Should we be worrying about the labor force?

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From one perspective, the labor market has made a rapid recovery from the pandemic induced surge to 14.8% unemployment in March 2020. Nationally, the unemployment rate sits at 5.9%, 2.4 percentage points above the level before the pandemic. In Iowa, the unemployment rate peaked at 11.1% in April 2020, but rebounded quickly and has been at or below 4% since November 2020.

However, the rapid rebound in unemployment rates disguises a relatively weak recovery of jobs. As of June 2021, national employment was still 3.5% below the level in June 2019. In Iowa, employment fell by even more, standing at 3.7% below the pre-pandemic level. Iowa metro employment fell by less at -2.8%, while employment in rural counties has fallen -4.9%.

Normally we think of employment outcomes as a consequence of firm demand for workers. However, we have been setting all-time records for unfilled job vacancies as an unprecedented fraction of the working age population has not been seeking work. The fraction of the population either employed or unemployed but seeking work fell 3.1 percentage points from February 2020 to April 2020 and has only rebounded by 1.4 percentage points.

In recessions, the labor force typically shrinks as some fraction of the workforce becomes discouraged and stops seeking employment. In a normal recovery, the labor force increases as employment increases and the returns to job search rise. This is not a normal recovery. The labor force participation rate has hardly budged since June of 2020, even though employment has risen 6.7%. Employment should have increased more. There were 9.2 million job openings in May 2021 but less than 6 million hires, a hiring rate of 64%. We had the same number of hires with only 7.3 million openings in May 2019, a typical hiring rate of 78%. Either the hiring process has become much less efficient or we have an unprecedented hesitancy of Americans to take jobs. The conclusion from this data is that we are not experiencing a shortfall of labor demand, but an historically weak of labor supply.

There are many explanations advanced for the decline in labor force participation, none of which have proven satisfactory. The most obvious is that workers were insecure about the possibility of contracting the disease and preferred to stay at home. But virtually all of the increase in the labor force participation rate since the initial drop happened in the summer of 2020 before the vaccine rollout. As the vaccines have been distributed and the transmission of the disease slowed, the labor force has remained stubbornly stagnant.

A second argument is that the shutdown of schools and closing of day care centers forced parents out of the labor force. However, it is nonparents whose labor force fell most. Labor force participation for parents changed only slightly between 2019 and 2020.[1] The pandemic caused some parents to drop out of the labor market, but not atypically so.

A third argument that holds more water is that the decrease in labor force participation is from older workers taking retirement, or perhaps, taking unemployment benefits until they can qualify for pension or social security. Because of the strong labor market in the years before the pandemic, the retirement rate in the U.S. fell as a larger share of older workers opted to remain working. Retirements reverted to the expected trend early in the pandemic. Analysis suggests that about one-third of the drop in labor force participation is due to the surge in retirements.[2]

The most widely discussed reason most recently has been the additional unemployment insurance (UI) benefits offered by the federal government. Initially, $600 additional benefit was added to the weekly UI payment, and then it was reduced to $300. However, the benefits were also extended beyond the typical 26 weeks in a series of successive legislations, including the Pandemic Unemployment Assistance program, the Pandemic Emergency Unemployment Compensation program, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021, and the American Rescue Plan Act of 2021. These extensions have allowed some individuals to continue to receive UI benefits for over a year.

It is clear that the UI benefits were generous. A paper by University of Chicago economists showed that median incomes rose for individuals who lost their jobs early in the pandemic compared to individuals with the same wage levels who remained employed.[3]

Typically, unemployment benefits average about 50% of previous earnings so that there is an incentive to seek employment. However, even after the $600 payment expired, earnings for job losers did not fall greatly compared to those who remained employed. (Figure 1) Because the value of free time is not zero, it is possible that individuals prefer to remain unemployed on benefits rather than returning to their previous job, at least until the benefits run out. The fraction of previously employed workers who said they would return to their previous job fell steadily from 68% in July 2020 to 52% by April 2021.[4]

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[1] See the summary by the U.S. Bureau of Labor Statistics at https://www.bls.gov/opub/ted/2021/labor-force-participation-declines-for-mothers-and-fathers-in-2020.htm

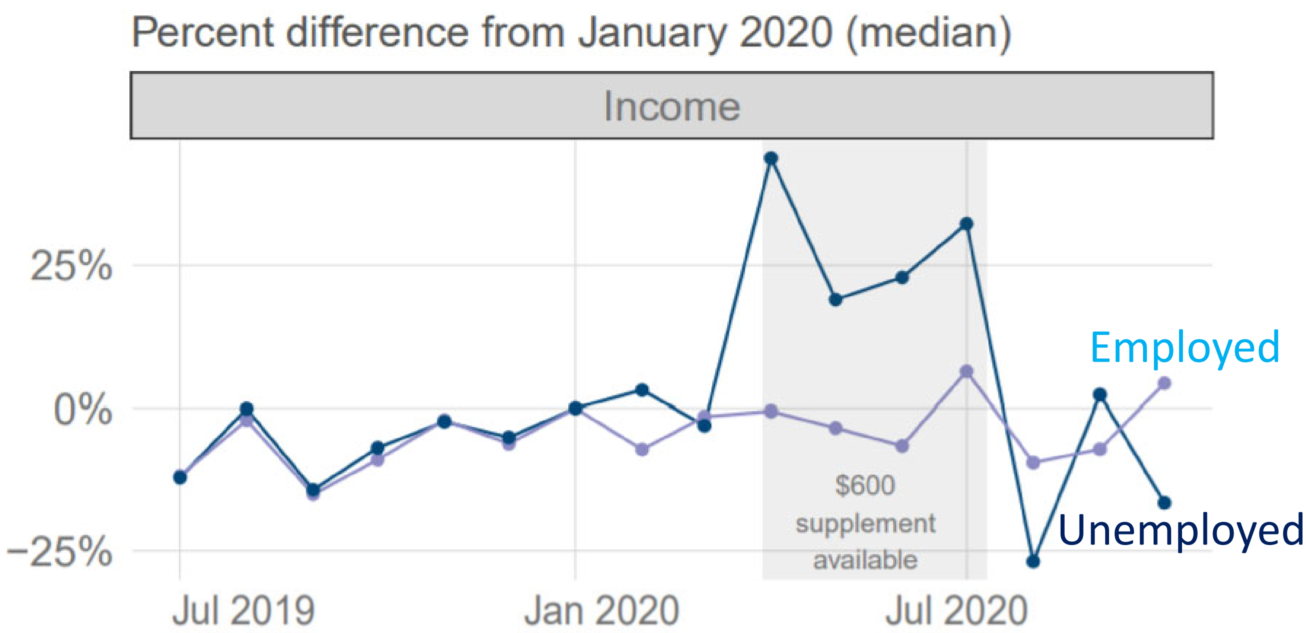
[2] Robert S. Kaplan, Tyler Atkinson, Jim Dolmas, Marc P. Giannoni and Karel Mertens The Labor Market May Be Tighter than the Level of Employment Suggests May 27, 2021 https://www.dallasfed.org/research/economics/2021/0527?utm_source=cvent&utm_medium=email&utm_campaign=dfe

[3] Ganong, Peter, Fiona Greig, Max Liebeskind, Pascal Noel, Daniel Sullivan, and Joseph Vavra. "Spending and job search impacts of expanded unemployment benefits: Evidence from administrative micro data." University of Chicago, Becker Friedman Institute for Economics Working Paper 2021-19 (2021)

[4] Robert S. Kaplan, Tyler Atkinson, Jim Dolmas, Marc P. Giannoni and Karel Mertens The Labor Market May Be Tighter than the Level of Employment Suggests May 27, 2021 https://www.dallasfed.org/research/economics/2021/0527?utm_source=cvent&utm_medium=email&utm_campaign=dfe

Figure 1: The median income of job losers and job retainers in the early pandemic

Source: Ganong, Peter, Fiona Greig, Max Liebeskind, Pascal Noel, Daniel Sullivan, and Joseph Vavra, 2021



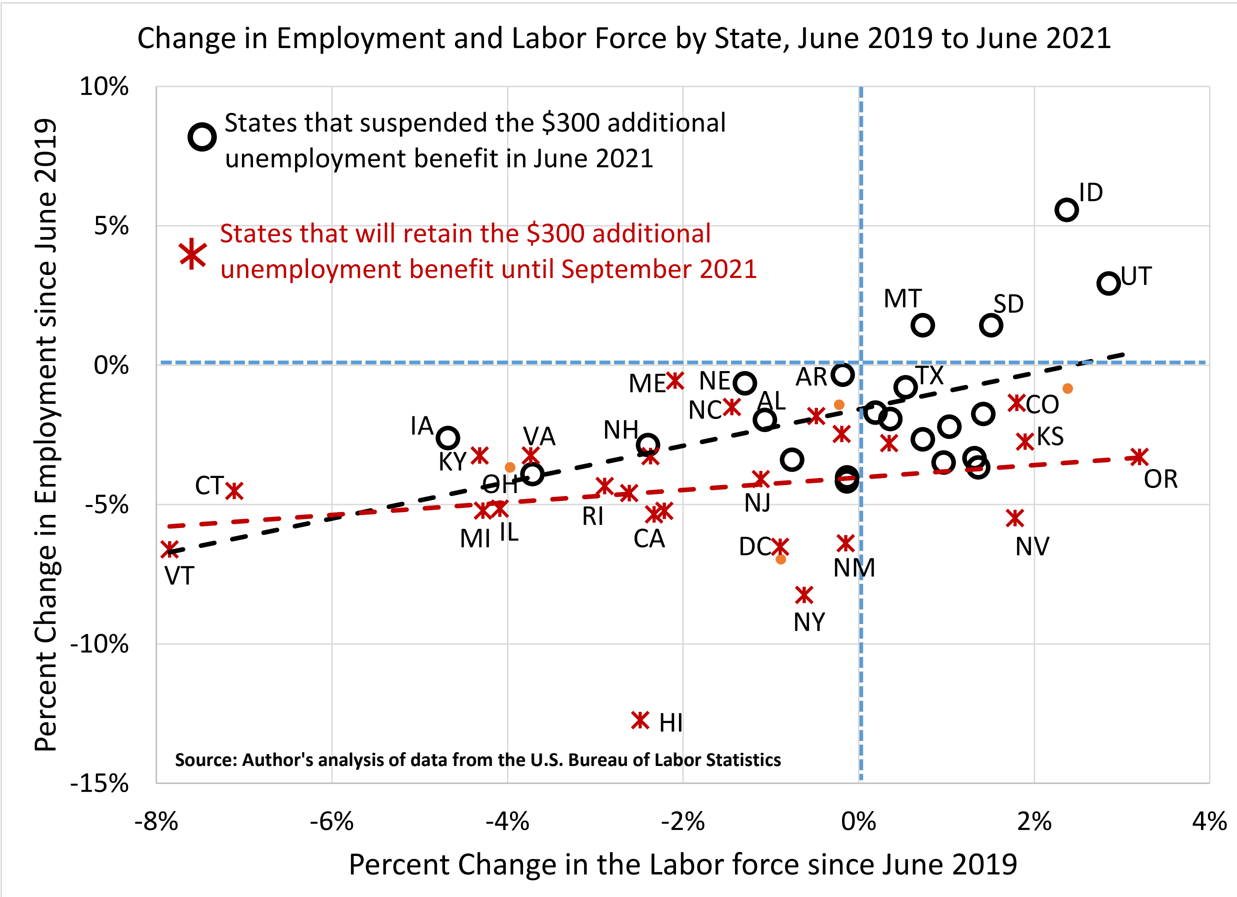
We can get some insights by looking at the pattern of employment and labor force changes by states from before the pandemic to the most recent data (Figure 2). I use June 2019 to June 2021 to hold fixed the labor market patterns due to month of the year. Twenty-two states eliminated the $300 additional UI benefit at some point in June, as designated by the circles. Four more states will suspend the added benefit in July, and the rest (designated by red asterisks) will have the payment expire in September.

It is obvious that employment outcomes are better (or less bad) in the states that eliminated the $300 surplus UI benefit. Average job loss was 1.6% in states that suspended the supplemental benefit, but employment fell 4.4% in states that are retaining the UI surplus benefit until September. However, the gains are due to the consistently more employment friendly policies in the states that suspended the $300 UI supplement than to the suspension itself. It is more accurate to say that states that had the smaller employment reduction opted to suspend the supplemental benefit than to say that the suspension led to a more modest employment reduction.

It is interesting that the positive correlation between employment changes and labor force participation remains, but it is stronger in the states that did not suspend the $300 payment. This is indicated by the flatter trend line for the states that did not suspend the UI supplement. A one percentage point increase in employment leads to a larger increase in the labor force in the latter states. That also suggests that the states that suspended the added benefit have a stronger tie to the labor market and are less likely to drop out when the economy weakens.

I divide Figure 2 into four quadrants. The upper right includes states that increased both employment and labor force since June 2019. The lower left includes states that lost both employment and labor force. The lower left includes states that gained labor force but lost employment. No states are in the upper left quadrant that would include states that gained employment but lost labor force.

Figure 2: Changes in employment and labor force participation by state during the pandemic



There are some interesting patterns in the data

First, four states, Utah, Idaho, Montana and South Dakota gained both employment and labor force since June 2019. No other states gained employment.

Hawaii lost jobs at a faster rate than any other states, losing 12.7% of its jobs. This is related to its reliance on tourism and transportation.

All the states that lost more than 5% of their employment have retained the UI supplemental benefit.

There are substantial differences in labor force participation for states with similar employment loss. For example, the states that have lost about 4% of their jobs have labor force changes ranging from -2.6% (Massachusetts) to -0.1% (West Virginia and North Dakota). The broad range of labor force participations at similar employment levels suggests that the reasons for the decrease in labor force are driven by differences between the states in incentives to supply labor and not to the state's labor market strength.

States that locate above the trend line have atypically weak labor force participation relative to the strength of their local labor markets. In other words, we would expect greater labor force participation in states such as Connecticut, Kentucky, Iowa, and Maine. I suspect economists will be studying the reasons for the weak labor force responses for many years.

We need the labor force to respond much more positively to rising labor demand as indicated by the unprecedented number of vacancies available. If that does not happen, we will face strong upward pressure on wages that will translate to inflationary pressures.

Details on Iowa

As can be seen by Iowa's position in Figure 2, the labor market response to the pandemic recovery has been quite disappointing in Iowa. The labor force drop has been atypically large at -4.7% and the labor force has not responded to improving job prospects.

There have been sharp differences in the extent to which the pandemic has affected the various sector of the Iowa economy. For the most part, these differences mirror the patterns in the nation, with the largest employment loss in the hospitality industries. Restaurants, bars, hotels, and entertainment venues lost a quarter of their employment almost immediately, and the recovery has only begun recently as the vaccine began to lower the spread of covid-19. Other sectors, shown in bold, have gained employment in the pandemic.

For example, manufacturing has lost employment overall. However, nondurable goods such as food processing and meat packing have increased while durable goods such as transportation equipment have declined.

Overall, retail firms have lost labor. However, big box retailers, liquor stores and food stores have gained employment. Retailers engaged in internet sales and home deliveries have gained market share while traditional brick-and-mortar stores have declined.

Iowa has been expanding its finance and insurance sector, and there has been a slight increase in those jobs during the pandemic.

It is interesting that the rate of employment loss in government is half that in the private sector. Nevertheless, state and local governments are being targeted for federal funding.

One might have expected information to benefit from the large number of workers conducting their work activities remotely from home. Instead, the sector lost employment at over three times the overall rate. While that sector is relatively small in Iowa, Transportation and warehousing, wholesale trade and construction together represent 13% of all jobs and all have experienced non-negligible employment loss.

The other area of loss is the educational services sector which is particularly important. It is likely that private colleges and public universities will be facing some significant problems recovering from the revenue losses from the pandemic. I expect that some of these institutions will need to effect some substantial changes to lower costs or enhance revenues to return to pre-pandemic employment levels.

Table 1: Employment changes by sector in Iowa, June 2019 – June 2021

Industry	June 2019 - June 2021	Employment Share
Total Nonfarm	-3.72%	100.0%
Total Private	-4.04%	83.3%
Construction	-2.98%	5.0%
Durable Goods Manufacturing	-5.66%	8.1%
Non-Durable Goods Manufacturing	**1.77%**	**6.0%**
Wholesale Trade	-2.98%	4.2%
Retail Trade	-1.03%	11.2%
General Merchandise Stores	**2.89%**	**2.1%**
Transportation and Warehousing	-4.13%	4.0%
Information	-16.36%	1.3%
Finance and Insurance	**0.63%**	**5.9%**
Professional and Business Services	-2.69%	8.7%
Education and Health Services	-6.69%	15.0%
Educational Services	-11.78%	2.7%
Health Care and Social Assistance	-5.83%	12.3%
Leisure and Hospitality	-9.61%	8.8%
Government	-2.08%	16.7%

Source: Author's analysis of data from Iowa Workforce Development
U.S. employment has fallen 3.5% from June 2019 to June 2021

Table 2: The fastest and slowest growing Iowa rural counties by employment change, June 2019 to June 2021

Fremont	8.74%
Cherokee	3.39%
Decatur	3.21%
Lucas	3.19%
Louisa	1.90%
Buena Vista	1.84%
Palo Alto	-8.65%
Iowa	-9.42%
Shelby	-10.02%
Floyd	-10.71%
Adams	-14.55%
Mitchell	-15.81%

Iowa's Rural Markets

As noted above, employment loss in Iowa's rural counties have been greater than for the state as a whole. However, there are huge differences in employment changes, ranging from -15.8% in Mitchell County to +8.7% in Fremont County. It is important to identify why some counties are doing better during the pandemic.

Some of the differences are due to pre-pandemic conditions, and this explains the outliers. Fremont County had experienced substantial employment loss due to flooding in 2019 and so the gains since then reflect the recovery from the atypically low employment base in June 2019. In contrast, Mitchell County had been experiencing a surge in employment in 2019 that was disrupted by the pandemic. In that case, the large loss is from an atypically high base in June 2019.

Other counties experiences reflect their sectoral employment mix. Rural counties with nondurable manufacturing have done relatively well (Buena Vista, Louisa County) as have counties that had large logistics operations supporting large retailers (Lucas). Counties that relied more heavily on hospitality performed more poorly (Palo Alto). If the vaccination successfully reverses the spread of the disease, employment in these counties should revert to their previous trends.

I return to the Mitchell County case to illustrate how difficult it is to understand why the employment recovery is so slow. In June 2019, the Mitchell County labor force was 7220, employment was 7110, and so there were 110 unemployed. In June 2021, the labor force had fallen by 14.4% to 6180, employment had fallen 15.6% to 6000, and there were 180 unemployed. Even though employment fell by 1110, unemployment rose by just 70 people. The rest dropped out of the labor market, meaning they are not seeking work. On-line job search website Indeed reports that there are 854 jobs posted within 25 miles of Mitchell county, almost enough to return to the pre-pandemic 5 employment level.

Iowa's Metropolitan Markets

There are substantial differences in the pace of the recovery across Iowa's metropolitan markets as well. As shown in Figure 3 and Table 3, Des Moines has performed particularly well with employment just 0.6% below the pre-pandemic level. Ames (-1.6%) and Dubuque (-2%) are also experiencing a relatively robust jobs recovery. All three markets have benefited from relatively rapid job growth in the government sector. The Des Moines and Dubuque private sectors have also been able to rebound faster than the U.S. as a whole. The labor markets of Cedar Rapids, Iowa City and Waterloo-Cedar Falls are lagging significantly behind the U.S. recovery, and their slow recovery has been related to the challenges faced by their private sector firms.

Figure 3: Employment Changes by Iowa Metropolitan area, June 2019 – June 2021

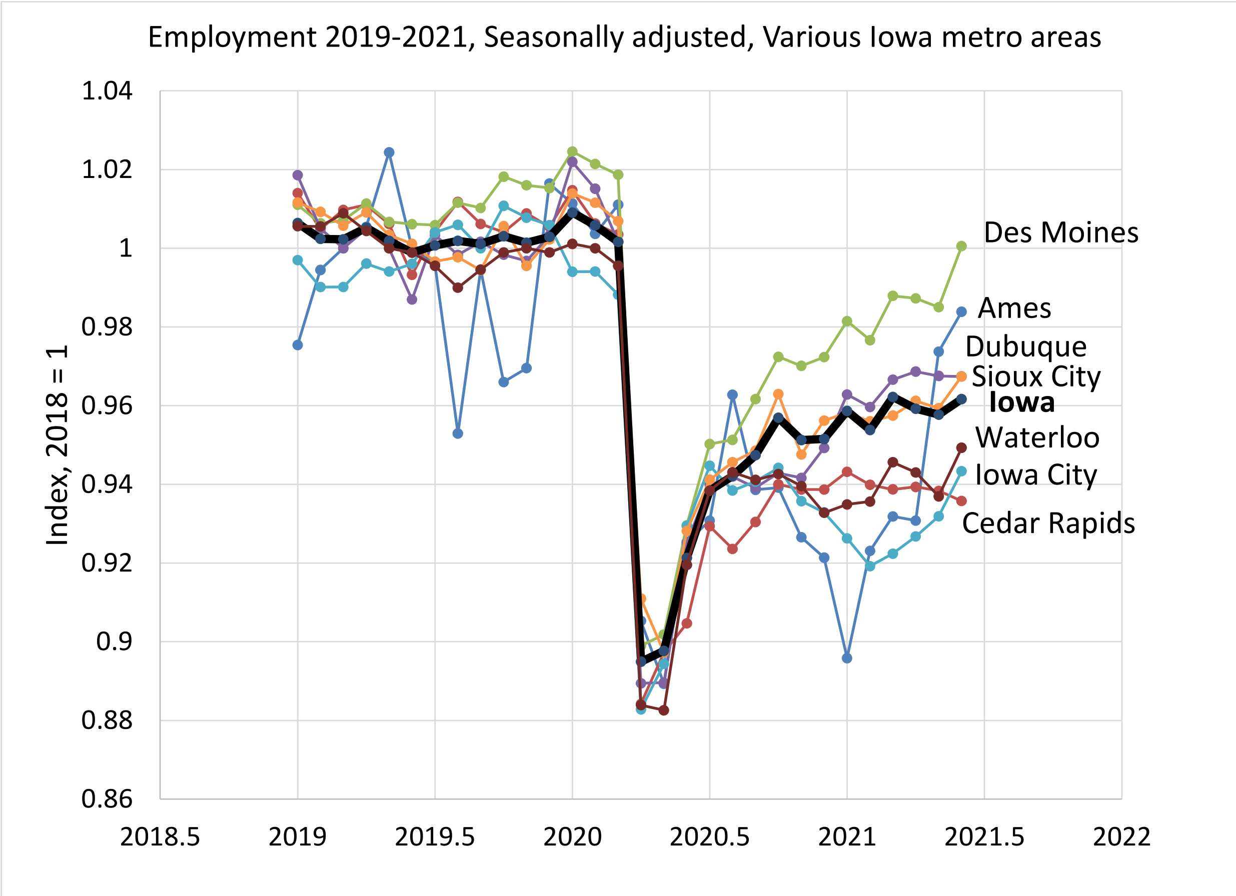


Table 3: Employment Changes by Sector for Iowa Metropolitan Markets, June 2019 – June 2021

	Ames	Cedar Rapids	Des Moines	Dubuque	Iowa City	Sioux City	Waterloo/ Cedar Falls
Total Nonfarm	-1.6%	-5.8%	-0.6%	-2.0%	-5.3%	-3.4%	-5.0%
Total Private	-4.4%	-6.0%	-1.2%	-2.3%	-7.9%	-3.3%	-5.4%
Goods Producing	-2.7%	-5.8%	2.1%	1.5%	-3.1%	-2.7%	-6.2%
Private Service Providing	-4.9%	-6.0%	-1.7%	-3.5%	-8.8%	-3.6%	-5.1%
Government	3.4%	-4.3%	4.1%	2.2%	-1.0%	-3.6%	-2.3%

Source: Author's analysis of data from Iowa Workforce Development
U.S. employment has fallen 3.5% from June 2019 to June 2021