Pandemic Unemployment Assistance and Labor Force Participation

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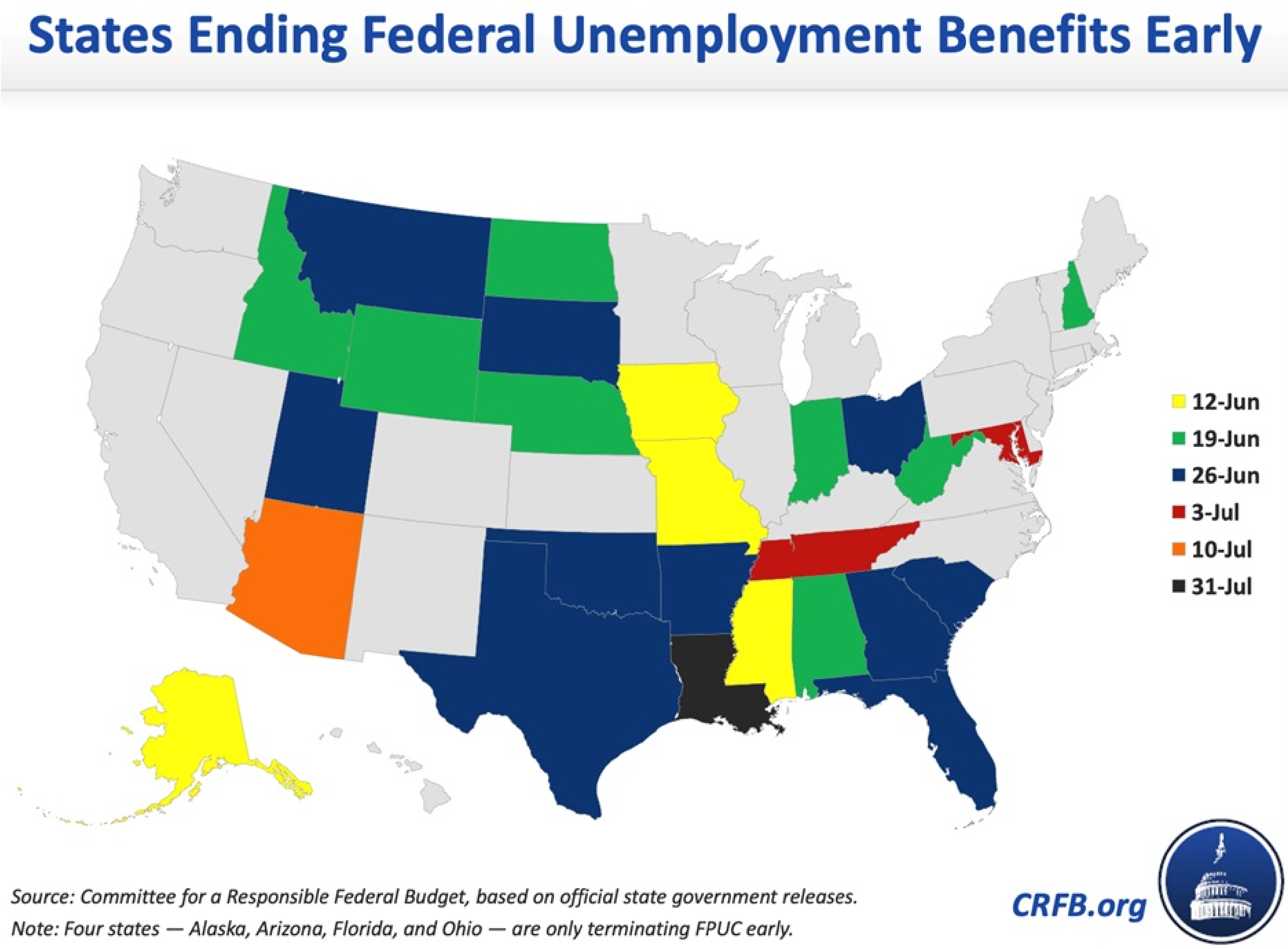
Introduction: When news of COVID-19 hit the world, I was right on the frontier. I was studying abroad in Rome at the time, coincidentally exactly where the first case was found in Europe. As governments gradually started shutting down, I found myself along with my girlfriend Jill flying home from Lisbon to a United States and Phoenix, Arizona that had completely closed. Many people's loved ones were lost and aged significantly, unemployment reached record highs, fear ran rampant, and those working on the front lines were fed up. As economies started to close and our nation was facing an extraordinary health crisis, Congress proceeded to pass the CARES act and it was subsequently signed into law on March 27th. That law (and subsequent legislation) Resulted in direct payments and increased unemployment insurance up to $600 or more per week as a state of emergency ensued.

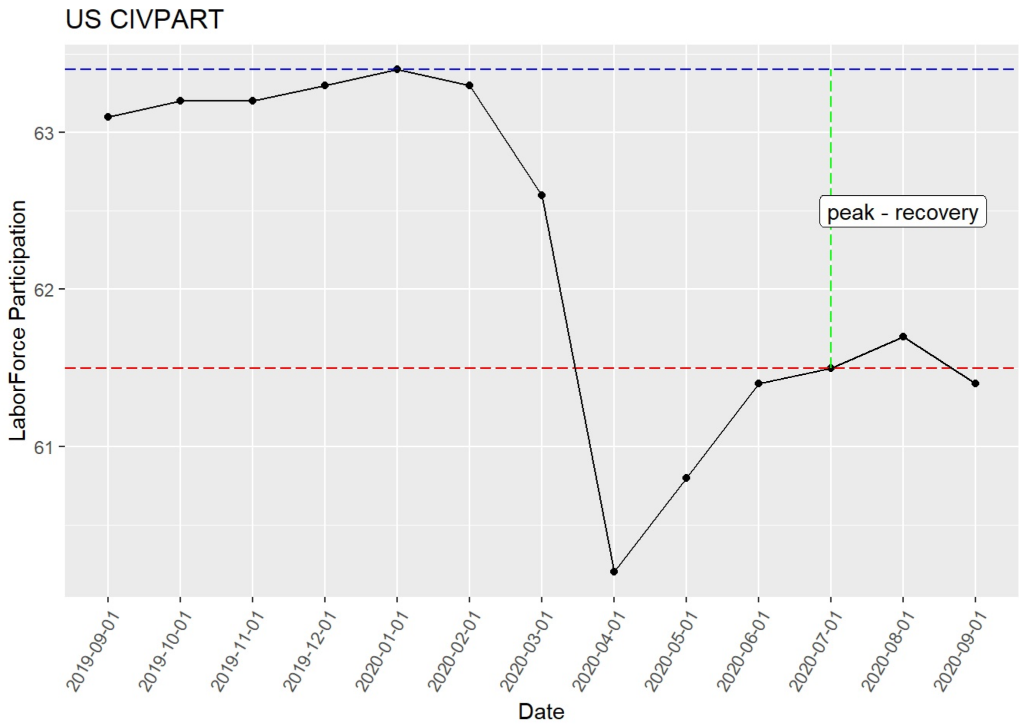
In this piece, we will attempt to evaluate the Pandemic Unemployment Assistant and sister program's effect on labor force participation rate. The data is coming straight from the Bureau of Labor Statistics CIVPART and JOLTS report. It became a common narrative that these programs lowered the participation rate and unlike previous dealing with unemployment benefits and national comparisons, the programs were identically implimented and states are binary whether they provide the money or don't.

When I returned to Arizona, I was unable to get unemployment insurance because I started working again before the bill was signed into law. I proceeded to hold a disgruntled attitude that I should have waited to get the new benefits instead of work. A year later, talking heads would be saying that my thinking was the thinking of people who received the benefits and this then became a hot-button political issue. The question of whether the support was causing people to not re-enter the labor force quickly became answered by a lot of political pundits and soon enough many states were ending the benefits early to incentive people to go back to work. Here is a chart of when states ended the pandemic unemployment assistance (PUA) and the federal supplement for gig workers not traditionally included (PUC).

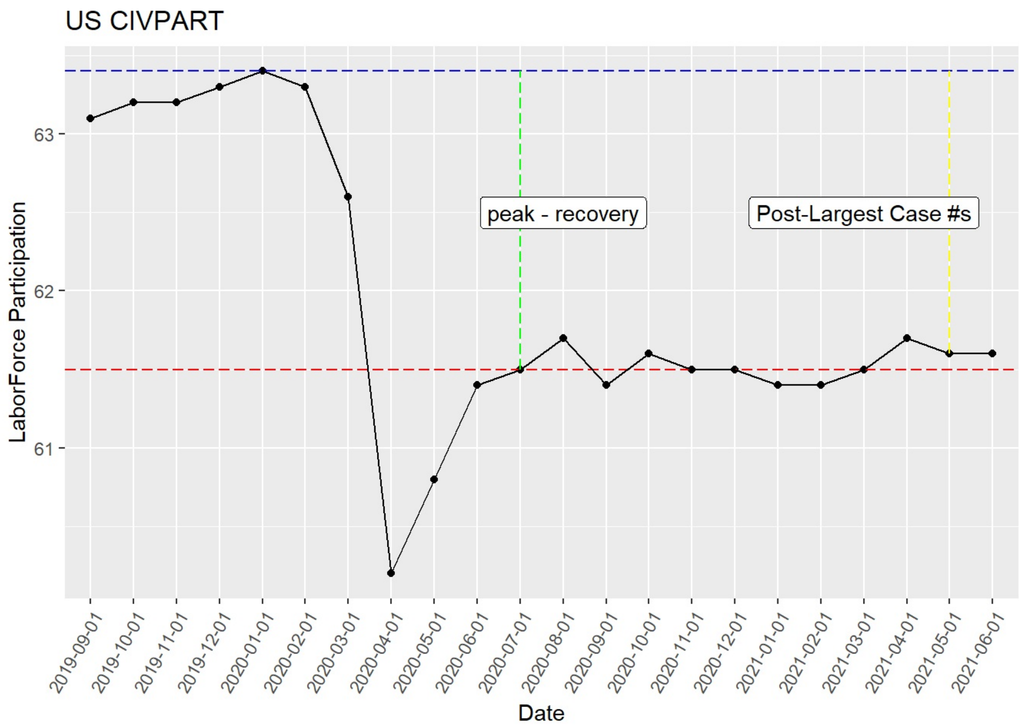


Alt text

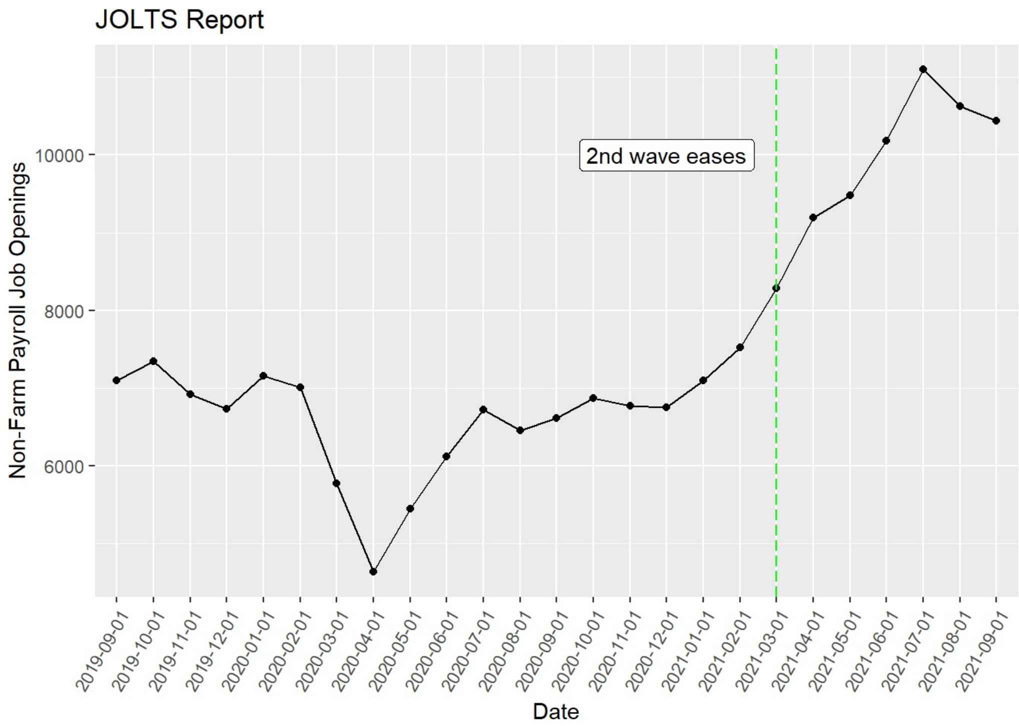
During the onset of COVID, the unemployment rate spiked to heights not seen since the Great Depression. It would've spiked even higher if we hadn't witnessed something just as troubling. As seen below this paragraph, The Labor Force Participation (LFP) rate dipped severely. Initially the narrative was very clear. Many jobs couldn't be virtualized and thus some felt indefinitely displaced. Lock downs were put into place that especially affected hospitality, tourism, the elderly and children. Families were hit hardest of all as childcare and social care had to be carried by a family member in many instances. The first wave of lock downs would define the strictest measures taken place and afterwards, with little exception, there was no political will to close any further. Cities and states either stayed with the same measures intermittently or got looser, and it is evident that there was an immediate suppression of LFP's rebound through the first summer as seen below.



Soon after the “first wave” of the virus declined, many politicians claiming to do what’s “best for the economy,” fully undid lockdowns in the states of which they held power. They thought that this would alleviate some of the distance between where labor force participation was before and after the onset of the pandemic. As states opened back up however, there was still no recovery in LFP and many claimed that the expanded unemployment benefits on a federal level were to blame. States electing to end the additional unemployment benefits early hoped that the economy could go back to where it was before the pandemic started. As seen below, here is the nationwide trend right before a group of 25 states decided to end benefits. We’ll use a graph through June as most states ended at the end of that month or the beginning of July.



What is interesting is that the US saw a small dip in LFP from the 2nd and largest wave of new COVID cases, however, afterwards, the same flat trend appeared. The narrative was starting to become less clear as job openings started to explode after the 2nd wave started easing and wages started to move upwards especially in the lower wage sectors. We see that the story telling us how pandemic assistance was larger than the returns from working started to gain traction.



Fundamentally, did the increased unemployment benefits hold back the recovery in LFP? We can look to evidence and compare the performance of states that ended and those that did not end the additional benefits. In examining this question, we can run a fixed effects regression with State and Date as the dummy variables. This takes out these “fixed” effects and leaves us with what we are regressing (the presence of Pandemic Unemployment Assistance (PUA)) on the broad LFP rate. Luckily the two groups of states are split evenly (26/25.. DC counts!), thus there is no sample size discrepancy between them and this makes for a fun natural experiment. The stimulus was very ubiquitous as its benefits were paid out broadly to every state with minimal conditions. While in the past in the US, federal and state governments had tried to extensively target the “right people”, a defining feature of this response was to as broadly as possible flood the economy with money so that everyone could weather the storm of the pandemic. This approach allows for very limited confounders as compared to other programs the government doled out and the fact that it was a very universal stimulus allows us to compare apples to apples easily.

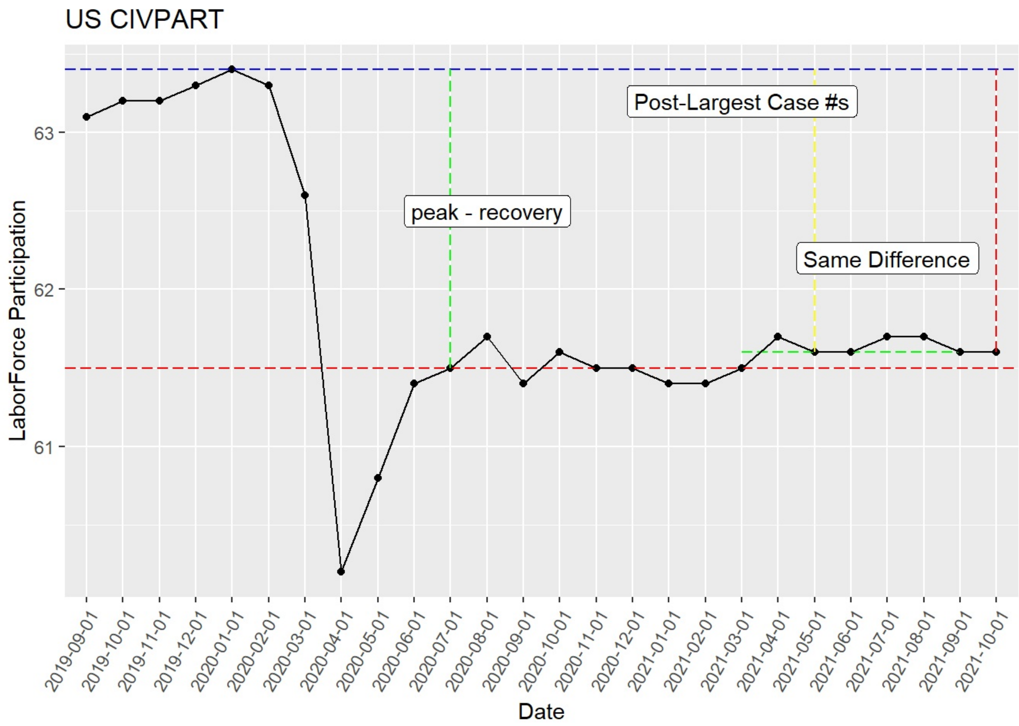
If we can reject the null hypothesis, we determine that the variable PUA (either 1 or 0 whether a state was participating) had a significant impact on the labor force participation rate. Here are the results for the regression below, the the coefficient is significant, it will have a star next to it.

Rate_{i,t}=beta_0+beta_1PUA_i+T_t+Si+epsilon{i,t}

Results

	Dependent variable:
	Rate
PUA	0.098
	(0.156)
Fixed Effects	Yes
Observations	1,020
R^2	0.947
Adjusted R^2	0.944
Residual Std. Error	0.923 (df = 949)
Note:	*p<0.1;* ***p<0.05;*** p<0.01

Conclusion: Our coefficient does not end up being significant, therefore we cannot reject the null hypothesis that PUA/PUC had any effect on the Labor Force Participation rate. Not only this, but having the programs actually increased the rate, therefore the directional of the result is also not consistent with the narrative that the programs were detrimental. After a full 3 months of differences between the two groups and all states expiring the benefits, we see the same nationwide trend and controlling for each state’s trend, we see no significance. The continuing trend can be seen in this graph.



I think it is much more of a plausible story that health concerns and an aging workforce that is wary of catching the virus are causing the level difference. As someone who wanted to quit my job and drop out of the labor force, I know very well that it wasn't possible to get benefits that way and too many people were struggling before. While it is possible that those who were marginally attached to the labor force ended up dropping out to get benefits, the evidence shows it is not sound reasoning to assume that it could be the root issue in the flat trend.

Data Source: https://fred.stlouisfed.org/ (https://fred.stlouisfed.org/)