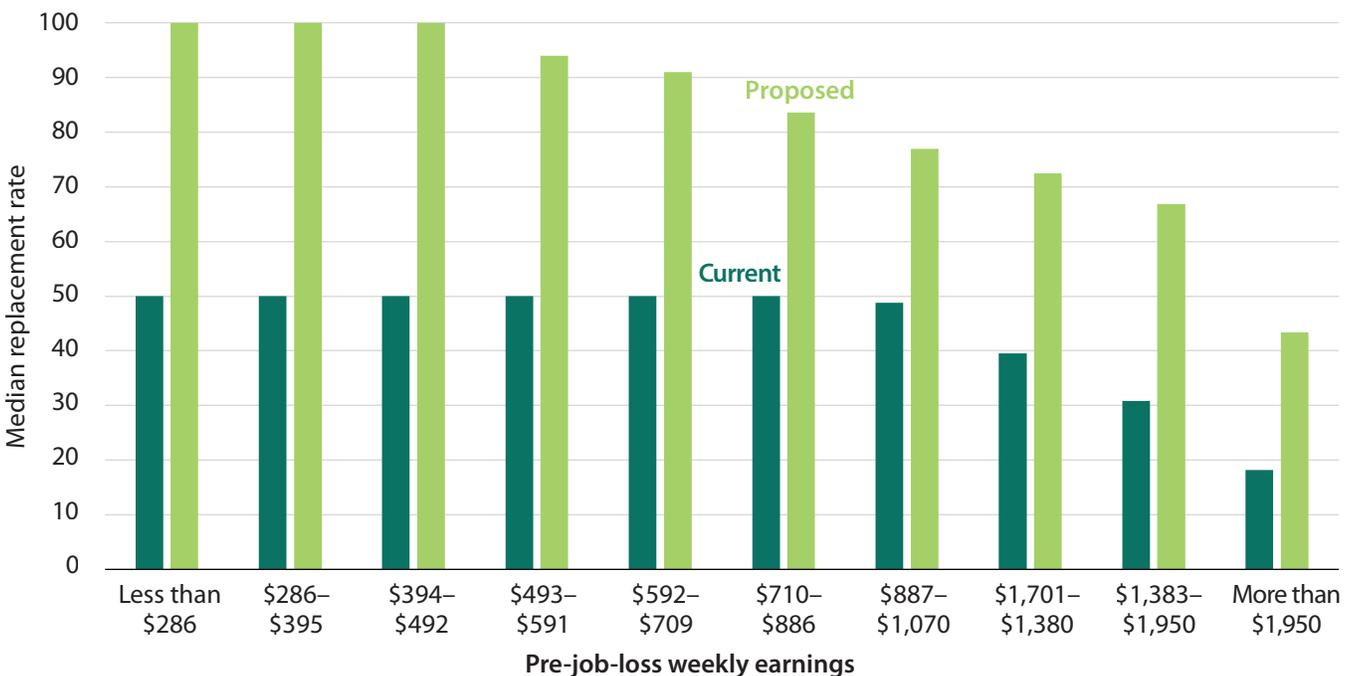
Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author's calculations.

Note: The benefits here are based on the assumption that the TUR is below 6 percent, and that there is no recessionary boost.



FIGURE A-2.

Current and Proposed Replacement Rates: With \$100 Recessionary Boost



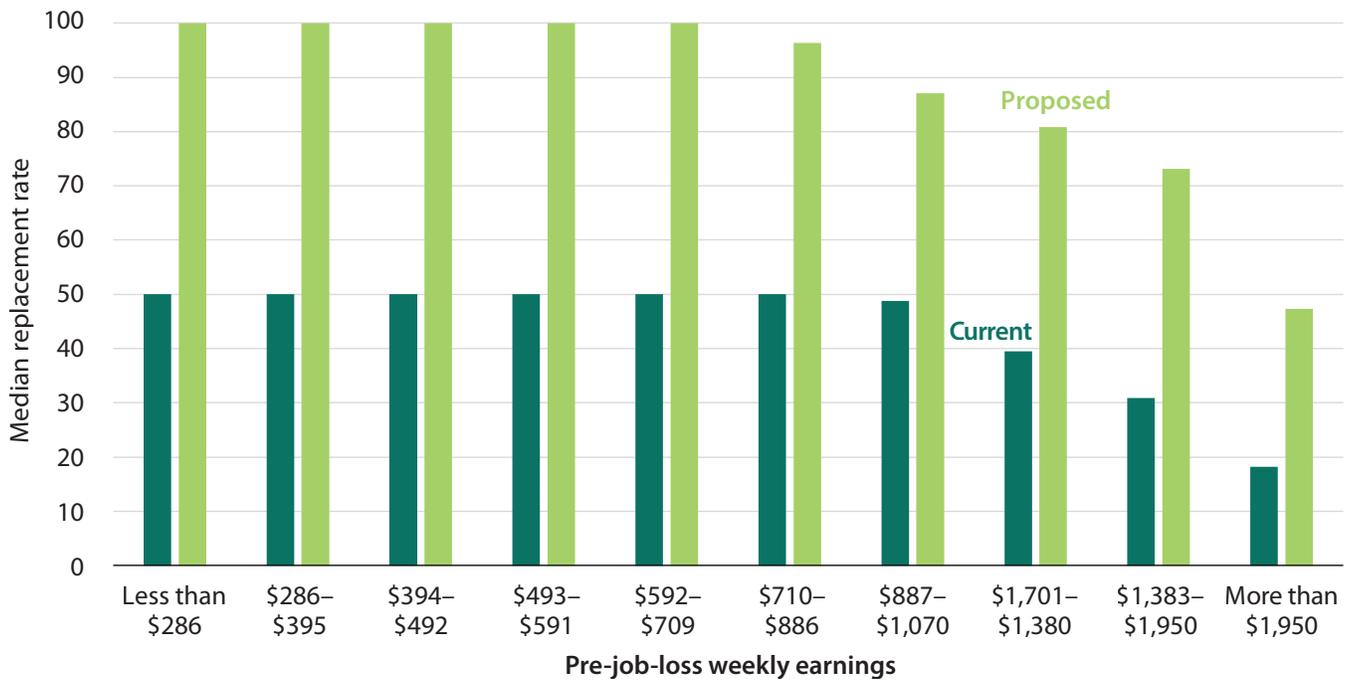
Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author's calculations.

Note: The benefits here are based on the assumption that the TUR is between 6 and 8 percent, and that there is a recessionary boost of \$100/week.



FIGURE A-3.

Current and Proposed Replacement Rates: With \$200 Recessionary Boost



Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author's calculations.

Note: The benefits here are based on the assumption that the TUR is above 8 percent, and that there is a recessionary boost of \$200/week..



FIGURE A-4.

Current and Proposed Replacement Rates under the Simpler Rule: No Recessionary Boost



Source: Ganong, Noel, and Vavra 2020; Current Population Survey 2019; author's calculations.

Note: Here, instead of the replacement rates based on Proposal 4, the "Proposed" replacement rates are based on simply adding \$100/week to current benefit levels. In this figure, it is also assumed that the TUR is below 6%, so there is no additional recessionary boost.



Appendix B: Frequently Used Acronyms

ASEC: Annual Social and Economic Supplement

AWW: average weekly wage

CPS: Current Population Survey

EB: Extended Benefits

FPUC: Federal Pandemic Unemployment Compensation

GNV: Ganong, Noel, and Vavra (2020)

IUR: insured unemployment rate

JA: Jobseeker's Allowance

LEHD: Longitudinal Employer-Household Dynamics

MPC: marginal propensity to consume

PUA: Pandemic Unemployment Assistance

PBD: potential benefit duration

STC: short-time compensation

SNAP: Supplemental Nutrition Assistance Program

TUR: total unemployment rate

UI: unemployment insurance



ADVISORY COUNCIL

STEPHANIE AARONSON
Vice President and Director,
Economic Studies; Senior Fellow,
Economic Studies,
The Brookings Institution

GEORGE A. AKERLOF
University Professor,
Georgetown University

ROGER C. ALTMAN
Founder and Senior Chairman,
Evercore

KAREN L. ANDERSON
Senior Director of Policy & Communications,
Becker Friedman Institute for
Research in Economics,
The University of Chicago

ALAN S. BLINDER
Gordon S. Rentschler Memorial Professor of
Economics and Public Affairs,
Princeton University;
Nonresident Senior Fellow,
The Brookings Institution

STEVEN A. DENNING
Chairman,
General Atlantic

JOHN M. DEUTCH
Institute Professor,
Massachusetts Institute of Technology

CHRISTOPHER EDLEY, JR.
Co-Founder and President Emeritus,
The Opportunity Institute

BLAIR W. EFFRON
Partner,
Centerview Partners LLC

DOUGLAS W. ELMENDORF
Dean and Don K. Price Professor of
Public Policy,
Harvard Kennedy School

JUDY FEDER
Professor and Former Dean,
McCourt School of Public Policy,
Georgetown University

JASON FURMAN
Professor of the Practice of
Economic Policy,
Harvard University;
Senior Fellow,
Peterson Institute for International Economics;
Senior Counselor,
The Hamilton Project

MARK T. GALLOGLY
Cofounder and Managing Principal,
Centerbridge Partners, L.P.

TED GAYER
Executive Vice President,
Senior Fellow, Economic Studies,
The Brookings Institution

TIMOTHY F. GEITHNER
President, Warburg Pincus;
Senior Counselor, The Hamilton Project

JOHN GRAY
President and Chief Operating Officer,
Blackstone

ROBERT GREENSTEIN
Founder and Former President,
Center on Budget and Policy Priorities

MICHAEL GREENSTONE
Milton Friedman Professor in
Economics and the College,
Director of the Becker Friedman Institute for
Research in Economics, and
Director of the Energy Policy Institute,
University of Chicago

GLENN H. HUTCHINS
Chairman, North Island;
Co-founder, Silver Lake

LAWRENCE F. KATZ
Elisabeth Allison Professor of Economics,
Harvard University

MELISSA S. KEARNEY
Neil Moskowitz Professor of Economics,
University of Maryland;
Nonresident Senior Fellow,
The Brookings Institution

LILI LYNTON
Founding Partner,
Boulud Restaurant Group

HOWARD S. MARKS
Co-Chairman,
Oaktree Capital Management, L.P.

KRISTON MCINTOSH
Managing Director,
Hamilton Place Strategies

ERIC MINDICH
Founder,
Everblue Management

DAMBISA MOYO
Co-Principal,
Versaca Investments

SUZANNE NORA JOHNSON
Former Vice Chairman,
Goldman Sachs Group, Inc.;
Co-Chair,
The Brookings Institution

PETER ORSZAG
CEO, Financial Advisory,
Lazard Freres & Co LLC

RICHARD PERRY
Managing Partner & Chief Executive Officer,
Perry Capital

PENNY PRITZKER
Chairman and Founder, PSP Partners;
38th Secretary of Commerce

MEEGHAN PRUNTY
Principal,
PE Strategic Partners

ROBERT D. REISCHAUER
Distinguished Institute Fellow and
President Emeritus,
Urban Institute

NANCY L. ROSE
Department Head and Charles P. Kindleberger
Professor of Applied Economics,
Massachusetts Institute of Technology

DAVID M. RUBENSTEIN
Co-Founder and Co-Executive Chairman,
The Carlyle Group

ROBERT E. RUBIN
Former U.S. Treasury Secretary;
Co-Chair Emeritus,
Council on Foreign Relations

LESLIE B. SAMUELS
Senior Counsel,
Cleary Gottlieb Steen and Hamilton LLP

SHERYL SANDBERG
Chief Operating Officer,
Facebook

DIANE WHITMORE SCHANZENBACH
Margaret Walker Alexander Professor and
Director, The Institute for Policy Research,
Northwestern University;
Nonresident Senior Fellow,
The Brookings Institution

STEPHEN SCHERR
Chief Executive Officer,
Goldman Sachs Bank USA

RALPH L. SCHLOSSTEIN
President and Chief Executive Officer,
Evercore

ERIC SCHMIDT
Technical Advisor,
Alphabet Inc.

ERIC SCHWARTZ
Chairman and CEO,
76 West Holdings

JAY SHAMBAUGH
Professor of Economics and International Affairs,
The George Washington University

THOMAS F. STEYER
Business Leader and Philanthropist;
Founder,
NextGen America

MICHAEL R. STRAIN
Director of Economic Policy Studies and
Arthur F. Burns Scholar in Political Economy,
American Enterprise Institute

LAWRENCE H. SUMMERS
Charles W. Eliot University Professor,
Harvard University

LAURA D'ANDREA TYSON
Distinguished Professor of the Graduate School,
University of California, Berkeley

DAVID WEIL
Co-President,
Charles and Lynn Schusterman Family Philanthropies

WENDY EDELBERG
Director

Highlights

The Unemployment Insurance (UI) system has not been reformed in decades and has required significant congressional intervention to deliver adequate support. The duration, administration, eligibility and authorization of the benefits could be adapted to improve the system and better align with the current labor market.

The Proposal

In this proposal, Arindrajit Dube of the University of Massachusetts Amherst, offers 5 reforms to the UI system to ensure more working Americans receive the benefits they need.

1. Convert the UI system to a fully federally financed and administered system in order to make it more equitable and easier to manage.
2. Expand eligibility by changing the minimum earnings requirement, allowing some voluntary separation, and implementing a “Jobseekers’ Allowance.”
3. Tie maximum benefit duration to state and national unemployment rate triggers with 7 tiers that automatically extend UI for up to 98 weeks. In future downturns the system would automatically adjust based on the severity of the recession.
4. Increase the replacement rates and add a two-tiered weekly boost during downturns of up to \$200 per week using unemployment rate triggers.
5. Improve short-time compensation by streamlining the application process. This can be achieved by incorporating it into UI at a federal level, increasing employer awareness with information campaign strategies, allowing up to 80 percent of enrolled workers to have hours reduced to increase employer participation, and providing a refundable credit to increase employers’ incentives to use short-time compensation.

Benefits

The reliance on state administration of the UI system has proven ineffective at administering benefits in a timely manner and in sufficient amounts during downturns. Arindrajit Dube offers a proposal to change the current system to help it reach more workers and automatically respond to economic downturns. These reforms would be a significant improvement from the antiquated system currently in place.



1775 Massachusetts Ave., NW
Washington, DC 20036

(202) 797-6484

BROOKINGS



Printed on recycled paper.

WWW.HAMILTONPROJECT.ORG