

Re-employment, Recall, and Industry Transitions During the COVID-19 Pandemic

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SUMMARY

This policy brief provides new insights about how many previously unemployed Californians have found employment and the extent to which workers have been transferring into new industries during the pandemic. To help assess the current state of the economy, the report tracks the number of Californians entering the Unemployment Insurance (UI) system—both those filing claims for the first time ("new initial claims") and those who are re-opening old claims after having returned to work ("additional claims")—and the total stock of claimants receiving UI benefits. This brief is based on California Unemployment Insurance claims data from before the pandemic began through October 16th, 2021.

The first part of this policy brief focuses on initial claims for UI benefits from claimants residing in California, including Pandemic Unemployment Assistance (PUA) claims, the federal program that expanded eligibility for people who do not qualify for regular UI benefits. We also analyze the number of continuing claims being paid to Californians each week and discuss how both these measures have changed since the expiration of federal pandemic UI programs in September 2021. The second part focuses on the rate at which UI claimants were either recalled to their prior employers or found employment with new companies a year after they first filed for unemployment. The report also includes a new analysis of how workers have reallocated across industries in California and sheds some light on how the California economy is changing in response to the pandemic.

This research is based on a partnership between the Labor Market Information Division of the California Employment Development Department and the California Policy Lab, a nonpartisan research center at the University of California, with sites at the UCLA and Berkeley campuses.

Key Insights from March 2020 to Oct 2021:

- The number of individuals filing initial claims for UI benefits and the number of claimants receiving UI benefits is at the lowest point since the start of the pandemic in March 2020. While the number of initial claims remains elevated compared to the expansionary period prior to the pandemic, about 47% of these claims represent additional claims of UI claimants that had found work but reopened a claim, likely reflecting the ongoing uncertainty in the labor market. The number of individuals receiving benefits in the week of October 5th was similar to the number before the start of the crisis, though this is partly a result of the September UI expirations.
- Re-employment rates in the year since the start of the pandemic have steadily increased, but in particular for lower educated workers remain lower than the prepandemic expansion period. 57% of workers who were fully separated from their employer at the beginning of the crisis (in Q2 2020) were employed one year later, in Q2, 2021. In comparison, 71% of people who claimed UI before the pandemic (in Q4 2018) were re-employed within a year. Claimants with a high school degree or less appear to be driving this pattern. It is important to keep in mind that these periods are in different parts of the business cycle, with the pre-pandemic period being the longest economic expansion in U.S. history.
- Recall has been high, particularly as a share of those re-employed. The percentage of all claimants (independent of whether reemployed or not) who were recalled to their previous employer within a year of separation was 34%, as compared to 31% prior to the pandemic. Out of only those claimants who were re-employed at any job a year after a job separation at the beginning of the pandemic in Q1 2020, an impressive 59% have returned to work for their previous employer in Q2, 2021, compared to 43% over a corresponding time period prior to the pandemic.
- Re-employment and recall in Q2 2021 was unevenly distributed among UI claimants. Black workers, younger workers, lower-educated workers, men, and workers in the Administrative & Support and Food Service industries were less likely to be re-employed and less likely to be recalled to their previous employer. Re-employment and recall were less common in more urban counties in the state, and more common in counties with higher incomes and higher rates of broadband access.

- The rate of industry transitions has been lower during the pandemic. During the pandemic, 68% of people who were employed a year after being separated were employed in the same industry, compared to 62% before the pandemic. Similar to elevated rates of recall, this finding could reflect the temporary nature of the layoffs during the lockdowns at the beginning of the pandemic.
- The rate of industry transitions has varied across demographic groups. Older workers had lower rates of industry transitions possibly reflecting specialization in industry-specific skills that make it difficult to change industries. Similarly, less educated workers have lower transition rates across industries, possibly reflecting the importance of education in adapting to new fields.
- Industry transitions are sometimes characterized by moves across industries with similar skills. The top destination for claimants from Accommodation & Food Services was Retail Trade and the top destination for Professional, Science, and Technology claimants was Information. The fact that workers from the hardest hit sectors in the pandemic typically find jobs in those same sectors may be hindering the path to recovery, especially for low-wage workers.

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The first policy brief in this series was published on April 29, 2020. Administrative data sources such as these sometimes get revised, and the numbers in this policy brief should be taken as preliminary.

Initial UI Claims Have Dropped Substantially, But Remain Elevated

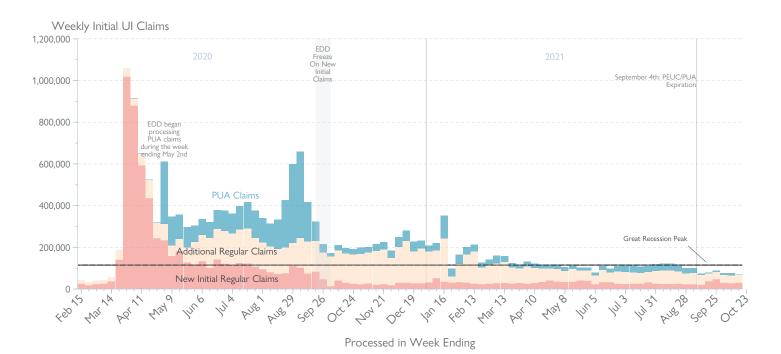
Californians filed an average of 79,143 initial claims for Unemployment Insurance (UI) in each of the four weeks from September 25th to October 16th, the lowest four-week average seen since the start of the crisis in March 2020. This is a substantial decrease relative to the 142,003 average weekly initial claims filed during March 2021. Despite this decrease, weekly initial claims are still higher than before the pandemic shutdowns. For example, 40,332 people filed initial claims in the last three weeks of February 2020.

As noted in past UI reports, a large share of initial claims in California is due to additional claims (see CPL's June 2021UI Report). In the four weeks from September 25th to October 16th, 47% of initial claims were additional claims. Additional claims can occur when workers that had received UI and found

a job lose that job or have their hours reduced and reopen a UI claim. The ongoing role of additional claims likely reflects the continued economic uncertainty facing many businesses due to the pandemic.

Initial claims for Pandemic Unemployment Assistance (PUA) have dropped substantially since early September 2021, when the PUA program expired, as illustrated in Figure 1. Initial claims for PUA could still be submitted after the expiration if the claim was for unemployment experienced before the September expiration. In the four weeks before the expiration, an average of 27,744 people were applying for PUA each week, but in the four weeks after the expiration only 6,697 people applied for PUA.

FIGURE 1: Weekly Initial UI Claims (including PUA) During the COVID-19 Crisis in California (2/15/2020 - 10/16/2021)



Notes: X-axis labels correspond to Saturdays. New Initial Regular Claims includes new initial claims for regular state UI. Additional Regular Claims includes additional claims for regular state UI and additional claims for extension programs. (DOL does not include additional claims for extension programs in their initial claims numbers, only additional claims for regular UI.) This figure does not include transitional claims, as DOL does not include them in their headline initial claim number nor do they represent flows into the UI system.

Individuals Receiving Benefits 6,000,000 Dec 26th: PEUC/PUA Temporarily Expire Sept 4th: PEUC/PUA Expire __ 5,000,000 Sept 11th: Extended Benefits Expire PUA (Expiring) 4,000,000 3.000.000 2,000,000 Regular UI EB (Expiring) Continuing) PEUC (Expiring) 1,000,000 Week of Unemployment

FIGURE 2: Total Number of Individuals Paid Benefits by Week of Unemployment (All Programs Stacked)

Notes: X-axis labels correspond to Saturdays. Data has been adjusted to account for delays in processing and retroactive claims

Figure 1 illustrates that when the PUA program expired, there was an increase in the number of people filing claims for regular UI. In the four weeks before the PUA expiration, there were 23,075 people per week filing initial claims for regular UI, but after the expiration there were on average 34,142 people per week submitting regular UI claims, potentially indicating that people who would have submitted PUA claims were instead switching to regular UI.

Despite the gradual improvements in the economy and the decline in initial claims both in California and nationwide, initial claims are still elevated compared to the pre-pandemic period, suggesting that the experience of workers in the current labor market continues to be fraught with challenges.

Analysis of Continuing Claims

In this section, we report original estimates of the total number of individuals receiving UI benefits based on the week in which they experienced unemployment (see appendix for measurement details). This measure is shown for all programs in Figure 2 (Regular UI, PUA, PEUC Extensions, and FED-ED Extensions). Because we do not observe certifications until

they are processed, we present this series with a censoring adjustment based on recent lag patterns. Intuitively, we cannot directly count the number of claimants who were unemployed in recent weeks because many certifications for these weeks have yet to be processed (or potentially even submitted). The censoring adjustment inflates recent weeks' counts of unemployed claimants by the percent of processed certifications that have typically trickled in at later dates. However, our censoring adjustment does not attempt to adjust for irregular delays in the processing of claims.

We estimate that 329,000 individuals were paid benefits for unemployment experienced during the week ending October 5th (the last week this can be measured in our data given typical processing lags). This is the lowest number of individuals receiving UI benefits since the start of the crisis. It is of similar magnitude as in the weeks leading up to the crisis, when on average 358,000 individuals received regular UI benefits (for the weeks from 2/8/20 to 2/29/20). Figure 2 shows that in the fourteen weeks from June 5th, 2021 (week ending June 5th) to September 4th, the total number of workers receiving regular UI benefits fell slightly from 2.87 million to 2.69 million.

Figure 2 also illustrates the impact of the federal UI program expiring in early September. The pandemic UI extension programs (PEUC and PUA) expired on September 4th, and the Extended Benefits program (EB) expired in California on September 11th, and the only program currently available is the regular state UI program. As a result, the total number of claimants fell substantially from 2.69 million during the week before September 4th to 406,000 the week after September 11th. The figure also highlights the efforts that the CA Employment Development Department took to automatically transition eligible claimants from the PEUC program, which ended September 4th, to the EB program, which ended the 11th.² In total, we estimate that these efforts provided over 400,000 Californians with an additional week of UI benefits. With an average weekly benefit amount of around \$300, a back of the envelope calculation suggests that about \$120 million dollars were paid out to those claimants for that week.

An important consideration for future work will be assessing to what extent and how quickly claimants who lost benefits because of the federal programs expiring subsequently found new employment. Administrative data that can track these specific claimants will be available in future quarters.

How Recall and Re-employment Changed During the Pandemic

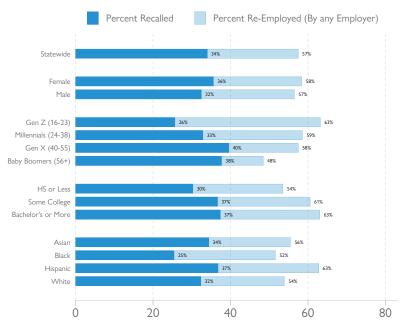
Figures 3 and 4 and Table 1 shows that of the two million claimants who entered the UI system during the second quarter of 2020 and who were "fully separated" from their employers (meaning they did not report any earnings in their first week of certifying for benefits), 57% were employed four quarters later in Q2 2021, and 34% had been recalled to a prior employer. Among those that had found re-employment, the percent recalled to a prior employer was 59%.

Compared to before the pandemic, re-employment after four quarters is substantially lower. In contrast, the rate of recall among those claimants that were re-employed is substantially higher. For claimants who entered the UI system in Q4 2018, 71% were re-employed four quarters later in Q4 2019 and 31% had been recalled to a prior employer. Among those who were re-employed only 43% were recalled to a previous employer. The high rate of recall suggests that workers and firms have maintained ties during the job separations of the pandemic. Below, we see that this was especially true for workers with some college education or more, and less true for workers with lower formal education.

Additionally, Figure 5 shows the time path of re-employment. The time path of re-employment was different between the pandemic and pre-pandemic periods. During the pandemic, 51% of separated workers were re-employed within a quarter of being laid off, but before the pandemic, only 46% were re-employed a quarter later. However, before the pandemic re-employment increased faster than during the pandemic. Appendix Figure A2 shows this path by education groups and shows that people with a high school degree or less are largely responsible for this pattern. They had much higher re-employment rates after one quarter during the pandemic than before it, but that rate plateaued after the first quarter.

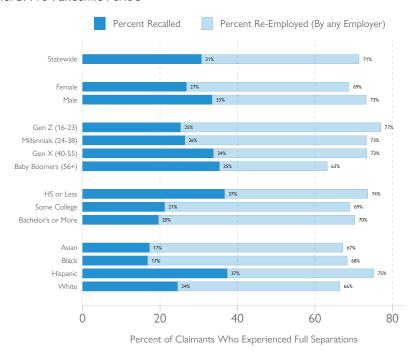
FIGURE 3: Recall and Re-employment Rates by Demographic Groups

Panel A: Pandemic Period



Percent of Claimants Who Experienced Full Separations

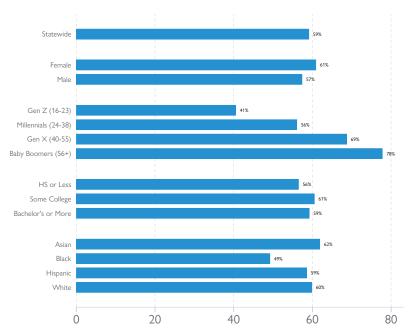
Panel B: Pre-Pandemic Period



Panel A Notes: The denominator for each bar includes all regular UI claimants from that demographic group who filed a UI claim during the 2nd quarter of 2020. The numerator consists of the subset of those claimants who had found any type of employment a year later, and those who became re-employed by their separating employer. Panel B Notes: The denominator for each bar includes all regular UI claimants from that demographic group who filed a UI claim during the 4th quarter of 2018. The numerator consists of the subset of those claimants who had found any type of employment a year later, and those who became re-employed by their separating employer.

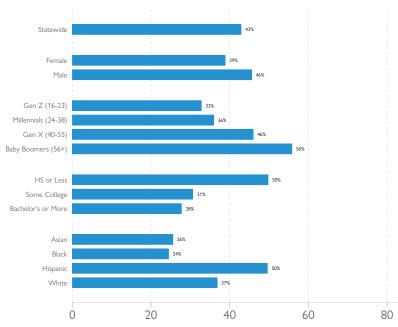
FIGURE 4: Recall Rates Among Those Reemployed by Demographic Group

Panel A: Pandemic Period



Percent of Re-Employed Claimants Who Were Recalled to Prior Employer

Panel B: Pre-Pandemic Period



Percent of Re-Employed Claimants Who Were Recalled to Prior Employer

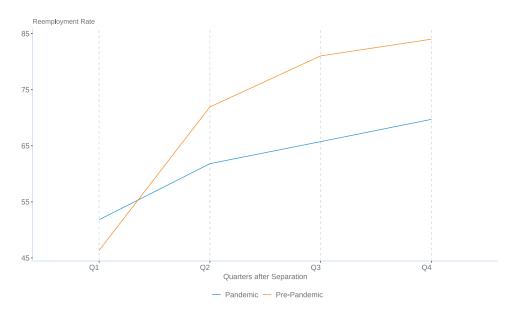
Panel A Notes: The denominator for each bar includes all regular UI claimants from that demographic group who filed a UI claim during the 2nd quarter of 2020 and were employed in Q2 2021. The numerator consists of the subset of those claimants who became re-employed by their separating employer. Panel B Notes: The denominator for each bar includes all regular UI claimants from that demographic group who filed a UI claim during the 4th quarter of 2018 and were employed in Q4 2019. The numerator consists of the subset of those claimants who became re-employed by their separating employer.

TABLE 1: Observed Re-employment and Recall for Claimants with a Benefit Year Beginning in Quarter 2 of 2020.

GROUP	ALL CLAIMANTS (INCLUDING THOSE NOT EXPERIENCING FULL SEPARATIONS)	ALL CLAIMANTS IN SAMPLE (EXPERIENCING FULL SEPARATIONS)	YEAR LATER	NUMBER RECALLED TO PRIOR EMPLOYER A YEAR LATER	% OF SAMPLE RE-EMPLOYED A YEAR LATER (OBSERVED EARNINGS IN BASE WAGE FILE)	% OF SAMPLE RECALLED	% OF RE-EMPLOYED WHO WERE RECALLED TO PRIOR EMPLOYER	% OF THOSE EXPECTING RECALL ACTUALLY EXPERIENCING RECALL	
Statewide	2,739,400	2,088,140	1,200,206	709,440	57.5	34.0	59.1	39.1	
By Gender									
Female	1,389,947	1,050,828	613,984	373,830	58.4	35.6	60.9	40.6	
Male	1,343,329	1,032,959	583,928	334,983	56.5	32.4	57.4	37.6	
By Generation									
Gen Z (16-23)	485,744	381,691	241,320	97,810	63.2	25.6	40.5	31.7	
Millennials (24-38)	1,085,783	824,638	483,415	270,955	58.6	32.9	56.1	38.8	
Gen X (40-55)	701,873	531,827	305,865	210,199	57.5	39.5	68.7	43.7	
Baby Boomers (56+)	455,083	342,684	166,009	129,124	48.4	37.7	77.8	40.5	
By Education									
HS or Less	1,243,316	956,729	512,346	289,432	53.6	30.3	56.5	34.0	
Some College	802,561	619,924	375,366	227,171	60.6	36.6	60.5	43.8	
Bachelor's or More	489,858	374,809	236,296	139,871	63.0	37.3	59.2	46.4	
By Race/Ethnicity									
Asian	462,192	356,679	198,064	122,588	55.5	34.4	61.9	39.4	
Black	224,397	170,474	88,002	43,310	51.6	25.4	49.2	31.0	
Hispanic	971,383	742,391	466,020	272,966	62.8	36.8	58.6	42.6	
White	849,445	649,082	350,159	209,647	53.9	32.3	59.9	37.8	

Notes: In this table, recall is defined as follows. First, we we identify the three highest-paying employers in quarter 2 of 2020 (the quarter the claimant filed their initial claim). Then, we remove from the sample all claimants that reported any earnings in their first week of UI (those that did not experience "full separations"). Finally, we define recall as the presence of any earnings from a separating employer a year later (Quarter 2 of 2021). Our sample is comprised of 2.7 million unique claimants for the regular UI program during the 2nd quarter of 2020, who have reported their last work dates, received at least one payment, and did not report any earnings in their first week of certification.

FIGURE 5: Cumulative Re-employment By Quarter



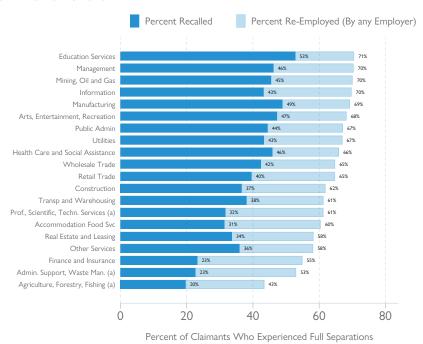
Notes: The denominator in each period includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had found any type of employment in each subsequent quarter. For claimants who entered the UI system in Q4 2018 (orange line), Q4 in the graph represents Q4 2019. For claimants who entered the UI system Q2 2020 (blue line), Q4 in the graph represents Q2 2021.

Substantial heterogeneity in re-employment and recall exists across demographic groups, industries, and geographies. Figure 3 contrasts how our measures of re-employment and percent recalled vary across demographic groups. Although workers in the baby boom generation have had among the lowest rates of re-employment, their rate of recall was among the highest, suggesting that recall has been more common among longer-tenured workers. Women, more educated workers, and workers identifying as Hispanic have each seen relatively high rates of both recall and overall re-employment. These patterns

for older workers and Hispanic workers are also observed before the pandemic, but prior to the pandemic, people with a high school degree or less and men had the highest rates of both re-employment and recall. Appendix Figure A4 shows the re-employment rate by industry for workers with a high school degree or less before and during the pandemic. It shows that the major industries for less educated workers like Construction, Administrative Support and Waste Management, and Accommodation & Food Services are down during the pandemic relative to before it.

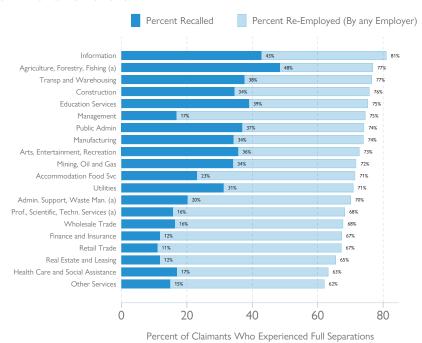
FIGURE 6: Recall and Re-employment Rates by Major Industry

Panel A: Pandemic Period



Notes: The denominator for each bar includes all regular UI claimants from that industry who filed a UI claim during the 4th quarter of 2018 and who were "fully separated" from their employer (i.e., not just working reduced hours). The numerator consists of the subset of those claimants who had found any type of employement a year later, and those who became re-employed by their separating employer. Graph excludes claimants whose industry could not be identified. a) Full Names of Sectors: Administrative Support, Waste Management, and Remediation. Agriculture, Forestry, Fishing, and Hunting. Professional, Scientific, and Technical Services

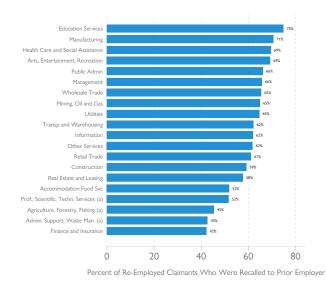
Panel B: Pre-Pandemic Period



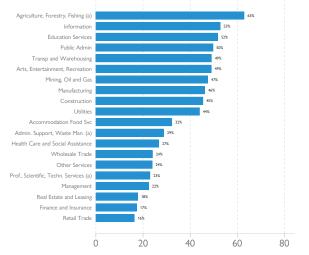
Notes: The denominator for each bar includes all regular UI claimants from that industry who filed a UI claim during the 4th quarter of 2018 and who were "fully separated" from their employer (i.e., not just working reduced hours). The numerator consists of the subset of those claimants who had found any type of employement a year later, and those who became re-employed by their separating employer. Graph excludes claimants whose industry could not be identified. a) Full Names of Sectors: Administrative Support, Waste Management, and Remediation. Agriculture, Forestry, Fishing, and Hunting. Professional, Scientific, and Technical Services

FIGURE 7: Recall Conditional on Re-employment by Major Industry

Panel A: Pandemic Period



Panel B: Pre-Pandemic Period



Percent of Re-Employed Claimants Who Were Recalled to Prior Employer

Notes: The denominator for each bar includes all regular UI claimants from that industry who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018 and were employed by any employer a year later. The numerator consists of the subset of those claimants who became re-employed by their separating employer.

Figure 6 and Table 2 compares rates of recall and re-employment across industries. Workers in the Education, Manufacturing, Arts & Entertainment, Health Care and Social Assistance, Management, and Mining, Oil, and Gas industries have all seen rates of recall of at least 45%. Education, Management, and Mining, Oil, and Gas also had the highest overall re-employment rates at over 70%. Information also had a re-employment rate of 70% even though it had a lower recall rate. The three industries with the lowest rates of both re-employment (<= 55 %) and recall (<= 23%) are Finance and Insurance, Administrative Support and Waste Management, and Agriculture, Forestry, and Fishing.

Before the pandemic, workers from the Construction industry and Transportation & Warehousing industries had some of the highest re-employment rates, but during the pandemic workers from those industries saw much lower rates of re-employment relative to other industries. Conversely, workers from the Mining, Oil, and Gas industries had some of the highest re-employment rates during the pandemic, but had relatively lower re-employment rates before the pandemic.

Geographically, we find that more affluent counties had higher rates of recall conditional on re-employment and re-employment. Figure 8 maps re-employment and recall conditional on re-employment at the county level across California, which is also presented in Appendix Table A1. Of the top 20 largest counties, those with the highest rates of recall include Orange, Ventura, and Sonoma, while Kern, San Francisco, Sacramento, and San Bernardino had among the lowest rates. Figure 9 presents spatial correlations of these county-level re-employment rates with a variety of socioeconomic factors. Some of the strongest county-level predictors of re-employment are measures of economic well-being, including poverty, median household income, fraction receiving SNAP/CalFresh benefits, and access to broadband internet. We also see less re-employment in more urban counties (as measured by the share of workers who take public transit to work and the population density of the county). Before the pandemic, the fraction receiving SNAP/CalFresh benefits was still highly correlated with re-employment, but median household income, broadband access, and public transportation were not. On the other hand, the share of employment in agriculture, the percent non-citizen, and the percent of people with limited English proficiency were more highly correlated with re-employment rates before the pandemic.

Taken together, these results suggest that by mid-2021, jobless workers had continued to maintain some ties with their former employers, but pandemic re-employment rates are lower than pre-pandemic rates.

TABLE 2: Observed Re-employment and Recall for Claimants with a Benefit Year Beginning in Quarter 2 of 2020, by Industry

GROUP	ALL CLAIMANTS (INCLUDING THOSE NOT EXPERIENCING FULL SEPARATIONS)	ALL CLAIMANTS IN SAMPLE (EXPERIENCING FULL SEPARATIONS)	NUMBER EMPLOYED A YEAR LATER	NUMBER RECALLED TO PRIOR EMPLOYER A YEAR LATER	% OF SAMPLE RE-EMPLOYED A YEAR LATER (OBSERVED EARNINGS IN BASE WAGE FILE)	% OF SAMPLE RECALLED	% OF RE- EMPLOYED WHO WERE RECALLED TO PRIOR EMPLOYER	% OF THOSE EXPECTING RECALL ACTUALLY EXPERIENCING RECALL
Retail Trade	315,163	260,102	168,415	102,808	64.7	39.5	61.0	47.9
Accommodation & Food Svc	316,757	259,915	157,139	81,434	60.5	31.3	51.8	37.3
Health Care and Social Assistance	267,250	197,303	130,069	90,387	65.9	45.8	69.5	53.7
Admin. Support, Waste Man. (a)	187,814	156,278	82,831	35,282	53.0	22.6	42.6	28.3
Manufacturing	145,290	119,625	82,882	58,454	69.3	48.9	70.5	55.9
Education Services	138,846	109,458	77,190	57,750	70.5	52.8	74.8	60.4
Prof., Scientific, Techn. Services (a)	117,593	96,156	58,839	30,361	61.2	31.6	51.6	39.3
Construction	106,447	92,310	57,077	33,737	61.8	36.5	59.1	43.1
Arts, Entertainment, Recreation	105,574	87,926	60,004	41,516	68.2	47.2	69.2	52.0
Other Services	96,916	82,415	47,920	29,580	58.1	35.9	61.7	41.1
Transp and Warehousing	95,836	74,586	45,652	28,361	61.2	38.0	62.1	45.9
Wholesale Trade	82,409	66,103	42,817	27,994	64.8	42.3	65.4	50.9
Information	64,571	54,299	37,865	23,449	69.7	43.2	61.9	49.8
Real Estate and Leasing	37,748	31,082	18,092	10,432	58.2	33.6	57.7	41.5
Agriculture, Forestry, Fishing (a)	33,283	29,783	12,914	5,847	43.4	19.6	45.3	21.5
Finance and Insurance	29,008	23,061	12,649	5,336	54.9	23.1	42.2	32.0
Public Admin	22,859	17,734	11,896	7,871	67.1	44.4	66.2	51.6
Management	12,440	9,976	7,017	4,605	70.3	46.2	65.6	54.1
Mining, Oil and Gas	2,959	2,599	1,821	1,181	70.1	45.4	64.9	48.1
Utilities	1,477	1,280	857	554	67.0	43.3	64.6	56.6

Notes: In this table, recall is defined as follows. First, we we identify the three highest-paying employers in quarter 2 of 2020 (the quarter the claimant filed their initial claim). Then, we remove from the sample all claimants that reported any earnings in their first week of UI (those that did not experience "full separations"). Finally, we define recall as the presence of any earnings from a separating employer a year later (Quarter 2 of 2021). Our sample is comprised of 2.7 million unique claimants for the regular UI program during the 2nd quarter of 2020, who have reported their last work dates, received at least one payment, and did not report any earnings in their first week of certification.

⁽a) Full Names of Sectors: Administrative Support, Waste Management, and Remediation. Agriculture, Forestry, Fishing, and Hunting. Professional, Scientific, and Technical Services.

FIGURE 8: Re-employment Rates (Right) by County and Percent of Claimants Recalled Conditional on Re-employment (Left) by County

In the left map, each county is colored according to the share of claimants from that county that had filed a UI claim and were fully separated from their employer during the 2nd quarter of 2020, and then became re-employed by their separating employer a year later. In the right map, each county is colored according to the share of claimants from that county that had filed a UI claim during the 2nd quarter of 2020 who were re-employed by any employer a year later.

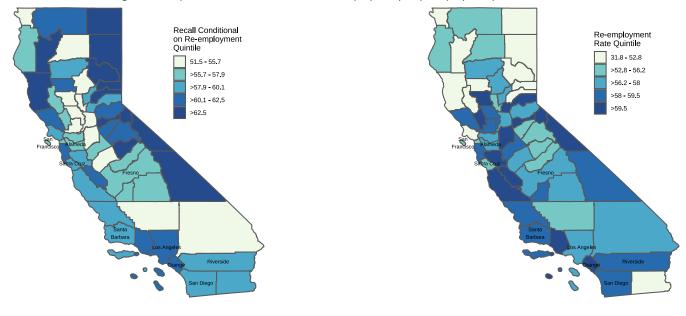
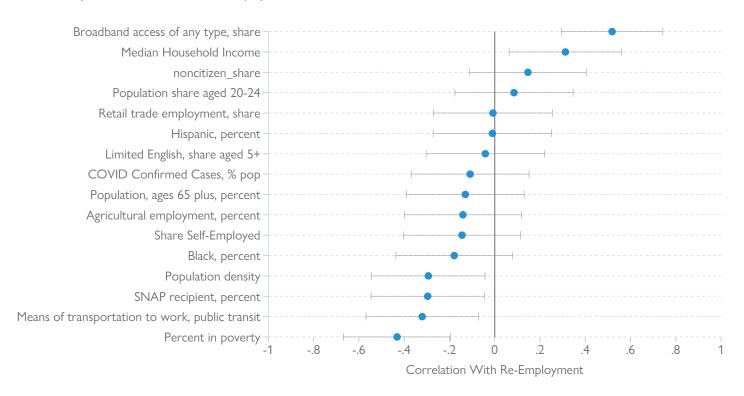


FIGURE 9: Spatial Correlations with Re-employment Rate



Notes: This figure illustrates the correlation between various county-level characteristics and the rate at which individuals who filed for UI benefits in that county during quarter 2 of 2020 were re-employed by any employer (a year later). The county-level characteristics are constructed from ACS 5-year estimates from 2015-2019. The information on COVID confirmed cases is sourced from the New York Times.

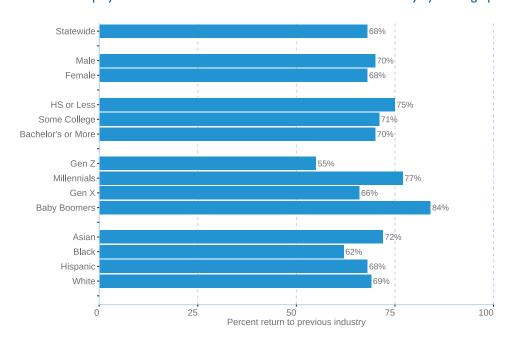


FIGURE 10: Percent of Re-employed UI Claimants who Returned to their Previous Industry by Demographic Group

Notes: The denominator for each bar includes all regular UI claimants from that demographic group who filed a UI claim during the 2nd quarter of 2020 and were re-employed a year later. The numerator consists of the subset of those claimants who had returned to the previous industry a year later.

Fewer Workers Transitioned into Different Industries During the Pandemic

In addition to examining overall re-employment and recall to a previous employer, this brief also examines the changing structure of the California economy by measuring the industry transitions of people who filed for unemployment insurance at the beginning of the pandemic. Statewide, among workers that lost their job at the beginning of the pandemic and filed for UI benefits, 68% of people who were re-employed a year later returned to their previous industry. This compares to before the pandemic, when 62% of individuals that lost their job and filed for UI, were reemployed a year afterwards.

Figure 10 shows how rates of returning to a previous industry varied by demographic characteristics. One of the starkest patterns emerges by age. Even though older workers had lower overall rates of re-employment, those that were re-employed ended up returning to their previous industry at higher rates than younger workers. This possibly reflects that older workers obtained a higher degree of industry-specific skills that would make it difficult to transition to other industries. Similarly, even though high school graduates

were both re-employed and recalled at lower rates than more educated cohorts, when they were re-employed they stayed in the same industry at higher rates than other more educated workers. This finding on education is consistent with other work that has suggested education increases the speed with which workers can adapt to a technologically changing economy (e.g. Goldin and Katz 2009).³

Figure 11 shows the percentage of workers who returned to their previous industry during and before the pandemic. During the pandemic, Utilities, Construction, and Healthcare and Social Assistance claimants had the highest rate of return to their previous industry. Before the pandemic, the rates of return to an industry were very different across industries with a high of about 90% for Agriculture, Forestry, Fishing, and Hunting to a low of 31% for Management. During the pandemic, the range of percent returning to previous industry was much narrower, reflecting the surge in temporary layoffs that occurred in many industries during the early part of the pandemic. The high rates of return to the same industry during the pandemic are also consistent with the higher rates of recall during the pandemic as compared to before the pandemic.

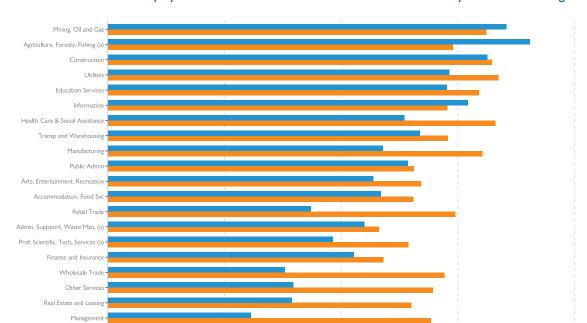


FIGURE 11: Percent of Re-employed Claimants who Returned to their Previous Industry Before and During the Pandemic

Notes: The denominator for each bar includes all regular UI claimants from that industry who filed a UI claim during the 2nd quarter of 2020 (pandemic) or the 4th quarter of 2018 (pre-pandemic) and were re-employed a year later. The numerator consists of the subset of those claimants who had returned to the previous industry a year later.

50

Percent

Pandemic Pre-Pandemic

Figure 12 illustrates where workers who did not return to their previous industry transitioned to, both before and during the pandemic. During the pandemic, Admin, Support, and Waste Management, Retail Trade, and Healthcare & Social Assistance were the industries that received the highest percent of transitioning workers. Compared to the pre-pandemic period, Retail Trade, and Healthcare and Social Assistance became more important destination industries for transitioning workers, while Admin, Support, and Waste Management became less important. Admin, Support,

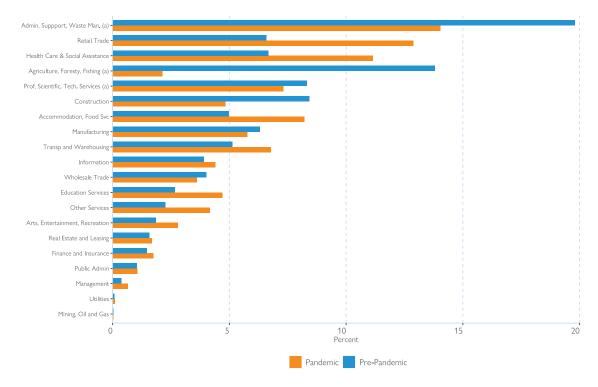
25

and Waste Management includes jobs like janitors, office clerks, and security guards that might typically be employed in corporate offices (or retail settings), but the closing of offices and the increasing prevalence of work from home arrangements could account for the industry becoming a less popular (though still important) destination. Construction, which normally contracts during recessions, was also a less popular destination for transitioning workers during the pandemic.

100

75

FIGURE 12: Industries that Claimants Transitioned to Before and During the Pandemic



Notes: The denominator for each bar includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 (pandemic) or the 4th quarter of 2018 (pre-pandemic) and were re-employed a year later in a different industry. The numerator consists of the subset of those claimants who were employed in that industry.

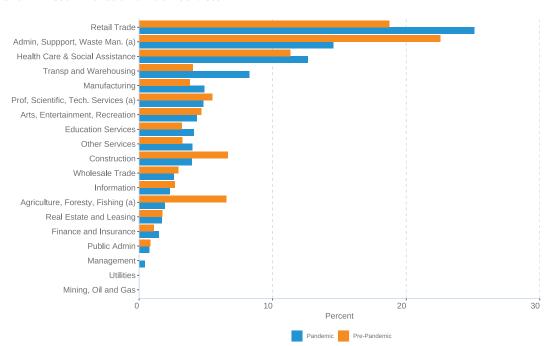
Figure 13 shows industry transitions from several selected industries. Panels A and B show industry transitions sometimes occur between intuitively similar industries that likely involve similar skills or education requirements. For example, the largest receiving industry for workers from the Accommodation & Food Services industry is the Retail Trade industry, both of which tend to be more customerservice oriented and often lower-wage jobs. Similarly, the largest destination industry for the Professional, Science, and Technology industry is the Information industry (and vice versa), which both require technical skills. The figures also show similar results for the pre-pandemic period with the exception that Administrative Services was more important pre-pandemic. Panel C illustrates that transitions do not

always take place between similar industries as Administrative Support and Retail are not necessarily closely related. It also shows how destination industries can change over time as Construction and Professional, Scientific, and Technology were the top destinations for Administrative Support workers prior to the pandemic. Finally, Appendix Figure A15 shows how transitions take place between the four largest industries (by claimants). It illustrates the large degree to which claimants rotate between these large industries. These industries also tend to hire a large share of less-educated claimants and were also hit hard by the pandemic shutdowns. This dynamic of less-educated workers clustering in hard-hit industries could explain why their pandemic re-employment rates are so low.

FIGURE 13: Industry Destinations of Workers from Select Pre-UI Industries

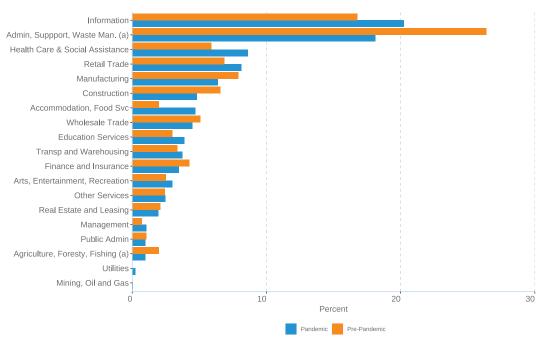
Notes for Panel A-E: The denominator for each bar includes all regular UI claimants from each industry who filed a UI claim during the 2nd quarter of 2020 (pandemic) or the 4th quarter of 2018 (pre-pandemic) and were re-employed a year later in a different industry. The numerator consists of the subset of those claimants who were employed in that industry.

Panel A: Accommodation & Food Services



Out of the 157,000 claimants from Accommodation & Food Services who were employed in Q2 2021, 65% went back to Accommodation & Food Services. Panel A shows the other most popular industries where the remaining 35% of workers transferred into and also shows how those transition choices compare to transition choices before the pandemic.

Panel B: Professional, Science, and Technology

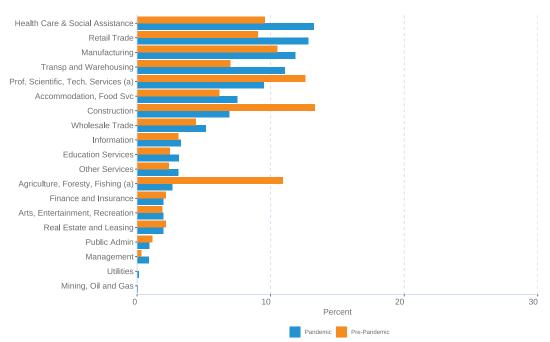


Out of the 58,000 claimants from Professional, Sciences, and Technology who were employed in Q2 2021, 64% went back to Professional, Sciences, and Technology. Panel B shows the other most popular industries where the remaining 36% of workers transferred into and also shows how those transition choices compare to transition choices before the pandemic.

FIGURE 13: Industry Destinations of Workers from Select Pre-UI Industries (continued)

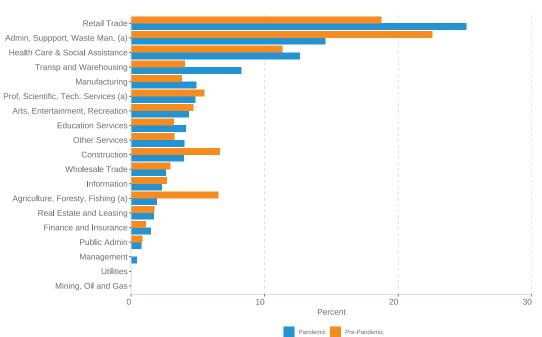
Notes for Panel A-E: The denominator for each bar includes all regular UI claimants from each industry who filed a UI claim during the 2nd quarter of 2020 (pandemic) or the 4th quarter of 2018 (pre-pandemic) and were re-employed a year later in a different industry. The numerator consists of the subset of those claimants who were employed in that industry.

Panel C: Administrative Services, Support, and Waste Management



Out of the 82,000 claimants from Administrative Services, Support, and Waste Management who were employed in Q2 2021, 58% went back to Administrative Services, Support, and Waste Management. Panel C shows the other most popular industries where the remaining 42% of workers transferred into and also shows how those transition choices compare to transition choices before the pandemic.

Panel D: Healthcare and Social Assistance

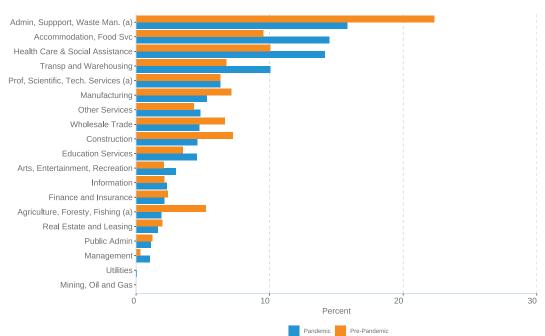


Out of the 129,000 claimants from Healthcare and Social Assistance who were employed in Q2 2021, 83% went back to Healthcare and Social Assistance. Panel D shows the other most popular industries where the remaining 17% of workers transferred into and also shows how those transition choices compare to transition choices before the pandemic.

FIGURE 13: Industry Destinations of Workers from Select Pre-UI Industries (continued)

Notes for Panel A-E: The denominator for each bar includes all regular UI claimants from each industry who filed a UI claim during the 2nd quarter of 2020 (pandemic) or the 4th quarter of 2018 (pre-pandemic) and were re-employed a year later in a different industry. The numerator consists of the subset of those claimants who were employed in that industry.

Panel E: Retail Trade



Out of the 168,000 claimants from Retail Trade who were employed in Q2 2021, 74% went back to Retail Trade. Panel E shows the other most popular industries where the remaining 26% of workers transferred into and also shows how those transition choices compare to transition choices before the pandemic.

Acknowledgments

We gratefully acknowledge the Labor Market Information Division of the California Employment Development Department for their partnership in producing this analysis. This research was made possible through support from Arnold Ventures, The James Irvine Foundation, the Smith Richardson Foundation, the Alfred P. Sloan Foundation, the University of California Office of the President Multicampus Research Programs and Initiatives, MRP-19-600774 and M21PR3278 and the Bylo Chacon Foundation. This work was also supported (in part) by Grant #85-18-06 from the Russell Sage Foundation. Any opinions expressed are those of the authors and do not represent the views of CPL's funders or partners. We also thank the UCLA Social Science Division, the UCLA Vice Chancellor for Research and Creative Activities, the Luskin School of Public Affairs and the California Center for Population Research for their support. All errors should be attributed to the authors.

Background on the data in this report

The size and richness of the administrative data we use allows us to analyze how the crisis in the labor market has affected workers by gender, age, education, race, and ethnic groups, as well as by detailed regions and industries. These analyses complement both traditional survey-based measures of labor market outcomes, which are very detailed but suffer from large lags and low frequency, and weekly publications of total UI claims, which are timely but lack the detail available here. These data allow us to track the fast-moving nature of the crisis and to help inform assistance for workers and firms affected by the upheaval in the labor market.

For inquiries about the definitions, methodology, and findings of this policy brief, please contact Till von Wachter.

Email: tvwachter@econ.ucla.edu.

To obtain the data tabulations used in this policy brief, please contact: Dr. Muhammad Akhtar, Chief, Labor Market Information Division, California Employment Development Department. Email: Muhammad.Akhtar@edd.ca.gov.

The California Policy Lab builds better lives through data-driven policy. We are an independent, nonpartisan research institute at the University of California with sites at the Berkeley and Los Angeles campuses.

This research publication reflects the views of the authors and not necessarily the views of our funders, our staff, our advisory board, the California Employment Development Department, or the Regents of the University of California.

Supplementary Appendix

Initial Claims - New vs Additional

Initial claims for regular UI are composed of two major components, as illustrated in Figure 1: New initial claims and additional claims. Figure 1 shows that the stubbornly high level of initial claims in California has been driven by a persistently elevated number of Additional Claims processed in each week, while new initial claims have dropped substantially and are now in line with the levels seen prior to the pandemic. To understand why, we first explain what triggers each type of claim. New initial claims correspond to "an application for the establishment of a benefit year," and provides a claimant with a weekly benefit amount. Everyone attempting to collect unemployment benefits must file a new initial claim. Additional claims are a subset of initial claims defined by EDD as a claim which is re-opened after a "break of one or more weeks in the claims series with intervening employment." While this definition may seem to imply that additional claims represent individuals beginning a second (or third, or fourth) period of unemployment, this is not necessarily the case. Both new initial claims and additional claims overstate the amount of people entering (or reentering) the UI system, but the inflation to additional claims is much larger.

There are a number of reasons why initial claims, and additional claims in particular, can overstate the amount of people entering (and re-entering) the UI system. New initial claims can overstate entries into the UI system if individuals file multiple claims within a single week, if claimants file initial claims which are denied, or if claimants filed initial claims which are accepted, but the claimant never certifies for benefits, perhaps because they found a job (after a person files a claim, they then need to certify every two weeks in order to receive benefits).

Additional claims are typically triggered when a UI claimant returns to full- or part-time work, but then becomes unemployed again. However, an additional claim can also be triggered by a claimant who works reduced hours for multiple weeks in a row, certifies for partial UI benefits and is either denied payment on one or more of these certifications because their (reduced) earnings are above the partial UI threshold, or delays one or more certifications. These "breaks in the claim cycle" trigger additional claims because the partial UI claimant has ongoing employment. However, because these individuals are not actually exiting and re-entering the UI system each week, the additional claims measure will overstate the number of people flowing into the UI system.

Because additional claims have made up more than 50% of initial claims for regular UI in every single week of the 12 months ending June 5th 2021, the degree by which initial

claims numbers overstate entry (or re-entry) has been quite large during the COVID-19 crisis. Importantly, the number of additional claims each week becomes directly tied to the total number of continuing claimants. Since the total number of continuing claimants has only slightly declined over the course of the crisis, and the claimants getting their payment denied each week has only fluctuated between 4% to 10% of the number of continuing claimants, it is not surprising that the level of additional claims remains elevated.

An important implication of this discussion is that if (or when) the number of continuing claimants is reduced, either due to increased job finding rates or due to administrative reasons (such as benefit exhaustions, or the end of benefit-years, as we discuss later in the policy brief), this will simultaneously decrease the number of additional claims, and therefore the total number of initial claims.

Continuing Claims - Week of Unemployment vs Week of Certification

Published UI statistics typically show the total number of UI payments that were "certified" in a given week, not the number of UI recipients who were actually unemployed in a given week. Since individuals can retroactively certify for payments for multiple weeks, both the level and the timing of this measure (often called "continuing claims") may not accurately reflect the number of individuals actually receiving benefits in that timeframe. Our measure sidesteps these problems by focusing directly on the number of individuals receiving UI benefits for unemployment experienced in any given week, providing a more accurate measure of the evolving status of the labor market. This measure is more directly comparable to the number of unemployed individuals or the number of workers in the labor force reported from Current Population Survey data than existing UI statistics.

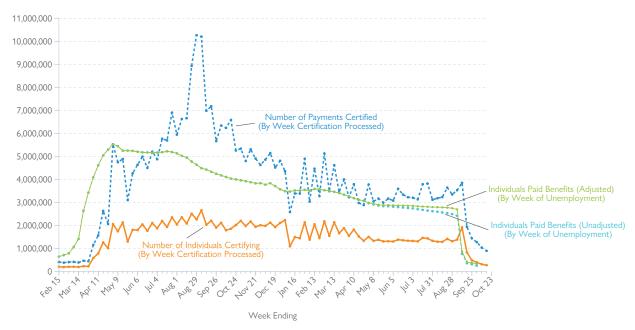
Once a UI claim is deemed eligible, the claimant must meet separate eligibility criteria in each week of unemployment to receive payment for that week. These eligibility criteria are verified through a process known as certification, which claimants in California complete bi-weekly. We call individuals that complete certification and are either paid UI benefits for a given week, or who could have received benefits if not for excess earnings in that week, "potentially eligible claimants." Two key characteristics of this measure are worth noting. First, at the time of certification these weeks are in the past. This means that measures of UI receipt which count certifications in each week (i.e., "continued claims") reflect unemployment experienced for various time periods that are at least 1-2 weeks prior to those certifications. It is not possible to accurately deduce from counts of certifications processed in a given week (the more commonly reported

measure) when that unemployment was experienced. Second, due to processing lags, the date on which we observe a certification sometimes comes later than the date that the certification was submitted by the claimant.

Figure A1 illustrates our key findings about the complex and evolving relationship between certifications processed in a week and the number of Californians who experienced unemployment that week. The dashed dark blue line shows the number of payments certified each week, and is analogous to "continued claims" measures often reported by the Department of Labor.

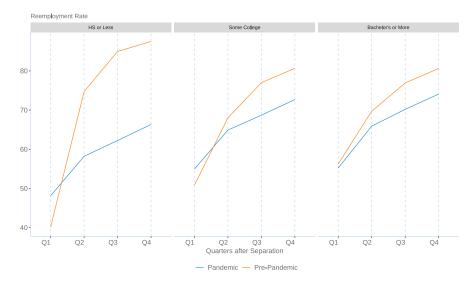
The traditional measure of the number of payments certified each week grew gradually during the pandemic until skyrocketing in August 2020. While this traditional measure of payment certifications may seem to indicate that there were millions of new filings in August, our September 2020 analysis suggested this was not the case. There was an increase in initial claims in late August, but the spike in payment certifications was driven by the fact that many of the individuals who filed claims during that period (and certified for the first time) were certifying for multiple weeks of benefits, often all the way back to the early stages of the crisis.

FIGURE A1: Total Number of Individuals Paid Benefits by Week of Unemployment, Total Number of Individuals Certifying for Benefits by Week of Certification, and Total Number Payments Certified by Week of Certification (All Claims)



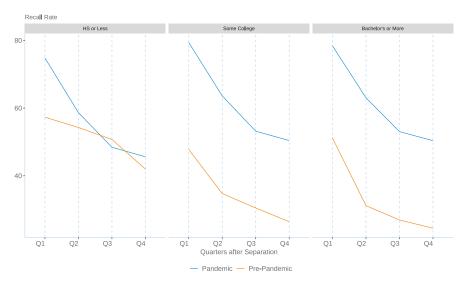
Notes: X-axis labels correspond to Saturdays. The "Number of Payments Certified" refers to the number of payments that were certified during a given week (the common definition of continued UI claims). The "Number of Individuals Certifying" refers to the number of people that certify for UI benefits in a given week. This figure includes claimants receiving benefits for regular UI, PUA, and PEUC.

FIGURE A2: Cumulative Re-employment By Quarter (By Education)



Notes: The denominator in each period includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had found any type of employment in each subsequent quarter.

FIGURE A3: Cumulative Recall Rate Conditional on Employment by Quarter (By Education)



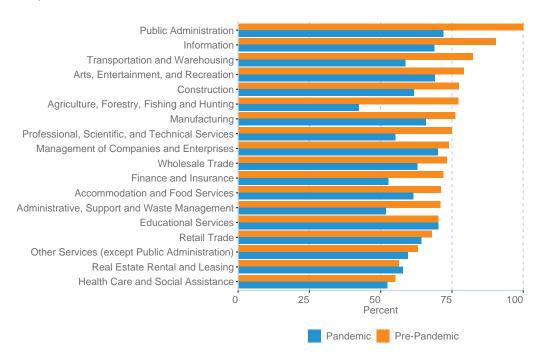
Notes: The denominator in each period includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018 and were employed within the next year. The numerator consists of the subset of those claimants who had been re-employed by their previous employer within the next year.

TABLE A1: Observed Recall and Re-employment for Claimants With a Benefit Year Beginning in Quarter 2 of 2020. (20 Most-Impacted Counties) (Sorted from Lowest Re-employment Rate to Highest)

GROUP	ALL CLAIMANTS (INCLUDING THOSE NOT EXPERIENCING FULL SEPARATIONS)	ALL CLAIMANTS IN SAMPLE (EXPERIENCING FULL SEPARATIONS)	NUMBER EMPLOYED A YEAR LATER	NUMBER RECALLED TO PRIOR EMPLOYER A YEAR LATER	% OF SAMPLE RE-EMPLOYED A YEAR LATER (OBSERVED EARNINGS IN BASE WAGE FILE)	% OF SAMPLE RECALLED	% OF RE- EMPLOYED WHO WERE RECALLED TO PRIOR EMPLOYER	% OF THOSE EXPECTING RECALL ACTUALLY EXPERIENCING RECALL
Kern	54,821	42,950	23,847	12,518	55.5	29.1	52.5	33.9
Sacramento	99,039	77,233	44,189	23,287	57.2	30.2	52.7	35.6
San Francisco	59,566	47,152	25,243	14,479	53.5	30.7	57.4	36.0
San Bernardino	150,326	114,623	66,071	36,378	57.6	31.7	55.1	37.6
Tulare	25,669	20,225	11,400	6,478	56.4	32.0	56.8	36.6
San Joaquin	50,685	40,176	23,933	12,977	59.6	32.3	54.2	38.3
Fresno	57,385	43,924	25,374	14,276	57.8	32.5	56.3	37.7
Solano	27,791	21,804	12,939	7,110	59.3	32.6	55.0	38.1
Contra Costa	71,932	57,340	33,244	18,895	58.0	33.0	56.8	38.1
Stanislaus	34,657	27,313	16,063	9,036	58.8	33.1	56.3	38.9
Alameda	110,524	87,540	50,755	29,268	58.0	33.4	57.7	38.9
San Diego	223,265	173,855	101,283	59,537	58.3	34.2	58.8	39.0
Santa Clara	108,774	86,542	51,791	30,013	59.8	34.7	57.9	40.1
Santa Barbara	22,080	17,402	10,292	6,067	59.1	34.9	58.9	39.9
Riverside	170,107	131,036	77,458	45,886	59.1	35.0	59.2	40.3
Los Angeles	785,175	608,876	348,128	215,806	57.2	35.4	62.0	39.8
San Mateo	43,614	34,480	20,388	12,506	59.1	36.3	61.3	41.8
Sonoma	27,896	22,226	13,113	8,085	59.0	36.4	61.7	41.3
Ventura	52,165	40,888	24,494	15,061	59.9	36.8	61.5	41.3
Orange	238,144	184,714	110,608	68,576	59.9	37.1	62.0	41.8
	200,171	70 1,7 1 1			37.7	37.1	02.0	11.0

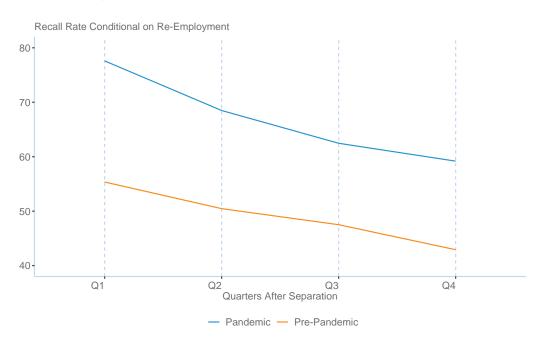
Notes: In this table, recall is defined as follows. First, we we identify the three highest-paying employers in quarter 2 of 2020 (the quarter the claimant filed their initial claim). Then, we remove from the sample all claimants that reported any earnings in their first week of UI (those that did not experience "full separations"). Finally, we define recall as the presence of any earnings from a separating employer a year later (Quarter 2 of 2021). Our sample is comprised of 2.7 million unique claimants for the regular UI program during the 2nd quarter of 2020, who have reported their last work dates, received at least one payment, and did not report any earnings in their first week of certification.

FIGURE A4: Re-employment Rates After One Year by Industry for Workers with a High School Degree or Less (Before and During the Pandemic)



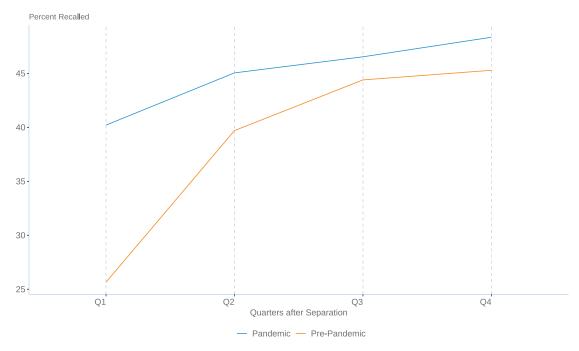
Notes: The denominator in each period includes all regular UI claimants with a high school degree or less who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had been re-employed by any employer a year later.

FIGURE A5: Quarterly Percent Recalled



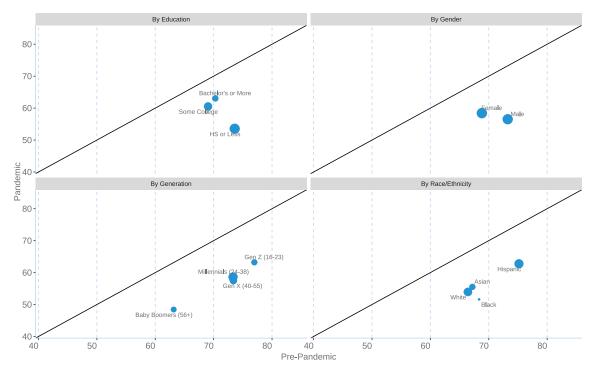
Notes: The denominator in each period includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer in each subsequent quarter.

FIGURE A6: Quarterly Recall Rate Conditional on Employment



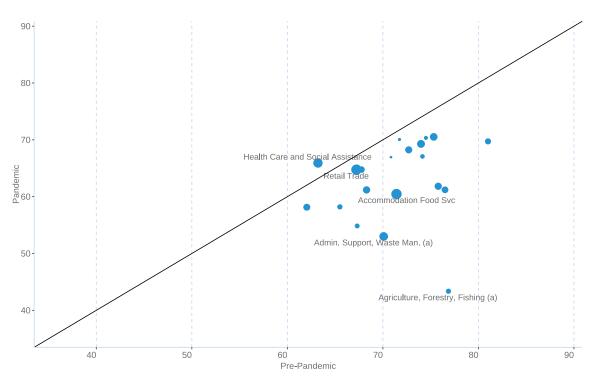
Notes: The denominator in each period includes all regular UI claimants who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018 and were reemployed in the period. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer in each subsequent quarter.

FIGURE A7: Re-employment Rate Scatterplot by Demographic Group During the Pandemic and Before the Pandemic



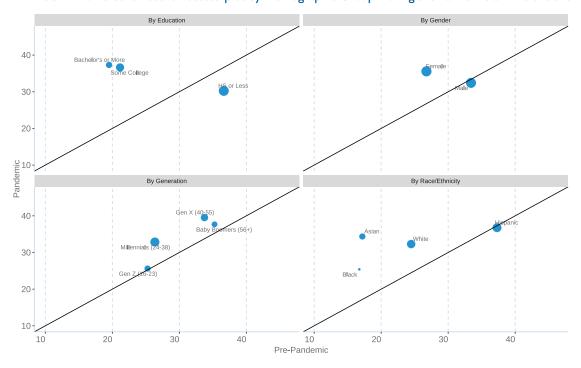
Notes: The denominator in each point includes all regular UI claimants in that demographic group who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had found any type of employment a year later. The size of the point represents the share of claimants that each demographic group accounts for in the Q2 2020 cohort.

FIGURE A8: Re-employment Rate Scatterplot by Industry During the Pandemic and Before the Pandemic



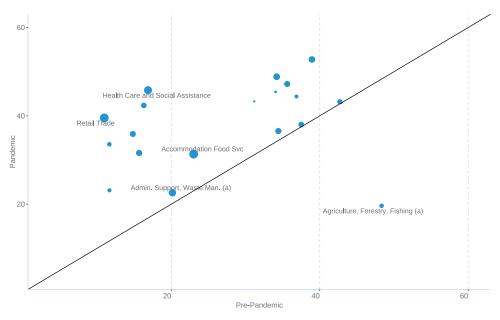
Notes: The denominator in each point includes all regular UI claimants in that industry who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had found any type of employment a year later. The size of the point represents the share of claimants that each industry accounts for in the Q2 2020 cohort.

FIGURE A9: Percent Recalled Scatterplot by Demographic Group During the Pandemic and Before the Pandemic



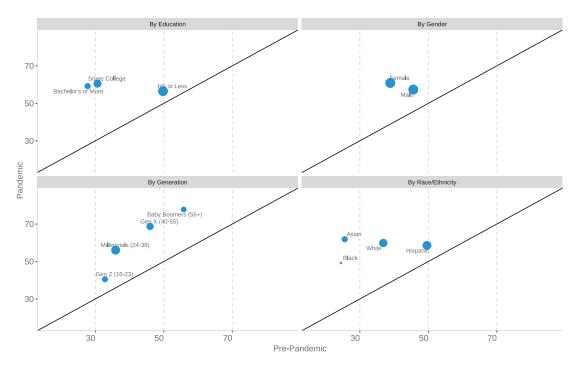
Notes: The denominator in each point includes all regular UI claimants from each demographic group who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer a year later. The size of the point represents the share of claimants that each demographic group accounts for in the Q2 2020 cohort.

FIGURE A10: Percent Recalled Scatterplot by Industry During the Pandemic and Before the Pandemic



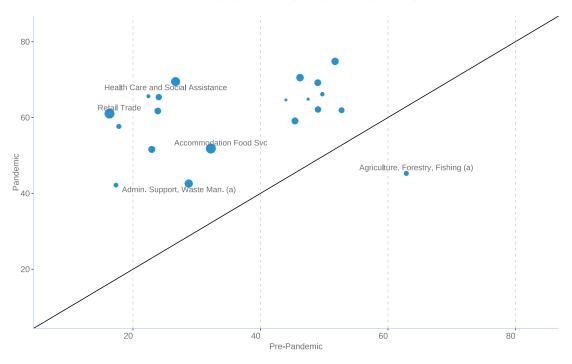
Notes: The denominator in each point includes all regular UI claimants from each industry who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer a year later. The size of the point represents the share of claimants that each industry accounts for in the Q2 2020 cohort.

FIGURE A11: Percent Recalled Scatterplot by Industry During the Pandemic and Before the Pandemic



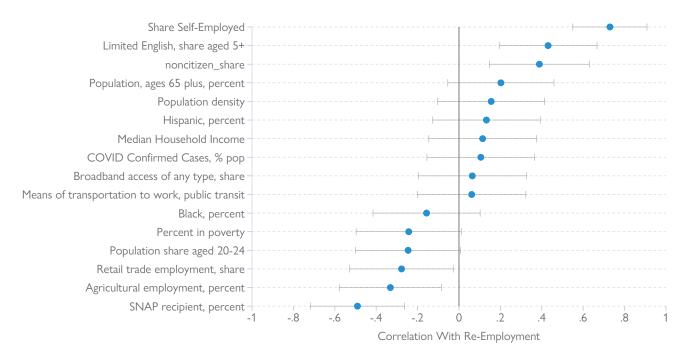
Notes: The denominator in each period includes all regular UI claimants in each demographic group who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018 and were reemployed a year later. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer. The size of the point represents the share of claimants that each demographic group accounts for in the Q2 2020 cohort.

FIGURE A12: Recall Rate Among Re-employed Scatterplot by Industry During the Pandemic and Before the Pandemic



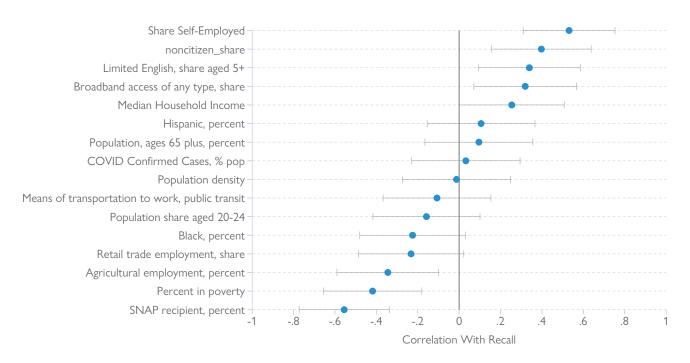
Notes: The denominator in each period includes all regular UI claimants in each industry who filed a UI claim during the 2nd quarter of 2020 or the 4th quarter of 2018 and were reemployed a year later. The numerator consists of the subset of those claimants who had been reemployed by their most recent employer. The size of the point represents the share of claimants that each industry accounts for in the Q2 2020 cohort.

FIGURE A13: Spatial Correlations with Recall Rate Conditional on Employment



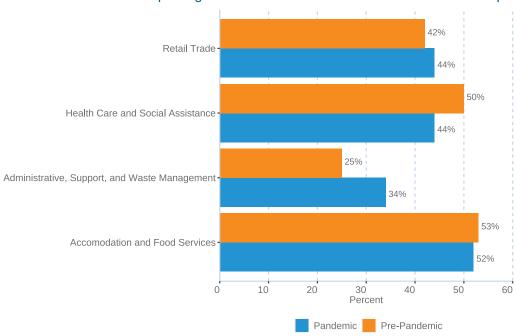
Notes: This figure illustrates the correlation between various county-level characteristics and the probability a claimant was recalled to their previous employer, given they were re-employed. The county-level characteristics are constructed from ACS 5-year estimates from 2015- 2019. The information on COVID confirmed cases is sourced from the New York Times.

FIGURE A14: Spatial Correlations with Percent of Total Claimants Recalled



Notes: This figure illustrates the correlation between various county-level characteristics and the rate at which individuals who filed for UI benefits in that county during quarter 2 of 2020 were re-employed by their previous employer a year later). The county-level characteristics are constructed from ACS 5-year estimates from 2015-2019. The information on COVID confirmed cases is sourced from the New York Times.

FIGURE A15: Share of Transitions from the Top 4 Largest Industries that Transitioned to One of the Other Top 4 Industries



Notes: The denominator for each bar is the number of claimants who applied for Regular UI in Q2 2021 or Q4 2018 and were re-employed in a different industry a year later. The numerator for each bar is the subset of those claimants who were re-employed in one of the other three industries in the graph. For example, 42% of claimants from the Retail Trade industry who were re-employed in a different industry a year after separation, were employed in either Healthcare and Social Assistance, Admin, Support, Waste Management, or Accommodation and Food Services.

Endnotes

- 1 However, since the PUA program and Regular UI have different eligibility criteria, it is not clear how many of these applicants will be approved or will receive Regular UI benefits.
- $2 \ \ \text{See news release on EDDs efforts: https://edd.ca.gov/About_EDD/pdf/news-21-55.pdf}$
- 3 Goldin, C. D., & Katz, L. F. (2008). The race between education and technology. Cambridge, Mass: Belknap Press of Harvard University Press.