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Should We Have Automatic Triggers for Unemployment Benefit Duration and How Costly Would They Be?[†]

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Unemployment insurance (UI) is a significant part of the social insurance safety net in the United States and around the world. The experience of COVID-19 illustrates the critical role that UI can play in the face of enormous aggregate shocks. It also highlights an issue that has been a perennial focus of UI policy: how the duration of benefits should depend on the state of the economy.

UI benefits are currently set to 26 weeks in most states. Under current law, a state enters into extended benefits (EB) if its insured or total unemployment rate exceeds legislated thresholds, with additional duration of 13 or 20 weeks. The current EB system has two potential shortcomings. First, the stringency of the trigger thresholds (including allowing states to opt out of the less stringent triggers) means that the system rarely actually triggers. Second, the additional 13 or 20 weeks may provide inadequate coverage during severe recessions. In response, Congress has enacted temporary additional extensions during each recession over the past 40 years, with extensions on five separate occasions ranging from 6 to 53 weeks.

For decades, economists have recommended replacing a system where extended durations of UI benefits are decided by legislative fiat to a more systematic linkage between benefit durations and economic conditions (McKay and Reis 2021; Chodorow-Reich and Coglianese 2019; Mitchell and Husak 2021). But the actual design of such automatic extensions has not been the subject of much previous analysis. In this paper, we develop a simulation model to analyze the trade-offs inherent in different extension policies.

We reach three conclusions. First, policies designed to trigger immediately at the onset of a recession or even before it starts result in benefit extensions that occur in less slack labor markets than the historical average for benefit extensions. Second, the ad hoc extensions in past recessions compare favorably ex post to common proposals for automatic triggers. This conclusion comes with the important disclaimer that past behavior is no guarantee of future legislative performance and that there may be other benefits to automating policy. Third, compared to ex post policy, the cost of more systematic policy is close to zero.

I. The UI Policy Simulator Model

The UI policy simulator combines a simulated history of unemployment duration lengths with benefit levels to arrive at a simulated panel of individuals with complete labor force histories over the period 1996–2019, grouped by state. The simulated history of unemployment duration lengths follows the procedure in Chodorow-Reich and Coglianese (2019, 2021). Each simulated individual may be employed, on temporary layoff, otherwise UI eligible, unemployed and ineligible, or out of the labor force in a given week. Individuals transition across these statuses with probabilities that obey a factor structure of aggregate labor market transition probabilities and individual history dependence and that aggregate to the gross flows transition rates across employment, unemployment, and being out of the labor force published by the Bureau of Labor Statistics (BLS).

II. Trigger Design

We use the simulator to consider three design issues in the construction of automatic triggers

for enhanced benefits. The first is the issue of when benefits should "trigger on": when the *level* of the running variable crosses a threshold, or also when the *change* is sufficiently large? The rationale for considering the change is that workers unlucky enough to be long-term unemployed at the start of a recession would otherwise be without benefits until unemployment rose high enough and that triggering earlier may also have aggregate demand benefits by increasing consumption of the unemployed. For example, the national unemployment rate did not cross the EB threshold of 6.5 percent until October 2008, 10 months into the Great Recession.

We consider a "Sahm trigger," following Sahm (2019). That paper suggests that national recessions are well predicted by a rise in the unemployment rate of 0.5 percentage points (p.p.) above the minimum of its 3-month average the previous 12 months, suggesting that benefits could trigger on in that scenario. Converting the Sahm trigger to the UI context raises the question of whether the trigger should "fire" based on state or national unemployment rates; while state triggers allow more responsiveness to the timing of recession onset across states, they introduce noise because of the difficulty of estimating state-level unemployment rates in real time (Chodorow-Reich, Coglianese, and Karabarbounis 2019).

Figure 1 illustrates the trade-off by comparing a national Sahm rule with a trigger of 0.5 p.p. to state Sahm rules with thresholds of 0.5 p.p. or 1 p.p. The *x*-axis in each graph is the difference between state unemployment six months after a trigger fires and the state's unemployment rate at the time that it fires; positive values mean that the unemployment rate went up, while negative values mean that it actually went down. In about half the cases where the national Sahm fires, state unemployment rates subsequently rise by at least 1 p.p., and in no case do they fall. In contrast, with a state Sahm trigger of 1 p.p. or, especially, 0.5 p.p., the state unemployment rate frequently remains stable or even falls after the trigger fires. These "false positives" in part reflect the difference between the real-time data used to determine a trigger firing and the revised data used to measure the subsequent unemployment rate change. Conversely, the national trigger misses few cases when unemployment subsequently rises steeply and the state data catch. We therefore conclude that a national
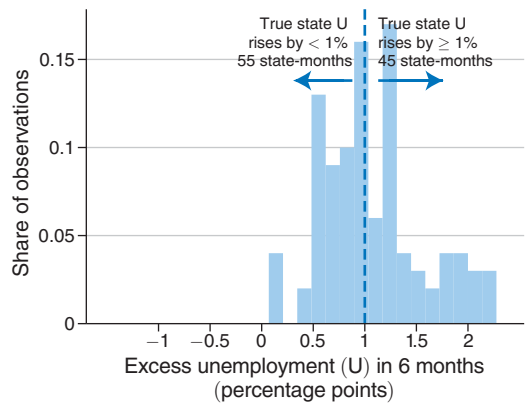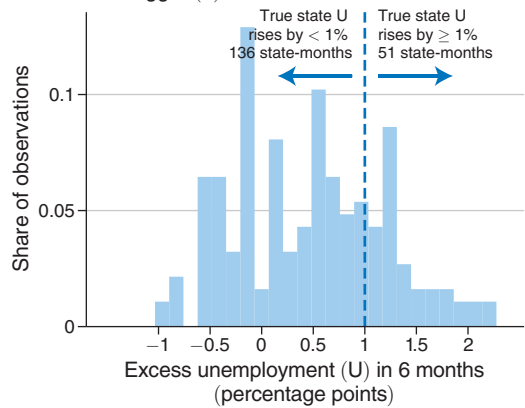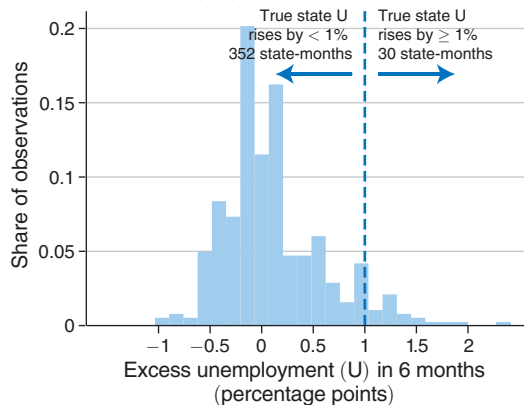

FIGURE 1. NATIONAL VERSUS STATE EARLY TRIGGER

trigger is preferred and model a national Sahm rule providing 0, 26, or 52 additional weeks of benefits for 6 months.

Table 1—Comparison of Alternative and Historical Policies

Sahm weeks	Tiers	Landing weeks	Total weeks claimed (millions)	Total weeks uncovered (millions)	Proportion of weeks uncovered	Weighted vacancy over unemploy.	Weighted total unem-ployment rate
0	1	0	437	876	0.67	1.23	8.9
0	1	13	449	863	0.66	1.28	8.82
0	3	All 0	583	730	0.56	1.16	9.2
0	3	All 13	602	711	0.54	1.2	9.11
0	4	All 0	678	635	0.48	1.37	8.7
0	4	All 13	696	617	0.47	1.41	8.63
26	1	0	502	810	0.62	1.44	8.29
26	1	13	514	799	0.61	1.47	8.24
26	3	All 0	654	659	0.5	1.32	8.67
26	3	All 13	672	641	0.49	1.35	8.62
26	4	All 0	721	592	0.45	1.48	8.42
26	4	All 13	737	575	0.44	1.52	8.37
52	1	0	593	719	0.55	1.46	8.02
52	1	13	604	708	0.54	1.49	7.99
52	3	All 0	719	594	0.45	1.38	8.39
52	3	All 13	736	576	0.44	1.42	8.34
52	4	All 0	760	553	0.42	1.52	8.25
52	4	All 13	777	536	0.41	1.55	8.21
	Historical		670	643	0.49	1.27	8.84

The second issue is how to set triggers that depend on the level of the state unemployment rate and hence also determine when a state triggers off. Choices here include the variation in duration extensions due to higher unemployment rates and the number of "tiers" of benefit extensions based on various unemployment rate cutoffs. We model three options: a 1-tier extension of 26 weeks when the unemployment rate exceeds 6.5 percent; a 3-tier extension that adds 26 weeks when the unemployment rate reaches 6.5 percent, 39 weeks when the unemployment rate reaches 7.5 percent, and 52 weeks when the unemployment rate reaches 8.5 percent; and a 4-tier extension that adds to the 3-tier version an extra tier that adds 13 weeks when the unemployment rate reaches 5.5 percent.[1]

The final policy option is the extent of "soft" versus "hard" landings for those who are unemployed when a trigger turns off. Concretely, consider a system with a trigger that

extends unemployment benefits by 26 weeks if the unemployment rate is above 6.5 percent. Suppose an individual has been collecting EB for six weeks when the unemployment rate drops below 6.5 percent. Should the individual immediately lose the remaining weeks of unemployment (a "hard landing"), or should they be allowed to keep some or all of the remaining weeks of entitlement (a "soft landing")?

III. Results

We use the simulator to assess 18 scenarios, defined as Sahm rule specification × number of tiers × hard/soft landing. We simulate the experience over the period 2001–2015, covering both the onset and aftermath of the 2001 and 2007–2009 recessions.

Table 1 shows our results. The first three columns describe the trigger-on, tier, and hard/soft landing policies. The next columns show the total weeks of extended UI that would have been claimed under the policy, the total weeks of long-term unemployment uncovered, and the coverage ratio (ignoring behavioral responses). The final two columns show how well the EB are targeted by computing the weighted average total unemployment

[1] We focus on unemployment rate triggers because they have been the traditional mechanism. An interesting avenue for future research would be to consider jointly the unemployment rate and the new state-level vacancy data released by the BLS Job Openings and Labor Turnover Survey program.
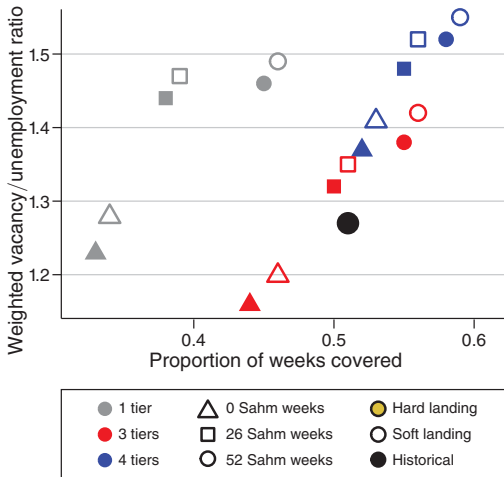
Figure 2. Coverage versus Targeting

rate and vacancy/unemployment ratio in the state-months that EB are available, weighted by the number of recipients. Policies that deliver the most benefits during periods of high unemployment or a low vacancy/unemployment ratio are better targeted. The last row of the table computes these same statistics for the actual ex post extension policy implemented by Congress.

A. *Evaluating Early Onset Policies*

Our first conclusion concerns the Sahm rule. For every specification of number of tiers and landing weeks, the Sahm trigger results in the average week of EB being received when the labor market is more tight (the average vacancy/unemployment ratio is higher and unemployment is lower). This result reflects the fact that the Sahm rule can trigger on when unemployment is very low but starting to rise.

B. *Comparison to Historical Policy*

Our second conclusion comes from comparing the alternative policies to the actual ex post extension policy implemented by Congress. To visualize this comparison, Figure 2 shows the relationship between the fraction of regular program exhaustees covered (equivalently, total cost) and the weighted average vacancy/unemployment ratio when additional benefits are claimed. By construction, additional tiers cover more long-term unemployed, as shown

by the rightward shift of the grey to the blue and the red frontiers. The large black circle shows the actual historical experience. Historical coverage is comparable to the 4-tier policy without a Sahm trigger or the 3-tier policy with a 26-week Sahm trigger. Moreover, the fact that it lies below the alternative policy indicators means that Congress has extended benefits in periods when the labor market was, on average, weaker than what would have occurred under the automatic policies considered, holding fixed total cost.

This result may appear surprising in light of conventional wisdom that discretionary fiscal policy contains long and variable political and implementation lags (Blanchard and Perotti 2002). Nonetheless, the ad hoc nature of the historical extensions creates several important risks. First, UI extensions become a political object; emergency benefits lapsed seven different times between 2002 and 2012, and again at the start of 2021, with potentially dire consequences for the temporary exhaustees (Ganong and Noel 2019). Second, historical policy has involved extreme course corrections, such as the reduction from 67 to 0 potential additional weeks in January 2014. Third, systematic policy facilitates workers' ability to optimally plan consumption and search and may generate aggregate demand benefits by reducing the precautionary saving motive of employed workers (Kekre 2021). Fourth, past behavior is no guarantee of future legislative performance.

C. *Cost of Policy Reform*

Perhaps the most important political barrier to reforming the system of benefit duration extensions is that such changes generate up-front costs when scored by the Congressional Budget Office (CBO) but have no immediate benefit if the economy is not already in recession.[2] The comparison of historical experience to the alternative polices considered challenges that logic. The coverage and cost of historical ad hoc policy is similar to the 3- and 4-tier policy alternatives. Therefore, viewed against a current

policy baseline that projects forward past ad hoc extensions, automating additional benefit extensions has little to no additional cost.

IV. Conclusions

There is a strong presumption that the generosity of the system should depend on the state of the economy. This has been recognized in each recession over the past 40 years on an ex post basis by Congress. We compare a variety of options for designing automated triggers to the ex post actions. Our model can also be combined with a simulation of individual benefit amounts (Ganong, Noel, and Vavra 2021) and used for other questions of policy interest, including the cost and distributional consequences of changing benefit amounts or eligibility.

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