

Research Brief

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When unemployment insurance benefits are rolled back: Impacts on job finding and the recipients of the Pandemic Unemployment Assistance Program

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In response to the COVID-19 pandemic, Congress expanded unemployment insurance (UI) benefits in three ways. First, it increased the level of benefits through a \$600 and then a \$300 per week supplement. Second, it expanded the pool of workers who are eligible to receive UI via the Pandemic Unemployment Assistance (PUA) program. Third, it extended the duration of benefits. As the labor market recovers from the COVID-19 recession, policymakers and economists have debated whether generous UI benefits are holding workers back from returning to work.

All of these program expansions are scheduled to expire in September 2021. Beginning in May 2021, twenty-six states announced they would end these benefits early at the end of June 2021. These expirations will dramatically change the level of benefits workers receive. Whereas typical UI benefits replace roughly 50 percent of a worker's wages, with the \$300 supplement almost half of jobless workers (48 percent) receive as much or more in UI benefits than their prior wages ([Ganong et al. 2020](#)). Additionally, the PUA program has accounted for roughly 40 percent of total UI claims during the pandemic.¹ These benefits have been economically important insofar as they have boosted the spending of jobless workers ([Greig et al. 2021](#)).

This brief aims to answer two important policy questions central to this debate. First, to what extent have the UI supplements discouraged jobless workers from returning to work? Second, how well targeted and timely are PUA benefits in insuring against income losses? Answering these questions can help inform the potential economic impacts of ending these provisions. We summarize our key findings in this insight and describe our methodology in more detail in a companion technical note ([see Ganong et al. 2021a](#)). Future work by the Institute will continue to examine dynamics around UI and PUA later in 2021, including the effects of some states' early exit from federal benefits.

Key Findings and Implications

- **Evidence as of May 2021 suggests that UI supplements had an impact on job-finding of unemployed workers, but it was small.** This suggests that UI supplements were not holding back the labor market recovery in a very significant way or contributing to wage growth that has occurred at the bottom of the income distribution. We conclude that unemployment supplements have not been the key driver of the job-finding rate through mid-May 2021 and that U.S. policy was therefore successful in insuring income losses from unemployment with minimal impacts on employment.
- **PUA is successfully helping marginalized workers who experienced income losses similar to those suffered by traditional UI recipients.** With the rise of contingent work more generally, a program like PUA may be an increasingly important macroeconomic stabilizer, especially if, in a future recession, payments are delivered more quickly than they were during the COVID-19 recession. However, in the absence of a pandemic, design of any such future program ought to contemplate ways to ensure benefits insure against exogenous income shocks rather than offset income losses associated with a choice not to work.

Finding 1: Evidence as of May 2021 suggests that changes in UI recipients’ decision to return to work caused by UI supplements have been small relative to the fluctuations caused by other factors. To measure work disincentive effects we trace the share of UI beneficiaries we see exit the UI program over time as UI supplements change.² We focus on two policy changes: August 2020 when the \$600 supplements expired and January 2021 when \$300 supplements were reinstated.³ We are interested primarily in jobless workers exiting UI to new jobs—the job finding rate—rather than workers returning to their previous prior employers. This is because the decision to recall sits with the employer, so workers likely to be recalled face much different incentives to search for work. Additionally, although recalls accounted for 70 percent of UI exits in the summer of 2020, more recent UI exits are mostly to new jobs.

If UI supplements were a strong disincentive to looking for work, we would expect to see a sustained increase in the job finding rate when the \$600 benefit expired, and the larger the disincentive, the larger the increase in job finding. Conversely, we would expect to see a sustained decrease in the job finding rate in January when the \$300 benefits began.

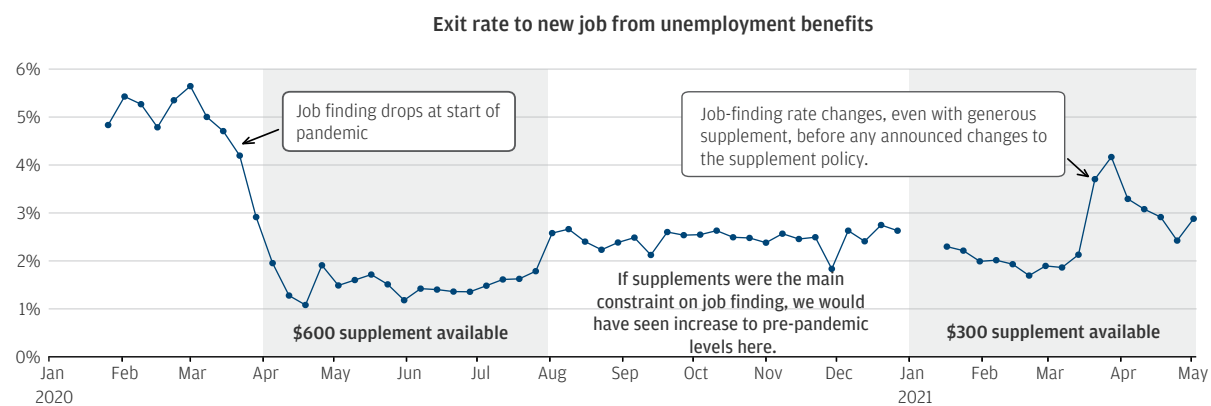
Prior to the pandemic in early 2020, in any given week roughly 5 percent of UI recipients exited to new jobs (Figure 1). In April 2020, the job finding rate dropped precipitously to below 2 percent as job losses mounted and stay at home orders came into effect at the start of the pandemic. In August 2020 after the expiration of the \$600 supplement, the job finding rate increased from 1.6 percent to 2.4 percent. In January, when the \$300 supplement is implemented, we observe the job finding rate decrease by roughly half a percentage point to 2 percent.

How should we interpret the magnitude of these work disincentive effects? On the one hand, one might view the changes in job finding in response to UI supplement changes (0.76 percentage point decrease at \$600 phase-out and 0.56 percentage point increase at \$300 phase-in) as large relative to the 2.4 percent job finding rate without the supplements observed during the fall of 2020.

On the other hand, macroeconomic, public health, and even perhaps UI administrative forces were likely playing a larger role than UI supplements in influencing the decision to work. The jumps in the job finding rate caused by the change in supplements are larger than the natural week-to-week variations in job finding—but the jumps are not much larger in an economic sense.⁴ Moreover, in addition to the more than 3 percentage point drop in the job finding rate at the beginning of the pandemic, the job finding rate did not return to its pre-pandemic level of greater than 5 percent when the supplement was removed in August of 2020. It remained at 2.4 percent.

In March and April of 2021, the job finding rate increased temporarily to about 4 percent before any announced changes in UI policy at the state or federal level. Many factors may be contributing to this increase, including increased [job openings](#), [vaccination rates](#), and availability of childcare and in-person school. However, given the enormous surge in UI claims a year prior in March and April of 2020, this is also the time when some UI recipients are reaching the end of their benefit year and must reapply in order to continue receiving benefits. Evidence from California suggests this 52-week benefit mark is generating a significant number of excess exits ([Bell et al. 2021](#)).

Figure 1: The job finding rate changes modestly when UI supplements change.



Note: The exit rate measured is the fraction of UI recipients who cease receiving UI benefits in the given week but did not return to a previous employer. Because the vast majority of people on UI entered unemployment since the beginning of the pandemic, and none of those workers have exhausted their benefits in the sample period, we assume that anyone exiting UI did not voluntarily quit UI and thus must have found employment. A temporary lapse in federal benefits means that true exits are not accurately measured in the weeks beginning January 3 and January 10, so these weeks are omitted. Certain states, such as California, required some workers on UI to re-apply after 52 weeks of benefits. This reapplication process was not always seamless, and evidence suggests it caused some portion of the spike in exits ([Bell et al. 2021](#)).

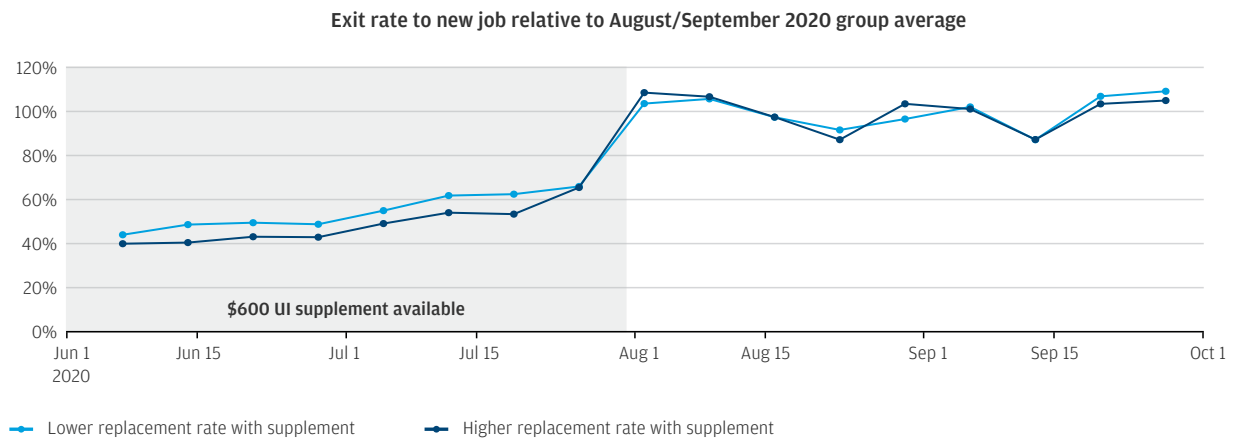
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In Figures 2 and 3, we further examine the disincentive effects of UI supplements by separating our sample into two groups: workers with above median income replacement rates with the supplement (i.e. lower wage workers) and workers with below median income replacement rates with the supplements (i.e. higher wage workers). If work disincentive effects from UI supplements exist they should be stronger for the group who is “more treated” by the policy. In other words, we should observe larger changes in the job finding rate for lower-wage workers for whom the supplements represented a larger proportional benefit increase. To facilitate comparison between the two groups, we normalize the job-finding rate by the time period where the supplement is not available and both groups have similar replacement rates.

We observe three notable trends. First, when supplements are in effect (shaded parts of the graphs), the job finding rate is slightly lower among workers with higher UI replacement rates. Second, when supplement policies change (moving from shaded to unshaded parts of the graph and vice-versa), the job finding rate changes more among workers with a higher UI replacement rate—it increases more when supplements are removed (Figure 2) and decreases more when supplements are reinstated (right chart). Third, in March and April of 2021 (Figure 3), the job finding rate increases dramatically but temporarily for both low-and high-replacement workers. Jobs reports and other indicators posted very strong job gains and job openings during this period, and many states faced some difficulty renewing UI payments for workers who had been receiving benefits for 52 weeks. Importantly, the fluctuations in UI exit rates for both groups in April 2021—when no changes to the supplement had been announced—are much larger than the differential changes between the two groups when supplement policy changes do occur.

Figure 2: Before the \$600 UI supplements expired, the job finding rate is lower for workers for whom the supplements represented a larger proportional benefit increase change.

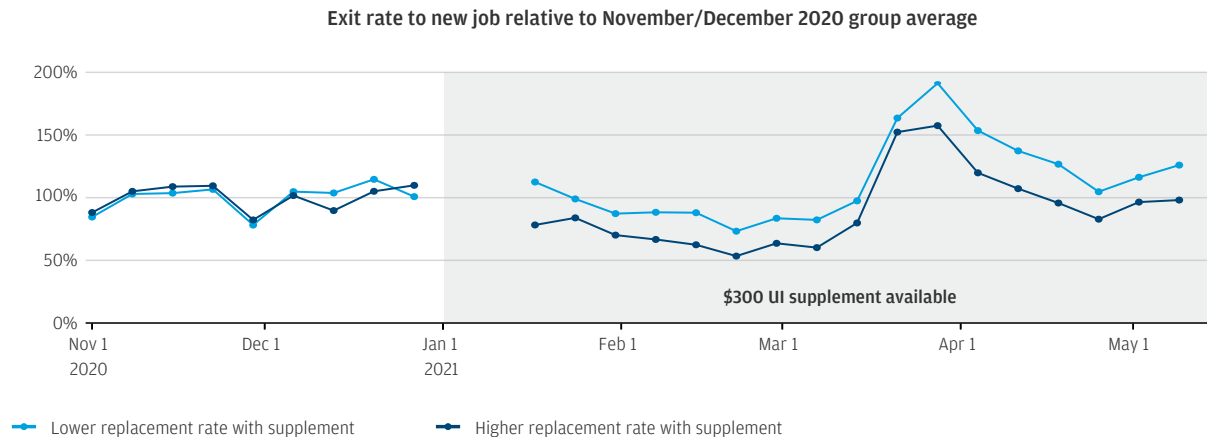


Note: The exit rate measured is the fraction of UI recipients who cease receiving UI benefits in the given week but did not return to a previous employer. Because the vast majority of people on UI entered unemployment since the beginning of the pandemic, and none of those workers have exhausted their benefits in the sample period, we assume that anyone exiting UI did not voluntarily quit UI and thus must have found employment. A temporary lapse in federal benefits means that true exits are not accurately measured in the weeks beginning January 3 and January 10, so these weeks are omitted. The data is normalized relative to the mean weekly exit rate to a new job of every week in August and September.

Source: JPMorgan Chase Institute

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Figure 3: Once the \$300 UI supplements took effect, the job finding rate was persistently lower for workers for whom the supplements represented a larger proportional benefit increase.



Note: The exit rate measured is the fraction of UI recipients who cease receiving UI benefits in the given week but did not return to a previous employer. Because the vast majority of people on UI entered unemployment since the beginning of the pandemic, and none of those workers have exhausted their benefits in the sample period, we assume that anyone exiting UI did not voluntarily quit UI and thus must have found employment. A temporary lapse in federal benefits means that true exits are not accurately measured in the weeks beginning January 3 and January 10, so these weeks are omitted. Certain states, such as California, required some workers on UI to re-apply after 52 weeks of benefits. This reapplication process was not always seamless, and evidence suggests it caused some portion of the spike in exits (Bell et al. 2021). The data is normalized relative to the mean weekly exit rate to a new job of every week in November and December.

Source: JPMorgan Chase Institute

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In sum, we find evidence of a modest job search disincentive. The job finding rate fell by roughly 4 percentage points at the beginning of the pandemic. By comparison, our research designs suggest that the UI supplements decreased the new job finding rate by 0.6 to 1.1 percentage points.⁵ This in turn implies low effects of the supplements on employment: the \$600 supplement reduced employment by less than 0.8 percent and the \$300 supplement reduced employment by less than 0.5 percent.

In addition, exit rates rose by 1 to 2 percentage points in March and April, while the \$300 supplement was in effect, in what was likely a response to increased job openings, vaccination rates, in-person school and childcare, but also a bulge in UI recipients needing to reapply for UI at the end of 52 weeks of benefits. This suggests that UI supplements were not holding back the labor market recovery in a very significant way or contributing to wage growth that has occurred at the bottom of the income distribution.⁶ We conclude that unemployment supplements have not been the key driver of the job-finding rate through mid-May 2021 and that U.S. policy was therefore successful in insuring income losses from unemployment with minimal impacts on employment.

We have previously documented that our estimates of the causal effect of benefits increases on UI exit rates during the pandemic are much smaller than pre-pandemic estimates from prior studies (Ganong et al. 2021b). There are four classes of explanations. First, the fact that recalls make up a large share of exits during this time period implies that some workers may be waiting to be recalled to their old jobs, and so their search for new jobs may be less impacted by financial incentives. This force may be weaker while the \$300 supplement is in place than when the \$600 is in place because the recall rate is lower during this time period. Second, prior research finds that the distortion is likely to be smallest in a recession, perhaps because labor demand is low (Landais, Michaillat, and Saez 2018; Mercan, Schoefer, and Sedláek 2020; Kroft and Notowidigdo 2016). Third, the pandemic may reduce job search above and beyond a normal recession, perhaps because it is difficult to search for a job during a public health emergency, or because employers who are recruiting may be doing so for positions with above-average health risk, or finally because school and daycare closures mean that some workers are unable to accept new jobs due to childcare responsibilities. Fourth, Chetty (2008) documents much smaller causal impacts of UI benefits on exit rates among benefit recipients who are not liquidity constrained. Because the \$600 supplement was large enough to bring nearly every recipient off their liquidity constraint by itself, and most workers also received three rounds of stimulus payments, the job-finding response may be more similar to the response previously estimated for recipients who are not liquidity constrained. We do not attempt to distinguish between these four hypotheses in this insight. Why work disincentive effects are so low through mid-May 2021 and whether they will remain low warrants further study.

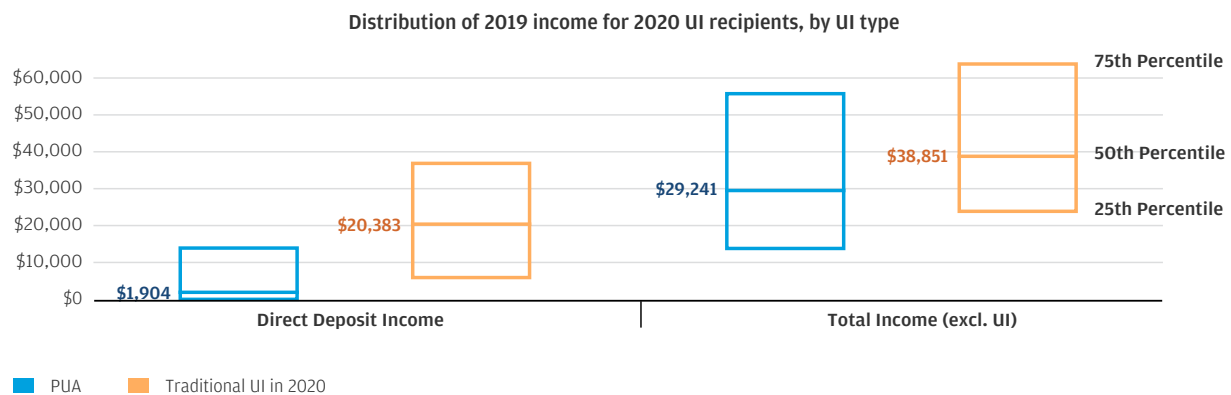
Next we turn our second policy question: how well targeted and timely are PUA benefits in insuring against income losses?

Finding 2: PUA is more likely to cover workers at the margins of the labor market: PUA recipients have lower income and are slightly younger than regular UI recipients. While the \$300 and \$600 supplements made benefits more generous, PUA was specifically targeted at workers who aren't already covered by traditional UI, such as self-employed workers and those with a limited work history. We use JPMorgan Chase Institute data to describe the characteristics of people covered by PUA as compared to those who received traditional UI.⁷

We find in Figure 4 that PUA recipients had substantially less direct deposit payroll income in 2019, and the median PUA recipient's total income (payroll direct deposit, cash, checks, and other inflows besides UI and transfers) was only 75 percent of the median UI recipient's. This suggests that PUA recipients were much more likely to be self-employed or otherwise receiving income that did not look like traditional payroll income.

PUA recipients are also more likely to be younger, especially under age 25. Figure 5 shows the age distributions of primary account holders who received PUA in 2020 in orange versus those who received traditional UI (blue). The modal PUA recipient is about 20 years old while the modal UI recipient is almost 30 years old. The mass of young PUA recipients may either be because young workers don't have the work history necessary to qualify for traditional UI or because younger workers are more likely to work in occupations, industries, or work arrangements that don't qualify for UI. For example, PUA may have played an important role in supporting students who, during the pandemic, may have continued to matriculate virtually and thus incur tuition costs without offsetting income from campus jobs.

Figure 4: PUA recipients had roughly 25 percent lower pre-pandemic income than regular UI recipients.

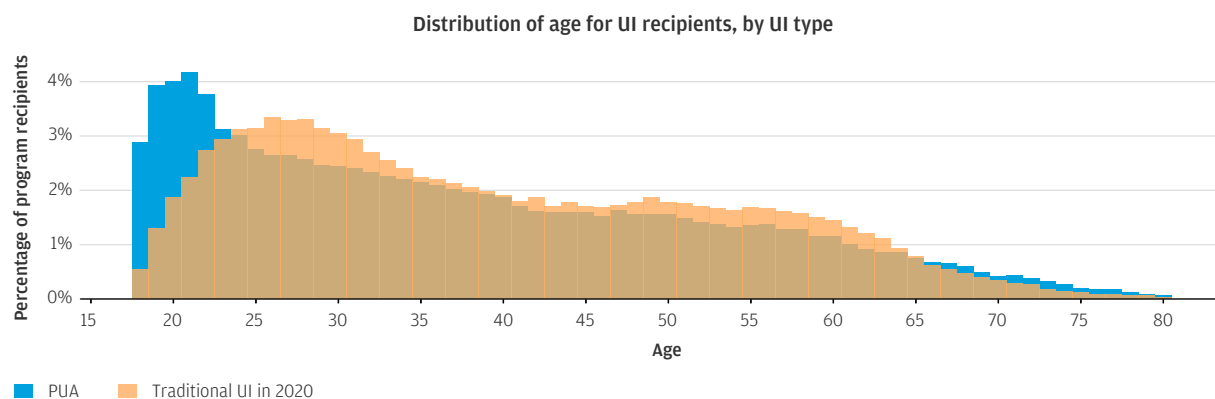


Note: Total income includes all inflows into checking account excluding UI payments themselves. Sample includes those who received any UI or PUA payments in 2020.

Source: JPMorgan Chase Institute

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Figure 5: PUA recipients have lower incomes and are younger than regular UI recipients.



Note: Distribution of age for UI and PUA recipients in 2020. Recipients include those who had age information associated with an account in January of 2020 and those who received any UI or PUA payments in 2020.

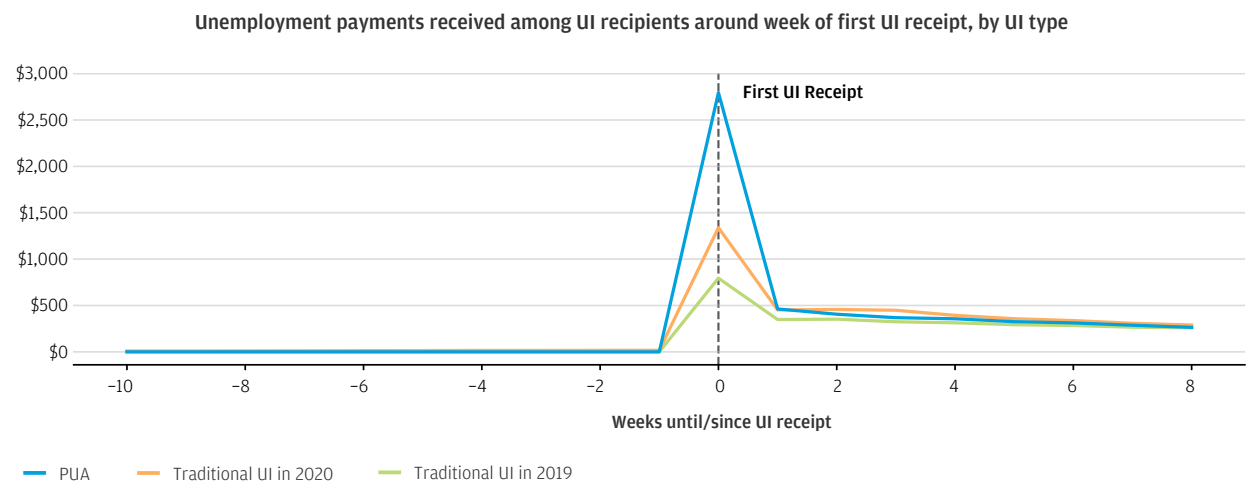
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Finding 3: PUA appears to insure workers against lost income to a similar extent as traditional UI, but workers receive PUA funds much later after applying for them. Another core question surrounding the PUA program is how well targeted and timely PUA benefits are and whether they insure against income losses. PUA is meant to insure income losses for workers who don't qualify for traditional UI specifically because they are self-employed or have limited work histories.

We begin in Figure 6 by documenting workers' benefit deposits around the first week of benefit receipt. Deposits for PUA recipients are represented by the blue line while workers who received regular UI benefits in 2020 or 2019 are represented by the orange and green lines respectively. The most important feature of this figure is the spike in benefits at time zero, the first week of benefit receipt. By comparing the size of the spike in week zero to the steady-state payments after week one, we can infer how much back pay each worker received in their first benefit payment, indicating how many weeks the worker waited to receive their first payment. In 2019 when the UI system was not overloaded, delays were fairly short, and workers' first UI checks contained roughly two weeks' worth of payments. In 2020 when the UI system was heavily burdened, initial checks had about three weeks' worth of payments. In contrast, the PUA system, a new program created by the CARES Act, had much larger initial payments corresponding to delays of six or seven weeks' worth of payments.

[Farrell et al. \(2020\)](#) previously documented that delays in UI payments created economic hardship for the recipients: workers who had to wait a month longer for their benefits cut spending by 10 percentage points more than workers who waited less than a month. Delays in UI payments also makes it difficult to know exactly when the worker experienced job loss and the magnitude of their income loss. In fact, by the time they got their PUA payments, some PUA recipients may have already returned to work.

Figure 6: PUA recipients received much larger initial UI benefit payments than regular UI recipients, indicating much longer delays in benefit receipt.



Note: Average weekly unemployment payments for UI recipients in 2019 and 2020 and PUA recipients in 2020. Recipients include those who received any UI payments in or after April 2019 and those who received any UI or PUA payments in 2020.

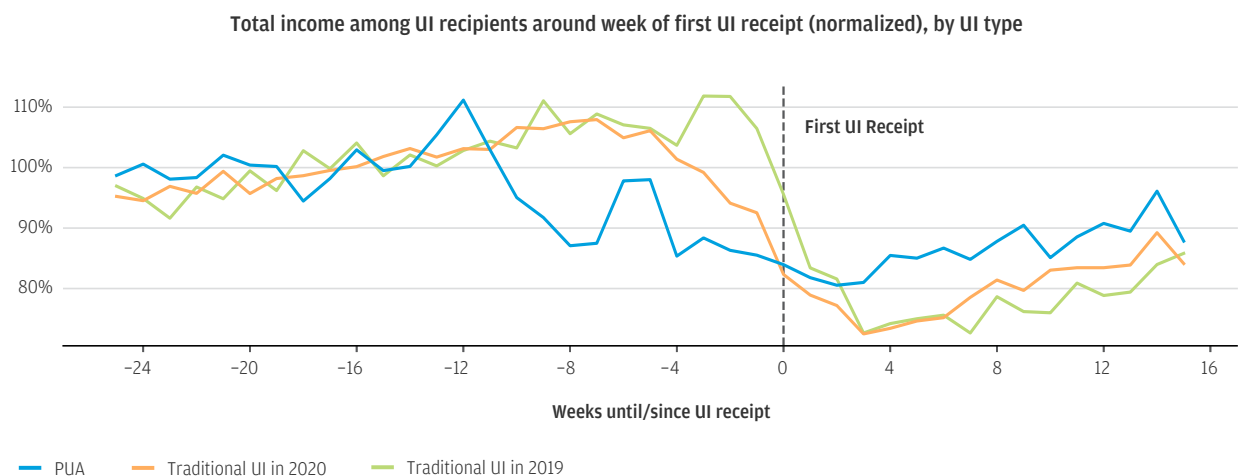
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Notwithstanding these measurement challenges, we next focus on workers' income right before they began receiving benefits. Figure 7 shows the change in workers' total income (excluding UI benefits) around the time of first benefit receipt. For 2019 UI recipients, we see a sharp 30 percent drop of income right before they get their first UI payment. This lines up with workers losing their income one or two weeks before their first UI payment. In 2020, when UI payments were more likely to be delayed, we again see a 30 percent drop in income but the drop is not as sudden because some workers were laid off four weeks before their first UI payment, some three weeks before, and so on.

PUA recipients' income drops about 20 percent from peak to trough, but there is no steep drop off as with the UI recipients. This is what we would expect if some workers experienced their income loss six, seven, or eight weeks before benefit receipt, which in the aggregate creates a much more gradual decline in income. Moreover, if some workers returned to work before receiving their first benefits, this would effectively hide the total extent of their income loss when using this method. Despite these various measurement problems, the data suggest that PUA is in fact compensating recipients for their income loss.

Figure 7: PUA recipients have income losses roughly similar in magnitude to those experienced by regular UI recipients.



Note: Average weekly total income excluding unemployment payments for UI recipients in 2019 and 2020 and PUA recipients in 2020. Weekly time-series is normalized by the average of total income from week -25 through week -9. Recipients include those who received any UI payments in or after April 2019 and those who received any UI or PUA payments in 2020.

Source: JPMorgan Chase Institute

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In addition to the larger delays in PUA benefits, a number of other factors make it difficult to compare and interpret the income losses of PUA recipients relative to regular UI recipients. First, for PUA recipients, income loss could reflect a choice not to work. From bank account data it is impossible to distinguish between a self-employed worker who cannot find work and a worker who has chosen to stop working, perhaps due to the public health risk. In the latter case, the income loss is endogenous; it follows from the worker's own decision not to work. However, because of the nature of the pandemic, compensating workers for this income loss may still have been socially beneficial as a way to reduce the spread of the COVID-19 virus.

Second, PUA workers may also be more likely to be paid via cash and other channels that are unobservable in our data if the worker does not deposit these funds into her bank account. If the cash-based income stream decreases, we might not observe that and thus understate the income losses suffered by PUA recipients. Third, recognizing that our unit of analysis is the household, independent or contingent work may represent a secondary source of income for the household, possibly offset by other income streams or another worker in the household (Farrell et al. 2018).

In summary, we find that PUA is successfully targeting income supports to more marginalized workers— younger and lower-income workers. PUA recipients do experience income losses roughly similar to the losses experienced by UI recipients. However, there were significant delays in PUA payments as states administered this new program. With the rise of contingent work more generally (Jackson et al. 2017), a program like PUA may be an increasingly important macroeconomic stabilizer, especially if, during a future recession, payments are delivered more quickly than was the case during the COVID-19 recession. However, in the absence of a pandemic, design of any such future program ought to contemplate ways to ensure benefits insure against exogenous income shocks rather than offset income losses associated with a choice not to work.

Figure Explanation

Figure 1: Exit rate to new job from unemployment benefits

A line plot showing the weekly exit rate to new jobs from unemployment insurance for the time period from January 2020 through the beginning of May 2021. The exit rate hovers around 5 percent until April 2020. At that point the exit rate when it plunges to about 1.5 percent and the \$600 supplement becomes available. The exit rate stays at about 1.5 percent until the beginning of August 2020 when the \$600 supplement expires, after which the exit rate rises to about 2.5 percent and holds there until the end of 2021. In January 2021 the \$300 becomes available and the exit rate drops to about 2 percent by February and holds there until mid-March. At that point, the exit rate spikes to about 4 percent, though the \$300 supplement is still available. The exit rate declines slowly after the spike to just under 3 percent at the beginning of May 2021.

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Figure 2: Exit rate to new job relative to August/September group average

The figure shows a line plot of the weekly exit rate to new jobs from June 2020 through September 2020 for two groups. The first group is those workers whose unemployment replacement rate was higher than the sample median. The second group is workers who had a lower than median replacement rate. Each group's weekly exit rate is divided by the groups average exit rate across August and September 2020, so that the time series for each group during August and September is centered on 100 percent. At the beginning of June, the relative exit rate for the high replacement group is 40 percent; for the low replacement group it is about 45 percent. Both group's relative exit rate increases through the middle of July, about 55 percent for high replacement workers and 62 percent for low replacement workers. Both groups have a relative exit rate of about 63 in the last week of July. After the \$600 supplement expires at the end of July, each group's relative exit rate jumps to just over 100 percent. Through the rest of August and September, the rates fluctuate very close to one another around 100 percent.

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Figure 3: Exit rate to new job relative to November/December group average

The figure shows a line plot of the weekly exit rate to new jobs from November 2020 through mid-May 2021 for two groups. The first group is those workers whose unemployment replacement rate was higher than the sample median. The second group is workers who had a lower than median replacement rate. Each group's weekly exit rate is divided by the groups average exit rate across November and December 2020, so that the time series for each group during November and December is centered on 100 percent. For both groups, the relative exit rate fluctuates around 100 percent until the end of 2020. At the beginning of 2021, the \$300 supplement becomes available, at which point the relative exit rate of the high replacement rate group drops to about 75 percent while the rate of the low replacement rate group stays at about 107 percent. The rates for both groups decrease roughly in parallel through the third week of February to about 51 percent for the high replacement group and 75 percent for the low replacement group. After this, the rates start to increase, again in parallel, through mid-March, after which they jump for both groups. The high replacement group has a relative exit rate of 150 percent and the low replacement group has a rate of about 175 percent. The rates then decrease, again in parallel, until the end of April: about 85 percent for the high replacement group and 101 percent for the low replacement group.

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Figure 4: Distribution of 2019 income for 2020 unemployment recipients, by unemployment type

	Direct deposit income		Total income (excluding UI)	
	PUA	Traditional UI in 2020	PUA	Traditional UI in 2020
75th percentile	\$13,899	\$36,857	\$55,749	\$63,795
50th percentile	\$1,904	\$20,383	\$29,241	\$38,851
25th percentile	\$0	\$5,904	\$13,791	\$23,860

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Figure 5: Distribution of age for unemployment recipients, by unemployment type

Figure shows two histograms overlaid on one another. The first histogram shows the distribution of ages for PUA recipients. Each bar shows what fraction of the group has a given age in January 2020. It starts high for people 18 years old, just under 3 percent, and peaks at the late teens and early twenties, around 4 percent. It falls to 3 percent for age 23 and then steadily declines to zero at around age 80. The second histogram shows the distribution of ages for traditional unemployment insurance recipients in 2020. It starts low for people at age 18, around 0.5 percent and increases rapidly, equalizing with the PUA histogram at about age 23 at 3 percent and continuing to increase slightly until age 26 and 27, which are about 3.25 percent of the group. It then decreases slowly to about 1.75 percent around age 40 where it holds steady until age 55, where it slowly drops to 0.75 percent at age 65, which is below the PUA histogram. From there, it decreases steadily to 0 at age 80.

[View chart version](#)

Figure 6: Unemployment payments around week of first UI receipt, by unemployment type

Figure shows line plots for three groups: PUA recipients, traditional UI recipients in 2020, and traditional UI recipients in 2019. The y-axis shows how much in benefits the average recipient received of their respective benefits in a given week. The x-axis shows the weeks relative to the first week a person received benefits. Week 0 is the first week a person receives benefits, week -5 is 5 weeks before, week 5 is five weeks after. All three lines show \$0 in benefits from week -10 through week -1. For UI in 2019, the benefits spike to about \$750 in week 0, and then go to about \$400 in week 1, and steadily fall to about \$250 in week 8. For UI in 2020, benefits spike to about \$1,300 in week 0, then fall to \$500 in week 1, and steadily decline to \$250 in week 8. For PUA recipients, benefits spike to about \$2,750 in week 0, then fall to \$500 in week 1, and steadily decline to \$250 in week 8.

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Figure 7: Total income around week of first UI receipt (normalized), by unemployment type

Figure shows line plots for three groups: PUA recipients, traditional UI recipients in 2020, and traditional UI recipients in 2019. The x-axis shows the weeks relative to the first week a person received benefits. Week 0 is the first week a person receives benefits, week -5 is 5 weeks before, week 5 is five weeks after. The y-axis shows the average weekly total income excluding unemployment insurance payments divided by the average payments from week -25 through week -9.

For 2019 UI recipients, income increases steadily from about 95 percent in week -25 to 110 percent in week -2. From there income falls sharply to 73 percent in week 3, after which it steadily climbs to about 85 percent in week 15.

For 2020 UI recipients, income increases steadily from about 95 percent in week -25 to about 105 percent in week -5, after which income falls to 73 percent in week 3. It then increases steadily to about 85 percent in week 15.

For PUA, income increases steadily from about 100 percent in week -25 to about 110 percent in week -13. From there, income falls precipitously to about 87 percent in week -8 and then more slowly falls to 81 percent in week -3. From there it increases to about 90 percent in week 15.

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Endnotes

- 1 See Department of Labor statistics, <https://oui.doleta.gov/unemploy/docs/allprograms.xlsx>
- 2 Our sample for Finding 1 includes data on individuals in JPMorgan Chase Institute data from ten states between January 2020 and May 2021. See [technical note](#) for additional details.
- 3 Although there was a temporary “Lost Wages Assistance” supplement paid for weeks claimed in August 2020, it was paid with substantial delay and haphazard implementation. In our prior paper we found little effect of this supplement (Ganong et al. 2021b).
- 4 We document the magnitude of these fluctuations in more detail in our [technical note](#).
- 5 See Section 4 of [technical note](#) for additional details.
- 6 When workers are not available at a given wage, employers increase the wages they offer in order to fill job vacancies. If the UI supplements were keeping workers from filing vacancies, that may have induced employers to raise their wages. However, because we do not see large job finding effects from the supplements, they are probably not contributing significantly to observed wage growth.
- 7 We are able to distinguish between PUA and UI payments in six states: Ohio (45.3 percent of sample), New Jersey (47.6), Massachusetts (3.6), West Virginia (3.2), Arkansas (0.3) and Vermont (0.2). In these states, we have 288,780 people who we observe receive UI or PUA in 2020. Of these customers, we have 2019 income data for 275,172 (Figure 4) and age data for 271,521 (Figure 5). For Figures 6 and 7 we also include 21,541 people who received UI in 2019.

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