

Understanding the Accuracy of Unemployment Insurance Data:

Evidence from the Appalachia Region



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EXECUTIVE SUMMARY

- Initial and continuing unemployment insurance claims are some of the only high-frequency data points on the U.S. labor market. During the Covid-19 pandemic, the weekly claims numbers have been a highly followed metric of economic damage.

- Close examination reveals clear errors in unemployment insurance claims numbers, making it hard to compare claims within and across states, and clouding our interpretation of national totals.

- Two potent examples: In Georgia, the number of initial claims in leisure and hospitality since the pandemic began

represents 163% of 2019 employment in that industry. In Pennsylvania, continuing claims data report more people receiving PUA for the week of June 20 than reportedly applied for PUA in all prior weeks.

- Errors appear to be due to challenges states faced to stand up a PUA claim reporting system on limited notice, duplicate claims from legitimate claimants, and applicant fraud.

- UI claims will continue to be a closely watched metric of labor market recovery. Investments in processes and systems that correct these errors would have high public returns.

Introduction

The U.S. Department of Labor's weekly unemployment claims news release provides some of the only high-frequency, official labor market data we can use to gauge labor market conditions and guide decision making during the pandemic. With numbers from each state's labor department, the news release gives us a week-by-week view of the number of claims for regular state unemployment insurance (UI) and, recently, federal pandemic unemployment assistance (PUA). Excepting a handful of minor programs, the sum of regular UI and PUA claims should reflect the total number of unemployment insurance claims for the state in that week.

Ideally, these numbers would provide valuable and frequent insights into the labor market during the Covid-19 pandemic. The number of initial claims should tell us the approximate flow into unemployment insurance, and continuing claims should tell us the number of people seeking to continue receiving benefits during a given week. With this information, it should be possible to compare how the labor markets in different states are faring during the pandemic, as well as gauge the health of the national labor market in weekly intervals.

However, states are reporting their initial unemployment claims in different ways, making it difficult to compare across states. Additionally, it is evident that some states are unintentionally reporting inflated claims numbers, due to reporting processes and/or applicant fraud,

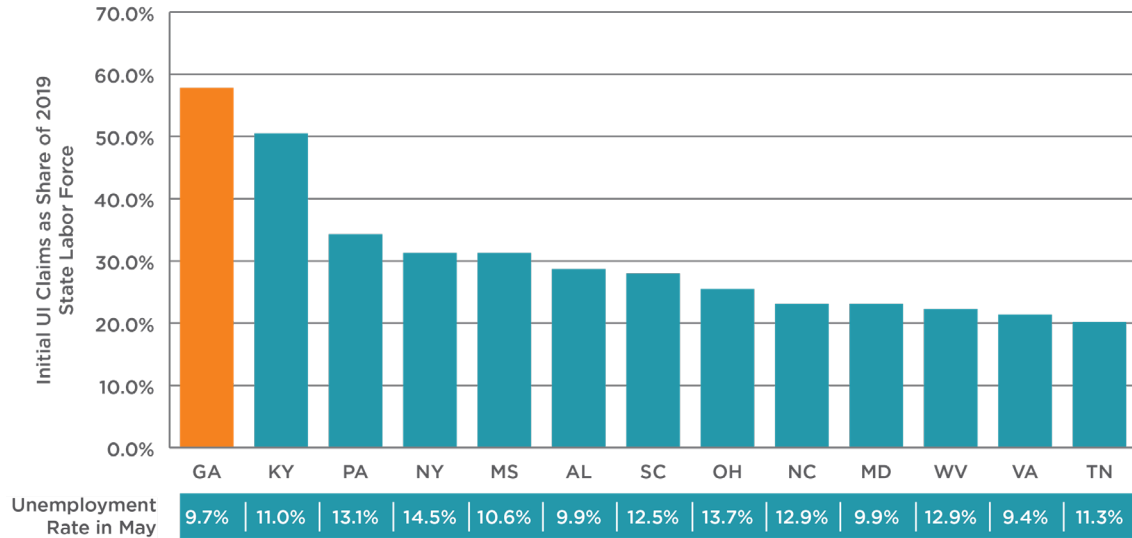
making it hard to measure how many workers are actually seeking unemployment insurance in those states and in the country overall. In the most potent example, industry-level claims data from Georgia suggests that 163% of leisure and hospitality workers have filed initial claims since the pandemic began. Because the challenges to accurate data reporting are evolving over time, these issues also make it difficult to compare the number of claims between weeks both within a state and for the country as a whole.

Using the data from the DOL news releases, as well as data from state labor agencies, we examine the quality of initial unemployment claims figures in the Appalachian region of the United States. Our results detail how data in the news release can lead to false conclusions about the state of the workforce during the pandemic.

State labor departments have faced an unprecedented surge in applications from Americans under intense financial pressure. Their efforts have been rightly focused on issuing payments to certified claimants. But a byproduct of their efforts is a weekly metric of the health of the U.S. labor market as reported to DOL. These high-quality data are implicitly influencing public policy. If reported with greater accuracy, they would likely be even more influential, for example as the basis for formulaic fiscal policies known as automatic stabilizers. As a result, federal investments to improve the accuracy of UI data reporting would have high public returns.

Georgia's High Number of Initial UI Claims

Figure 1



Cumulative initial claims for state UI (not seasonally adjusted) from weeks ending in March 14 through July 4. Below the graph are state unemployment rates from the BLS for May 2020.

As stated above, accurate claims data would make it easy to compare the impact of Covid-19 on state labor markets. Comparing the cumulative number of initial state UI claims over the course of the pandemic should show approximately the number of people filing for unemployment in each state. Figure 1 shows the cumulative initial UI claims (not seasonally adjusted) for states in the Appalachian region as a share of each state's 2019 labor force.¹ In this figure, Georgia's 2,952,254 initial claims appear particularly high compared to the others, implying that Georgia's labor force was hit much harder by the pandemic than the other states. Assuming the news release data to be correct and consistent across states, this chart would also imply the share of people filing for UI in Georgia is almost three times that of Tennessee—an alarmingly large

disparity between two neighboring, similar states. Notably, Georgia's unemployment rate as of May was the second lowest in the region, in contrast to initial claims data.

Repeating this analysis in Figure 1 for continuing claims indicates that continuing claims in Georgia are more in line with the state's unemployment rates and with other states in the Appalachian region, suggesting that Georgia's systems are successfully weeding out many of the excess claims. But, still, continuing claims in Georgia for the last week of June were more than 12 percent of last year's employment (compared to 8 percent in Tennessee), the second highest among the Appalachian states and in excess of the unemployment rate reported in May.

These observations have led us to investigate

¹ Appalachian Region as defined by the Appalachian Regional Commission: https://www.arc.gov/appalachian_region/theappalachianregion.asp.

the reasons why Georgia's initial claims might be so high. We have identified three contributing factors.

- Because PUA applicants in Georgia are required to first be declined for regular state UI, the state has been reporting initial PUA claims as regular state UI claims. These requirements are a function of legacy computing systems that limits the flexibility of the application system.

- Georgia's mandated process for unemployment insurance application by employers has likely had the unintended consequence of duplicate initial claims. Those duplicated claims appear to be included in the regular state UI numbers Georgia reports each week.

- Although it is hard to know how large of an issue this is, the recent spike in UI applicant fraud may also be adding initial claims to Georgia's reported numbers.

Our reasons for suspecting the three causes above are detailed in the sections below. We emphasize that this is not an exhaustive (nor entirely confirmed) list of factors that could skew Georgia's UI claims. For example, another potential reason for these elevated claims is high rates of layoffs and rehiring. If Georgia employees are more likely to be furloughed and rehired (perhaps before being furloughed again), this would be consistent with the patterns observed in Figure 1. But we know of no evidence, even anecdotal, that these employment transitions occur more frequently in Georgia than elsewhere in the region. Similarly, we know of no evidence that UI-supported work sharing is more prevalent in Georgia than elsewhere in the region. (Indeed, Georgia does not have a sanctioned work share program.)²

²<https://www.ncsl.org/research/labor-and-employment/work-share-programs.aspx>

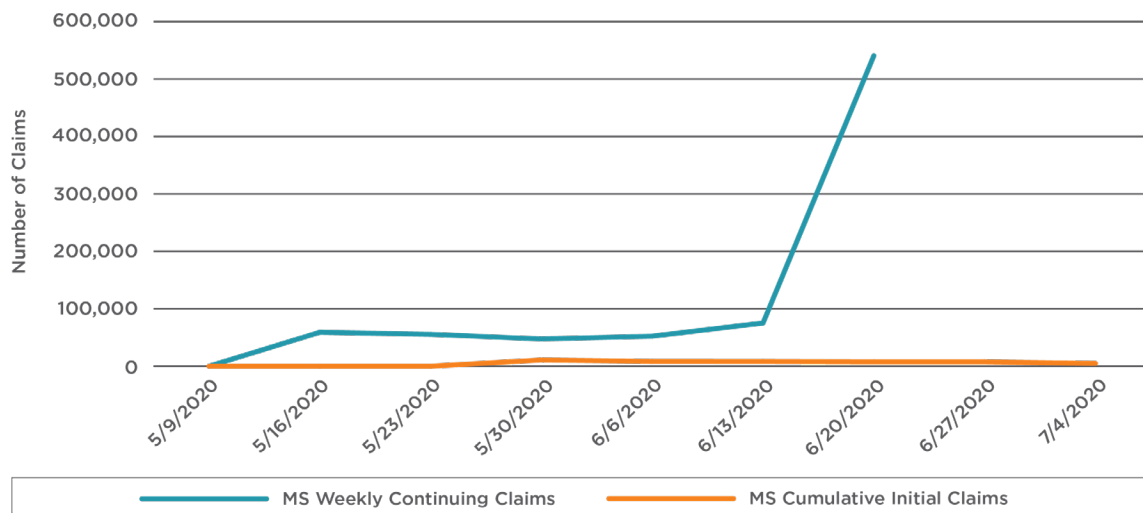
PUA Claims

The federal PUA program was created in the early stages of the pandemic to provide a form of unemployment insurance to workers who lost their job due to the virus but do not qualify for regular state UI. These PUA benefits mainly go to workers who are self-employed, gig workers, or work for non-profits. Although the money for PUA comes from the federal government, the program is administered by state agencies much like UI, and state agencies need to account for PUA claims separately.

State-level initial and continuing PUA claims began appearing in the DOL's unemployment claims news release on May 14. From the beginning, there have been obvious issues with the reported PUA data. In the first week, as state employment offices were still scrambling to create procedures around this new program, only 30 states provided any numbers for PUA claims. While most states are now reporting PUA figures, many of them took weeks or even months to begin doing so. Kentucky, for instance, did not report any initial claims until the week ending June 6, and Georgia's first initial claims were reported for the week ending July 4. West Virginia has yet to report any initial or continuing PUA claims at all.

Not only is much of the PUA data missing from the news release, but the data that is included is either inaccurate, incomplete, or both. Even in states that have been reliably reporting PUA claims, we find inconsistencies between initial and continuing claims. Pennsylvania, for example, has reported a total of 960,775 initial PUA claims as of the week ending July 4, but the state also reported 2,650,885 continuing claims for the week of June 20 – implying that **more people are receiving PUA in that week alone than reportedly applied for PUA in the first place.**

Figure 2



Mississippi weekly continuing claims and cumulative initial claims for PUA. Continuing claims have fewer data points because they are reported on a two-week lag.

Pennsylvania is not alone in this issue; many states have reported a cumulative number of initial PUA claims lower than the peak week of continuing claims. This is the case for nine of the 13 states in Figure 1.³ Additionally, continuing claims have been extremely volatile in some states, while initial claims have remained low and relatively steady. This is especially apparent in Mississippi, where continuing PUA claims have recently taken a huge spike. As Figure 2 shows, between June 13 and June 20, Mississippi's continuing claims jumped from 75,185 to 540,403, while the cumulative initial claims remained below 50,000. During this time, continuing claims for state UI also rose by around 51,000 claims, making it unlikely that the jump was a reallocation from regular UI to PUA. These inconsistencies make it hard to interpret PUA data and will ultimately make it difficult to evaluate the effectiveness and impact of this new program.

Some of the inconsistencies in PUA reporting are likely due to the procedures that states are using to process PUA claims. **Some states, including**

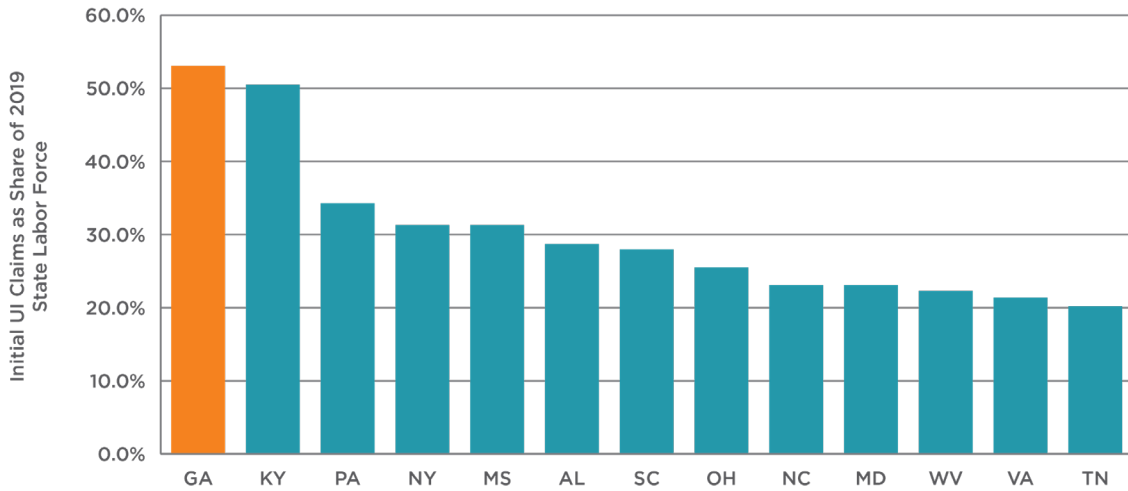
Georgia, require all individuals wanting to file for PUA benefits to first be declined for state UI. These procedures are understandable given the legacy computing systems states are working with and the urgency of the need. But the result is an apparently inflated measure of regular state initial UI claims in the weekly reports.

Georgia's state labor department is aware of the issue has been keeping track of initial PUA claims, even for the weeks the state reported no claims on the DOL's official news release. According to their state data, Georgia has received a total of 238,024 initial claims for PUA through July 4.⁴ Subtracting this number from initial regular state UI claims gives a more accurate count of initial claims for regular UI. This adjustment, however, hardly makes a dent in the nearly three million initial claims in the state. In Figure 3, we have recreated Figure 1 with Georgia's corrected UI claims, but the story is still largely the same. Georgia still towers over most of the other states. This leads us to another likely source of error in Georgia's UI numbers – duplicate claims.

³ Two of the states for which this is not the case, Georgia and West Virginia, have not reported any continuing PUA claims.

⁴ These initial PUA claims figures come from correspondence with the Workforce Statistics Division at GDOL.

Figure 3



Cumulative initial claims for state UI (not seasonally adjusted) from weeks ending in March 14 through July 4. For Georgia, initial PUA claims are subtracted out of the reported initial UI claims.

Duplicate Initial UI Claims

Initial UI claims should ideally be filed just once per person per layoff. Afterwards, that individual's claim is either approved or denied and shifted into continuing claims counts, with little reason to apply again. However, an official at the Georgia Department of Labor recently noted that GDOL has seen several instances of two or even three initial UI claims filed under the same social security number during the pandemic.

Using Georgia's industry-level UI claims, we have found evidence that suggests the number of duplicate claims is significant. In the leisure and hospitality sector, Georgia has seen 820,066 initial UI claims between March 21 and July 4.

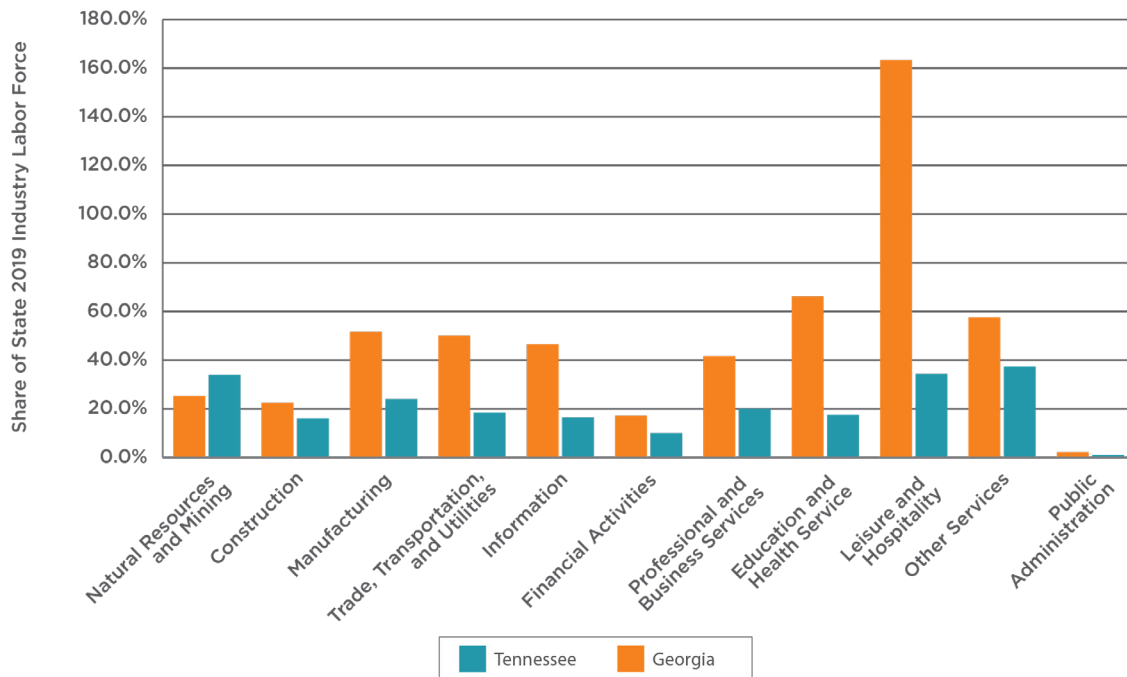
However, Georgia's leisure and hospitality workforce in 2019 only totaled 502,100 according to establishment data from the Bureau for Labor Statistics. The initial UI claims therefore account for 163% of this industry's workforce – a figure that almost certainly indicates some individuals are being counted multiple times.⁵

Georgia's initial claims are elevated in many other industries as well. As Figure 4 shows, for most industries, initial claims in Georgia make up a much larger portion of their industry workforce than initial claims in Tennessee. The manufacturing industry is another industry with outsized claims in Georgia. In Tennessee, the initial claims in manufacturing totaled 85,348 – about 25% of their 2019 workforce in that industry. In Georgia, there have been 209,548 initial claims in manufacturing, which is more than 50% of their industry workforce.

Could differences in the composition of manufacturing subsectors between the two states account for this difference? We used subsector-level claims numbers from Tennessee to answer this question. After finding the percent of each manufacturing subsector that filed initial UI claims in Tennessee, we multiplied these percentages by the size of the workforce in each subsector in Georgia, giving us a baseline number of claims in Georgia if each manufacturing subsector in Georgia was affected similarly to Tennessee. This calculation resulted in a total of just 91,343 manufacturing claims in, well

⁵ Alternative explanations are cycling furloughs for the same worker, work sharing, or fraud.

Figure 4



Initial UI claims (not seasonally adjusted) in Georgia and Tennessee as a share of 2019 industry labor force in each state.

short of the actual Georgia total. We also cannot explain this difference with PUA claims, which are unlikely to be a substantial portion of employment in the industry.⁶ Instead, we believe this difference was mostly due to duplicate claims in Georgia.

How, then, are multiple claims being filed for the same person? We propose that there are three likely mechanisms in Georgia. First, it is possible that **initial claims are being filed by both the employer and the employee**. Early in the pandemic, Georgia's labor department staff was swamped with an unwieldy number of claims, and they were eager to find ways to cut down their workload. In late March, GDOL began requiring that employers file UI claims for furloughed workers instead of having the workers file for themselves. While this may have decreased the workload on GDOL, it likely led to a lot of confusion among temporarily laid-off workers about how to

receive unemployment benefits. Indeed, there have been reported instances of furloughed workers filing for themselves, only to find out later that their employer had already filed an initial claim – creating two separate claims for the same person.⁷ The second possible mechanism is that **workers that have two or more jobs may be getting double-counted**. If these workers get laid off from both of their jobs, this would also generate two initial UI claims because both employers would file for them. The third possibility is that some workers filed initial claims for themselves multiple times. GDOL has been dealing with extensive backlogs of claims, meaning some workers have had to wait for several weeks to hear back about their claims. During this delay, many individuals may have become impatient or concerned that their claim was never received, and it is possible that they chose to submit another initial UI claim.

⁶ Our assumption is that gig and self-employed workers are unlikely to work in the manufacturing industry.

⁷ Instances of this are reported in an article in Vox by Ella Nilsen: <https://www.vox.com/2020/4/24/21229329/georgia-unemployment-insurance-rule-furloughed-workers>

This is not an exhaustive list of possibilities, and there may be additional reasons that duplicate claims have occurred in Georgia and other states. (See Footnote 5.) Nevertheless, it is clear that these duplications are present and having a pronounced effect on initial claims data in at least a few Georgia industries.

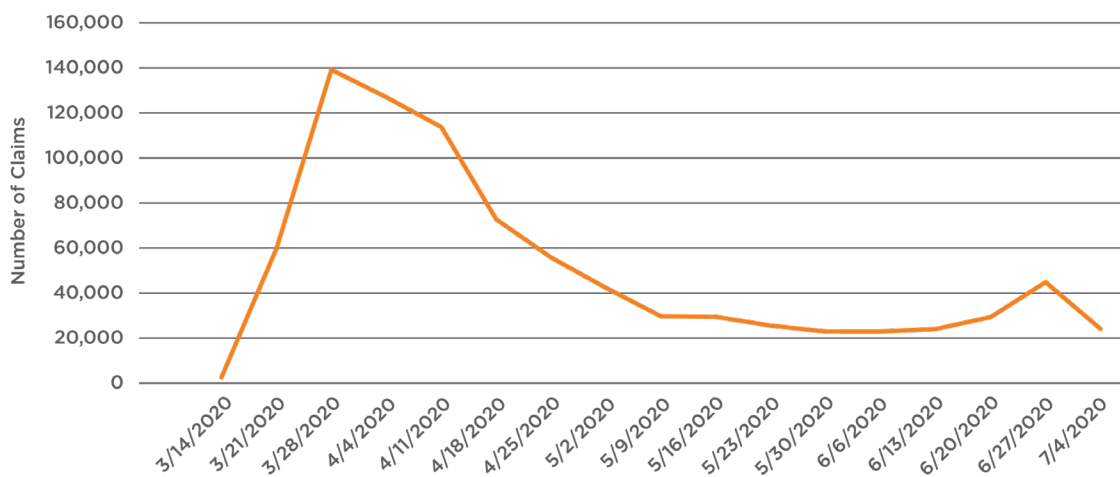
Fraudulent UI Claims

In the nationwide economic fallout during Covid-19, state unemployment offices have been flooded with a historic number of claims. Amidst this influx of new claims, there has been a spike in fraudulent UI claims across the country, with criminal actors hoping to go unnoticed because of the increased claims traffic. There have been reports of coordinated attacks in North Carolina, Massachusetts, Michigan, Rhode Island, Oklahoma, Wyoming, and Florida, and other states have also reported that they are investigating thousands of cases of UI fraud.⁸ This is detrimental to state economies and unemployment programs in many respects, but for our purposes, **UI fraud can notably inflate the number of UI claims in**

the affected states. A particularly striking example can be seen in Indiana. After initial claims in Indiana had stabilized below 30,000 per week for over almost two months, the state's claims jumped from 29,331 to 44,827, only to fall back to 24,086 the following week. This spike is shown in Figure 5. Officials in Indiana suspect that UI fraud is a large part of this significant jump, **estimating that over 20,000 of the claims from that week were from criminals,** not unemployed citizens. This greatly distorts the number of reported claims, and thus, the number of individuals that appear to be applying for UI.

In mid-June, GDOL was investigating around \$1.5 million in UI fraud charges, but they expected many of the claims were unintended consequences of the employer filing rules. For instance, many of these flagged claims were from employers who filed for their furloughed workers, not knowing that they were still working full-time at another job, making them ineligible for UI. While cases like this are hardly malicious, they still contribute to the issue at hand: adding a misleading number of initial UI claims to Georgia's total. This size of the effect is difficult to quantify without more information.

Figure 5



Weekly initial UI claims in Indiana (not seasonally adjusted).

⁸This is according to a *New York Times* report by Tara Siegel Bernard: <https://www.nytimes.com/2020/07/02/your-money/coronavirus-unemployment-fraud.html>

The Promise of Accurate UI Data

Over the course of seven days in March 2020, the weekly unemployment insurance claims release from the Department of Labor transitioned from a rote report of a boringly robust labor market to one of the most highly anticipated pieces of economic data. Although the Census Bureau has since implemented high-frequency surveys of households and small businesses (the Pulse surveys), these small sample surveys are less accurate measures of labor market health than the universal data collected by UI systems. The monthly employment situation report has long been the hallmark labor market data report, but in the fast-moving world of Covid-19, the information in the monthly jobs report can seem stale.

There is enormous promise in accurate weekly UI data. An accurate weekly measure of unemployment claims would join American mobility data and other high-frequency data in helping observers understand the week-to-week progression of the American economy. Accurate data would allow for more nuanced policies than are currently on the table, for example by informing an automatic stabilizer to fiscal policy or by providing the rationale for industry-specific or geography-specific UI payments.

These positive public returns accrue nationwide, not to states themselves. Thus, the effort and investment to improve UI reporting should be a federal one, as previous grant programs to upgrade UI computing systems have recognized.

Conclusion

For a variety of reasons, reported initial UI claims are not what they seem. The explanations we offer in this paper are by no means a complete list, but they should still give us pause when we look for insights in initial UI claims data throughout the pandemic. The unreliable and ever-changing nature of UI data makes it difficult to compare states to each other, to compare the same state week over week, and

to determine the true demand for unemployment benefits nationwide. For these reasons, we warn against using initial UI claims for policy decisions, automatic stabilizers, or other labor market analysis during the pandemic without fully considering what these numbers are telling us. Investments to upgrade systems and produce accurate labor market data are likely to generate high public returns.