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The Economic Effects of Pandemic Unemployment Programs: An Update

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Executive Summary

Earlier this year, we published a study estimating that a $600 weekly unemployment bonus, on top of usual state benefits, would lead to millions fewer Americans working. The purpose of this study is to examine after the fact what happened to labor market trends in the United States while those benefits—later reduced to $300 a week—were in place and estimate the lost employment. This study then projects how many fewer Americans will be working in the months ahead if another $600 a week unemployment bonus, which has been proposed in the House of Representatives (the "updated HEROES Act"), were to be enacted into law.

This study confirms the accuracy of our earlier predictions of large job losses from UI bonuses, which paid more than two-thirds of unemployed workers more money for becoming and staying unemployed than working. In some cases, those benefits paid workers twice as much as returning to their job. We find that if UI bonuses had stayed at $600 a week this fall, three to five million fewer workers would be employed today.

Returning to the $600 weekly unemployment bonuses through March 2021 would reduce employment by 6 to 10 million jobs. Even a $300 weekly bonus would cost 3 to 5 million jobs compared to the option of letting the bonus expire and returning to the preexisting unemployment insurance system.

Introduction

The March CARES Act broadened eligibility for unemployment benefits and provided a $600 weekly bonus to unemployed workers through late July. When those benefits expired, and pursuant to an August executive order, another federal bonus followed in most states, amounting to $300 per week until funds were exhausted in the fall. While they lasted, the federally funded bonuses were paid in addition to the longstanding regular state benefits. Regular state unemployment benefits generally provided the unemployed between one-third to one-half of their salaries.

Furthermore, eligibility for regular state benefits is, and has been, generally limited to persons who (i) were laid off from a job, (ii) held a job for four of the previous five quarters, and (iii) were actively looking for work.[1] The CARES Act created an entirely new program, Pandemic Unemployment Assistance (PUA), for people who failed these criteria. In other words, even without a pandemic or a recession, PUA participants (who, by fall 2020, were about half of those enrolled in unemployment programs) would be unlikely to be working because many of them were not working before or are not actively looking for work.

Congress is now considering whether, among other pandemic legislation, to extend the December 31, 2020 expiration date for the PUA program and to reinstate some or all of the $600 bonus until March or perhaps longer. We have enough data now to see that having unemployment bonuses depress employment and aggregate spending rather than increasing them. The bonuses make it difficult for employers to

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1 https://www.dol.gov/coronavirus/unemployment-insurance

maintain and replenish their workforce. This is why, contrary to the projections of "stimulus" advocates, employment and retail sales surged as soon as the CARES Act bonus expired.

The purpose of this report is to estimate macroeconomic effects of such policies with attention to what happened in the labor market as the original bonuses expired and the economy has partly recovered. We find that if President Trump had this summer agreed to extend the full $600 bonus, rather than reducing it to $300, 3 to 5 million fewer Americans would have been working this fall. Several million more Americans would likely have been working had we reverted back to the preexisting unemployment benefits with no bonus payments.

If Congress enacts the updated Heroes Act with $600-a-week bonuses from December through March (or beyond), then by March 6 to 10 million fewer people will be employed.[2] If the bonus were instead $300, then aggregate employment would be 3 to 5 million less as compared to letting the bonuses fully expire in 2020. The estimates and projections are summarized in Table 1.

Table 1. Unemployment Bonuses and the Economy

	Low Estimate	High Estimate
Jobs saved by letting the $600 bonus expire in July Q4 2020 employment	3 million	5 million
Jobs lost by renewing CARES Act $600 and PUA programs Q2 2021 employment	6 million	10 million

Notes: The expired $600 bonus was replaced with a $300 bonus. "Jobs" refers to employment as measured in the household survey. The hypothetical CARES Act renewal would be effective December 2020. The baseline for the Q2 2021 project is zero unemployment bonus (just normal state benefits).

The Economy Thrived when CARES Expiration Dates Arrived

Job Openings

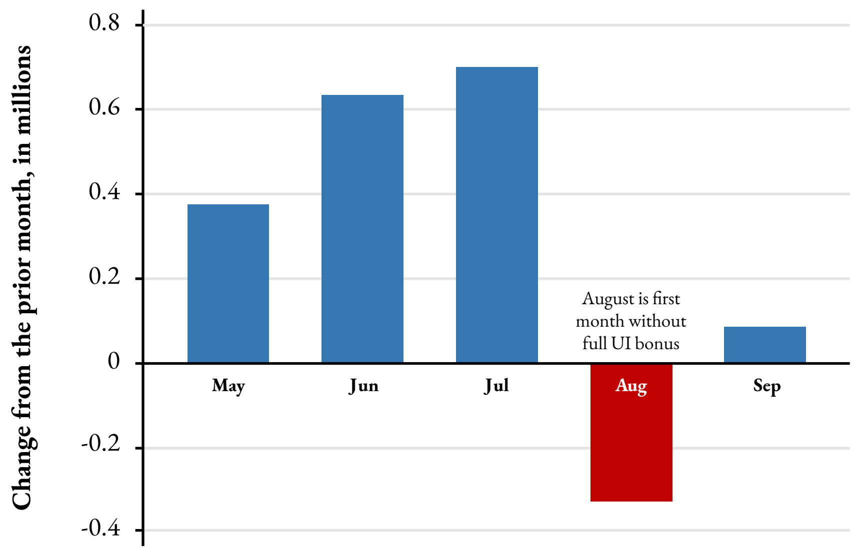
An unemployment bonus is a disincentive to accept a job offer and raises the cost for employers to fill positions because each employer must compete with the bonus as well as other employers. As long as the PUA lasts, an unemployment bonus is also a subsidy to quit. Many advocates of the UI bonuses even admitted that one result of the higher benefits would be to force employers to raise wages to get workers back on the job.

2 https://rules.house.gov/sites/democrats.rules.house.gov/files/BILLS-116HR925SA-RCP116-66.pdf Also depressing employment, but not part of this report's projection, are other parts of the HEROES Act that expand Food Stamps (SNAP) and other programs with income or employment tests.

Indeed, employers had trouble filling job openings after the CARES Act went into effect. A May 8 news item at the *Wall Street Journal* put it succinctly, "Businesses Struggle to Lure Workers Away from Unemployment."[3] The job openings data from the Bureau of Labor Statistics backs up the anecdotes: by May, job openings were already surging past the average of the past 10 years. Figure 1 shows the monthly changes in job openings, which were positive every month from May and as long as the full bonus lasted.

Job openings decreased for the first time in August, which was the first month without the full bonus. This suggest that either (i) employers no longer had as much trouble filling positions (and had fewer positions opening due to benefit-induced separations) or (ii) the recovery was faltering. Hypothesis (ii) is rejected by the employment and consumer spending data shown next. Also, the Department of Commerce data showing 33% annualized growth of the economy in the 3rd quarter (July-Sept.) is further evidence the economy was picking up steam, it wasn't slowing.

Figure 1: Changes in Job Openings
measured and seasonally adjusted by BLS



Employment

According to news reports, the unemployed were no longer getting the $600 already as of the week beginning July 26.[4] During that week and the first few days of August, Congress was still talking about either extending the entire bonus or part of it. When those talks broke down, President Trump issued his August 8 executive order providing for a retroactive $300 bonus using an alternative funding mechanism.[5]

Figure 2 show employment changes from the labor-department household survey as well as the Real-time Population Survey, with one of the measures showing men only in an attempt to minimize the

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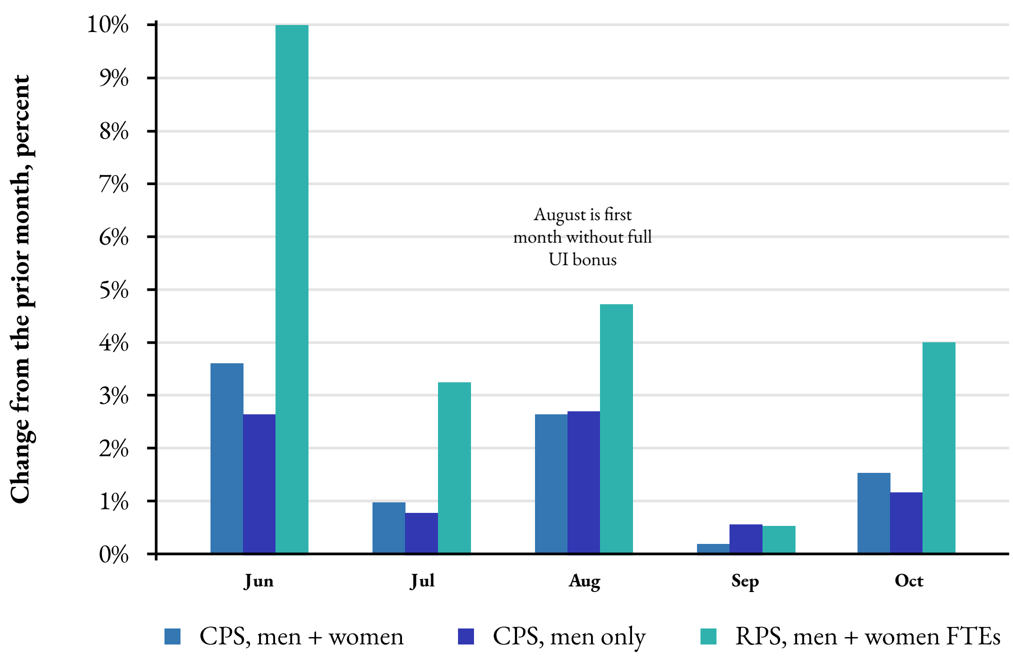
3 https://www.wsj.com/articles/businesses-struggle-to-lure-workers-away-from-unemployment-11588930202

4 https://www.cnbc.com/2020/07/21/last-day-for-600-unemployment-benefits-is-likely-this-weekend.html. Also note that studies find job-finding rates to increase both "shortly prior to exhaustion and at the time of exhaustion" of unemployment benefits https://onlinelibrary.wiley.com/doi/full/10.4073/csr.2013.4.

5 https://www.whitehouse.gov/presidential-actions/memorandum-authorizing-needs-assistance-program-major-disaster-declarations-related-coronavirus-disease-2019/

effect of school closures on parental employment.[6] By all three measures, employment and work hours increased every month, showing that a recovery was in progress. But all three measures also show that the increase from mid-July to mid-August substantially exceeded the increase in the prior month and in the subsequent months.[7]

Figure 2: Employment Changes
seasonally adjusted. Vertical scale is limited to 10%



The exceptional August is also notable given that it is the only month when job openings declined, even as the economy was expanding. The gap between August and the average of July, September, and October is 1.7, 1.9, and 2.1 percentage points for the three measures, respectively. Translated into a number of jobs, that is about 3 million more jobs added in August than added in the nearby months. Presumably, all else the same, ending the full bonus also had lingering job-creation effects in September and October which are not counted in August.[8] The longer-run effect of ending the bonus might therefore be somewhat greater than 3 million jobs.

Retail Sales

The Congressional Budget Office has said that unemployment subsidies reduce unemployment in the short run because of an assumed increase in aggregate demand.[9] The theory is that the income

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6 Full-time equivalent employment is measured from the RPS using its hours per adult series. I have applied a seasonal adjustment using the seasonal pattern as measured in the CPS-MORG in prior years. The adjustment itself has little effect on the difference between August and the average of July, September, and October.

7 Each month's labor market survey occurs during the week including the 12th of the month.

8 Moreover, any job creation in September and October due to ending the full bonus raises the baseline to which I compare August.

9 https://www.cbo.gov/system/files/2020-06/56387-CBO-Grassley-Letter.pdf

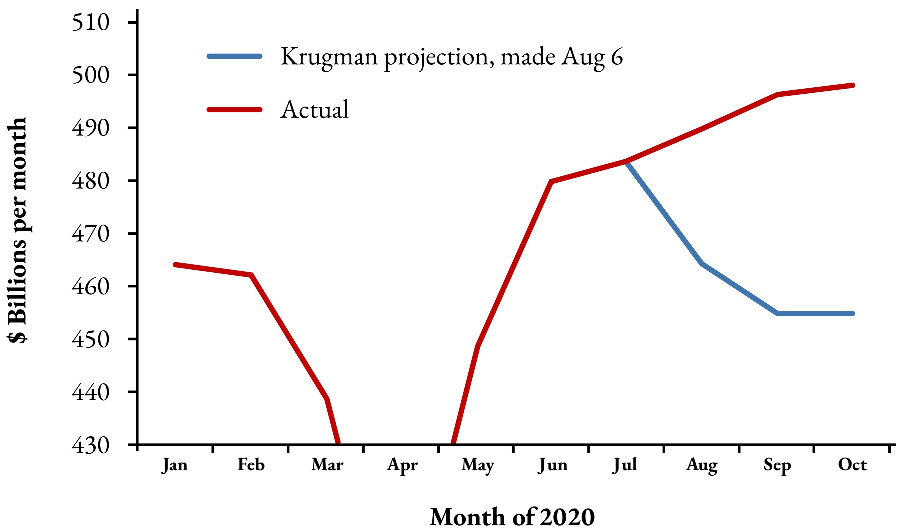
augmentation from enhanced unemployment insurance spurs consumption, thereby increasing the demand for workers and that this overrides any negative employment effect from the higher benefits. Under this theory, paying people more money not to work, will lead to more people working.

Professor Paul Krugman went further. "I've been doing the math, and it's terrifying . . . the end of benefits will push down overall consumer spending . . . more than 4 percent," he projected in early August.[10] Furthermore, he insisted that drop would be followed by "a substantial 'multiplier' effect, as spending cuts lead to falling incomes, leading to further spending cuts."

Studies have shown that unemployment assistance affect the spending of those who receive it, although perhaps less so this year. However, CBO, Krugman, and other practitioners of the old-style Keynesian logic may be mistaken because aggregate demand consists of a lot more than consumption of the unemployed. They fail to keep track of all of the parties to a subsidy transaction, including taxpayers and lenders to the government.

Because economics is ultimately an empirical science, it is important to look at the spending data (Figure 3), with special attention to August when monthly unemployment payments were cut by tens of billions of dollars. August retail sales showed a normal monthly increase despite the absence of full unemployment bonuses. With full bonuses still gone, retail sales increased again in September and October.

Figure 3: Changes in Retail Sales After UI Bonus Expires



Note: Krugman projected that ending UI bonuses would reduce spending by 4 percent (blue line August), even before "the multiplier" (Sept). Sources: FRED series RSXFS

CBO's model performed just as poorly. In May, CBO said that the unemployment rate would average 15.8 percent in Q3 (most of which was after the CARES Act UI bonus expired), whereas in fact it averaged 8.8 percent. It projected that the unemployment rate would be 11.5 percent for the final quarter of 2020 and remain above 8 percent for the entire year of 2021. In fact, 2020's fourth quarter began with a 6.9 percent unemployment rate, with a November rate that looks to be even lower than the October rate.[11]

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10 https://www.nytimes.com/2020/08/06/opinion/coronavirus-us-recession.html

11 Bick, Alexander and Adam Blandin. "Real-time Labor Market Estimates during the 2020 Coronavirus Outbreak." November 20, 2020.

What about the 20 million people on unemployment programs?

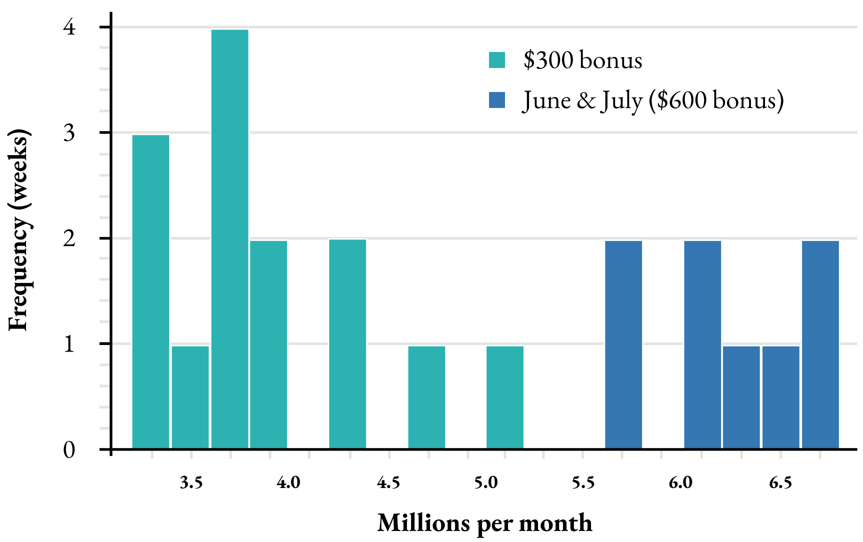
As of the end of October, more than 20 million people were on unemployment assistance programs. At first glance, it would seem that helping them by restarting a bonus would be enough to have favorable aggregate effects. However, regardless of the number of people involved, there is an equity-efficiency tradeoff.[12] Redistributing money to low-income people may help reduce inequality, but it also reduces efficiency by distorting incentives.

The number of program participants should also be understood in the context of the 2020 recession. By October, employment had returned to within 9 million of its pre-pandemic level, which itself was at record highs. How can "only" 9 million missing jobs create more than 20 million unemployed? The answer is that many of the people on the programs would not be working even without a pandemic. They are likely people who quit work, are not looking for work, and/or were rarely working before the pandemic. This is why about half of those on unemployment programs do not qualify for regular state unemployment benefits and are instead participants in the new PUA program.[13]

As further evidence that the number of program participants depends on the legislation, and not just the state of the economy, consider Figure 4. Each color is a histogram of the weekly data on initial unemployment claims, which are the flows into unemployment-benefit programs. The blue histogram shows the flows for the last two months of the $600 bonus, which consists of eight weekly observations. The range of observations during that time was from 5.7 million up to 6.8 million initial unemployment claims, at monthly rates.[14] As indicated by the heights of the blue bars, two observations were near at the low end and two observations at the high end, with the remaining four observations scattered in between.

Figure 4: Histograms of Initial Unemployment Claims

$300-bonus weeks do not overlap with the $600-bonus weeks



[12] Okun, Arthur M. *Equality and Efficiency: The Big Tradeoff*. Brookings Institution Press, 1975.

[13] Some of the more than 20 million may also reflect double-counting and labor market churn (people, perhaps old, who quit work due to health concerns and have been replaced by younger workers who would not be working if those positions had not opened up). Others may be parents who quit work due to public school closures, but the better solution to this for children and taxpayers, and likely public health, would be to open the schools.

[14] The monthly rate is 52/12ths of the weekly rate. Monthly rates are easier to compare with the employment and job openings data that are sampled monthly, as in Figure 2.

The gold histogram shows the 14 observations for the period (August – October) after the full bonus expired. Now the range is from 3.3 million up to 5.2 million initial claims. In other words, after the full bonus expired in July, the claims never again reached the levels of 5.7 million and beyond that were seen before expiration (blue histogram). Indeed, they exceeded five million only once (the week ending August 1) and then only by a small margin, which is why the gold bar furthers to the right has a height of only one. The average initial claims post-expiration is 3.9 million, which is 2.3 million less than the average while the full bonus lasted.[15] Economics suggests that fewer claims are made after July because the amount of cash to be received fell by $300 per week.

It is sometimes claimed that the 2020 recession has been unique in that subsidizing unemployment does not increase unemployment. Many of those claims point to a July "Yale study" finding that "the workers with the largest changes in UI generosity experience the largest declines in employment relative to the January baseline, [but] the differential decline occurs entirely in the weeks prior to the passage of the CARES Act."[16] In other words, two very opposite interpretations of their estimates are possible, depending on (a) whether the CARES act was anticipated and, if not, (b) how the March shock would have regressed to the mean absent uniform unemployment benefits. This July study did not have the advantage of the benefit expirations that occurred at the end of July. If the authors are correct to conclude that unemployment benefits have no discernible effect on the labor market, the patterns shown in Figures 1 through 4 of this report are a remarkable coincidence indeed.

Why the Unemployment Bonus Reduced Employment and Increased Unemployment

To many Americans a $600 weekly unemployment bonus on top of the normal benefit payment would not seem to be a great financial disincentive to work or to return to work. Most Americans want the jobless to be taken care of during a severe economic downturn. It is true, for example, that some workers would have returned to the job even if it didn't pay much more than benefits, because people would have been worried about these benefits eventually running out and the job offered not being there when the benefits eventually expired.[17] These observations help explain why the large majority of jobs continued during the pandemic despite the availability of newly enhanced unemployment benefits.

But just because most jobs continue while a generous unemployment program is ongoing (we predict more than 90 percent would) does not mean that all jobs do. The bonuses are sometimes quite large in comparison with the pay from work. The Congressional Budget Office estimated how the benefits would compare with earning a paycheck for worker who had become unemployed during the pandemic. It found that "roughly five of six recipients" would be earning more from UI benefits than from returning to the job they left.

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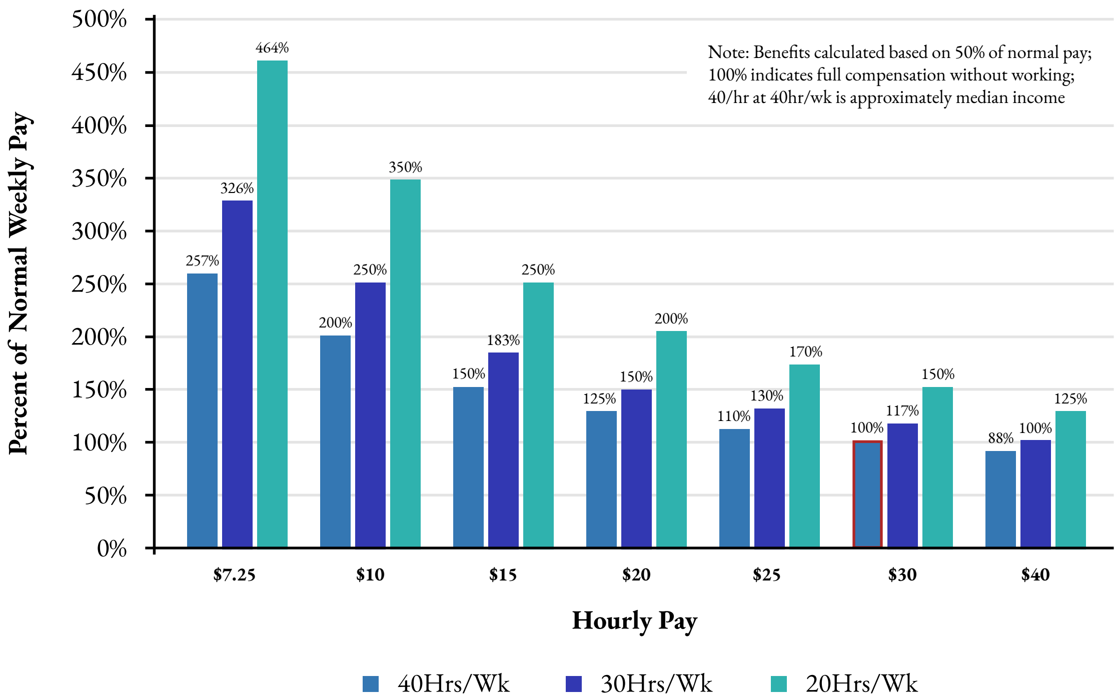
15 Figure 2 suggests that August employment increased 3 million more than it did in nearby months. This could occur, for example, from 2.3 million fewer people leaving employment for unemployment (Figure 4), and 0.7 million more people leaving unemployment for employment.

16 https://tobin.yale.edu/sites/default/files/files/C-19%20Articles/CARES-UI_identification_vF(1).pdf

17 More generally, the amount of a week's paycheck is not the same as the reward to working that week. The reward to work can be greater than the paycheck – perhaps by creating opportunities to work in subsequent weeks – or less than the paycheck due to childcare or commuting costs.

Figure 5 shows that many workers not only got paid as much for not working, but in some cases more than twice as much. This was especially true of workers who were not working 40 hours a week. Moreover, workers earning at or near minimum wage often could receive benefits well over twice the earnings they could make from returning to the job. Even the $300 weekly bonus puts many workers above replacement of wages from a 20- to 40-hour-a-week job.

Figure 5. Unemployment Benefits as a Percentage of Normal Pay, Assuming $600 Weekly Bonus



The Employment Effect of Restarting UI Bonuses

The directional effect of the unemployment bonus is clear: when you subsidize something, you get more of it. Extending the unemployment bonus will result in more unemployment and less employment. The bonus is a disincentive to find work and raises the cost for employers to create jobs because each employer must compete with the bonus as well as with other employers. The bonus is a subsidy to laying off workers because it reduces the gains from maintaining a worker-employer match.[18] As long as the PUA program is in place, the bonus is also a subsidy for quits.

Estimating the size of the effects from historical data is challenging because the $600 bonus is approximately twenty times the bonus paid in the 2009 Recovery Act and thereby well outside the range of historical experience. State unemployment systems have also been extraordinarily congested

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18 Topel, Robert H., "On Layoffs and Unemployment Insurance," *American Economic Review*, September 1983; Ratner, David, "Unemployment Experience Rating and Labor Market Dynamics," Federal Reserve Board of Governors, December 2013.

during the pandemic, well outside the range of historical experience. Acknowledging these challenges, earlier this year we estimated that continuing the $600 bonus through to the end of 2020 would reduce end-of-year employment at that time by about 10 million.[19] Continuing half the bonus would reduce employment about 5 million below what it would be with no bonus and about 5 million above what it would be with the full bonus.

Since then, we have seen the labor market evolve further while about half of the bonus expired. The latest labor-department data we have (October), which is three months after expiration, shows seasonally-adjusted employment increasing 3 million in the establishment survey and 6 million in the household survey. Of course, part of the increase would likely have occurred even if the full bonus had continued because the economy was recovering for other reasons, such as learning which activities might be resumed even before much of the population can resist infection from the novel coronavirus. On the other hand, the economy took a hit in September when parents would normally rely on schools for childcare during the workweek. Two studies suggest that this e-learning factor alone reduced employment by about one million already in September, especially among mothers.[20]

Thus, while our 10 million jobs forecast for the effect of the full bonus after six months (5 million for half bonus) is consistent with the observations, with the additional data (especially this report's Figure 2) a better summary of the findings is 6 to 10 million jobs (3 to 5 million for half bonus).

The CARES Act Was Overkill

A full recovery is likely undesirable, if not impossible, as long as COVID-19 remains a serious health concern. Even if full recovery—9 million more employed than shown in the October household survey—was the goal, taxpayer spending need not be so disproportionate and poorly targeted as it was in the CARES Act. Even at a profligate rate of $50,000 per job per quarter, that would be less than a $0.5 trillion package as compared to the CARES Act and the revised HEROES Bill each of more than $2 trillion. We knew that something was broken with the CARES Act when personal incomes experienced a record increase in Q2 even while production and labor incomes experienced record decreases.[21]

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19 https://committeetounleashprosperity.com/wp-content/uploads/2020/07/CTUP_SuspendingPayrollTax_Study.pdf

20 https://www.americanprogress.org/issues/women/reports/2020/10/30/492582/covid-19-sent-womens-workforce-progress-backward/ and https://www.nytimes.com/2020/10/29/upshot/mothers-leaving-jobs-pandemic.html. Both studies use the household survey.

21 https://www.newsweek.com/excessive-fiscal-covid-response-opinion-1525027

Conclusions

U.S. employment remains depressed, but as of November 2020 only about 5 percent, compared to estimates of about 20 percent for early May.[22] The labor market was depressed twice this much (about 10 percent) in early 2009 when a Democratic Congress and a Democratic president decided that a $25 weekly unemployment bonus was the right policy. Moreover, this time we are experiencing a V-shaped recovery with the end of the recession clearly in sight. The 2020 recession was due to a dangerous virus, against which multiple vaccines will soon be available as a result of the federal government's accelerated timetable. It would be counterproductive and wildly disproportionate to create even a $300 weekly bonus now. A $600 weekly bonus would discourage businesses from hiring and millions of individuals from working, making a full economic recovery very difficult to achieve.

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22 Bick, Alexander and Adam Blandin. "Real-time Labor Market Estimates during the 2020 Coronavirus Outbreak." November 20, 2020.

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