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The Labor Market Recovery Following COVID

By the time the Fed raised interest rates, employment was back to normal—but not for everyone.

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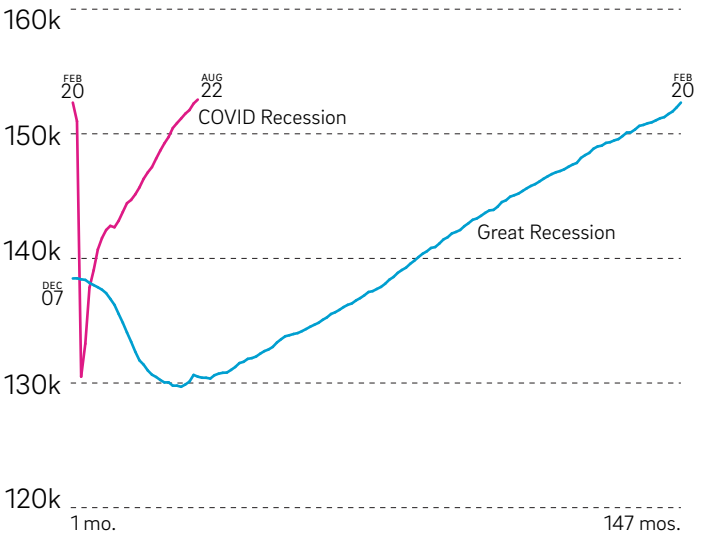
The COVID-19 pandemic was the largest adverse shock to hit the U.S. economy since the Great Depression (1929-1939). Total payroll employment decreased by 14 percent when the pandemic hit. In contrast, during the Great Recession (2007-2009), from peak to trough, employment declined only 6 percent, although even that smaller decline had a long-lasting effect on the labor market. Given how long it took for the labor market to recover after the Great Recession, many economists worried that the COVID shock, which was more than twice as strong, would have adverse, long-lingering effects on the labor market.

But the recovery from the COVID shock has been

FIGURE 1

The Labor Market Took Much Longer to Recover from the Great Recession

Total nonfarm employment, in thousands of persons, seasonally adjusted, from the beginning of the Great Recession to the beginning of the COVID recession, and from the beginning of the COVID recession to the most recently available monthly data



Source: U.S. Bureau of Labor Statistics; Federal Reserve Bank of St. Louis (FRED).

surprisingly strong, much stronger than many economists expected (Figure 1). This might be due to the strong fiscal and monetary support provided to the economy, which prevented large-scale defaults and helped maintain strong demand.

However, this strong support and the fast recovery, along with COVID supply chain disruptions, spurred inflation in the second half of 2021. Because of the increase in inflation, it took the Federal Reserve just two years after the COVID shock to tighten monetary policy, starting in March 2022. In contrast, after the Great Recession it took nine years before conditions warranted monetary policy tightening (Figure 2).

A central bank raises interest rates to dampen economic demand and thus relieve inflationary pressure, but higher rates might also slow the growth of employment in the labor market. Had employment fully recovered by the time the Federal Reserve began to tighten monetary policy earlier this year? Or was the labor market still lagging relative to the prepandemic? In this article, I address these questions.

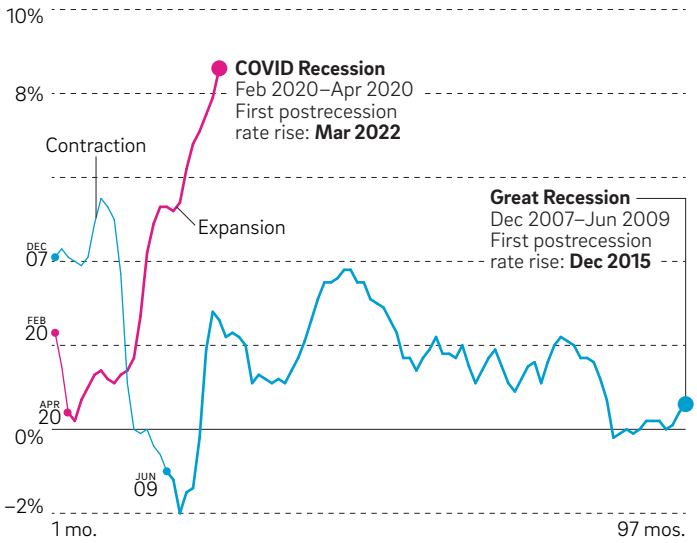
As is well known, this recession was unique, with nonstandard effects on different demographic groups, so I divided the population into demographic groups and then analyzed how each group's employment recovered following the pandemic, relative to previous expansions. I find that although the recession is over for most demographic groups, the recovery of women without a college degree and of older workers is lagging.

For this analysis, I used employment-to-population ratios. However, the comparison of employment-to-population ratios through time is complicated by the fact that U.S. demographics have changed. The share of the population 55 years and older, which was 20 percent in 1990, had increased to 29 percent by 2020.

FIGURE 2

Inflation Increased Rapidly After the COVID Recession, Triggering Early Rate Hike

The inflation rate from the onset of the recession to the FOMC's first increase in interest rates, the Great Recession and the COVID recession



Source: U.S. Bureau of Labor Statistics; Federal Reserve Bank of St. Louis (FRED).

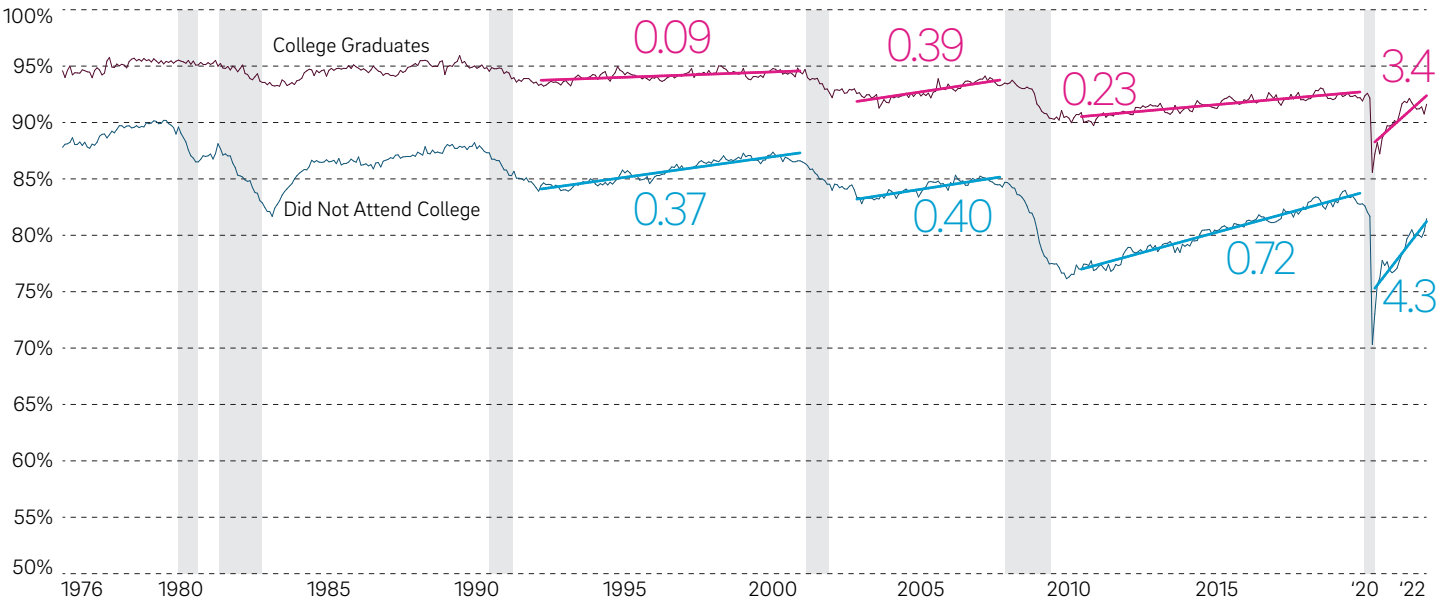
Note: Inflation rate refers to the Consumer Price Index for All Urban Consumers: All Items in U.S. City Average (CPIAUCSL).

FIGURE 3

During Recessions, Men Without a College Degree Are More Likely to Lose Their Jobs

But during recoveries, they tend to find jobs faster.

Employment-to-population ratio, men 25–54 years old, with and without a college degree, 1976–2022



Source: Flood et al. (2021).

Note: The figure also plots linear trend lines for some of the expansions, highlighting the average percentage point increase in the employment rate per year during each expansion.

Given that prime-age people are more attached to the labor market than older people, aging might affect the evolution of the employment-to-population ratio on its own. To overcome this effect, I focused on the prime-age population. I also looked at men and women separately, as women substantially increased their labor force participation in the 1980s, whereas men did not.

Prepandemic Recoveries Followed a Predictable Pattern

Comparing Men With and Without a College Degree

Employment of men without a college degree drops more than it does for college-educated men during recessions (Figure 3).[1] In turn, during recoveries, men without a college degree typically see their employment grow faster than do college-educated men. For example, following the 1990 recession, the employment rate grew 0.4 percentage point per year for men without a college degree, whereas it barely grew for the college educated.

This pattern was even more stark during the Great Recession, when the employment rate declined a whopping 9 percentage points for men without a college degree but only 3 percentage points for college-educated men. And then, during the recovery, the employment rate grew 0.7 percentage point per year for men without a college degree but only 0.2 percentage point per year for college-educated men.

This suggests that long recoveries are especially important for the increase in the employment rate of men without a college degree.[2] Another thing to notice is that the employment rate increased steadily in some of these expansions for men without a college degree, especially during the more recent ones—that is, the employment rate was on a linear upward-sloping trend line throughout the expansion. In most macroeconomic models, the natural employment rate is below 100 percent, because there is always some necessary churning in the economy, with firms exiting and entering and people switching to preferable jobs. In addition, some people might exit the labor force because, for example, they develop health problems or need to take care of family. As an expansion continues, the economy gets closer to this natural employment rate, and the yearly increase in the employment rate should slow down. It's important to have a sense of where this natural employment rate is because, as the economy approaches that point, the Federal Reserve might need to tighten monetary policy to relieve inflationary pressure. However, for recent expansions, it has been hard to pin down the point at which the growth of the employment rate slowed down for men without a college degree. For example, in the post-Great Recession expansion, the employment rate for men without a college degree increased steadily on the same linear trend for the full 12-year expansion with no slowdown. This shows how challenging it is to estimate the natural rate for men without a college degree.

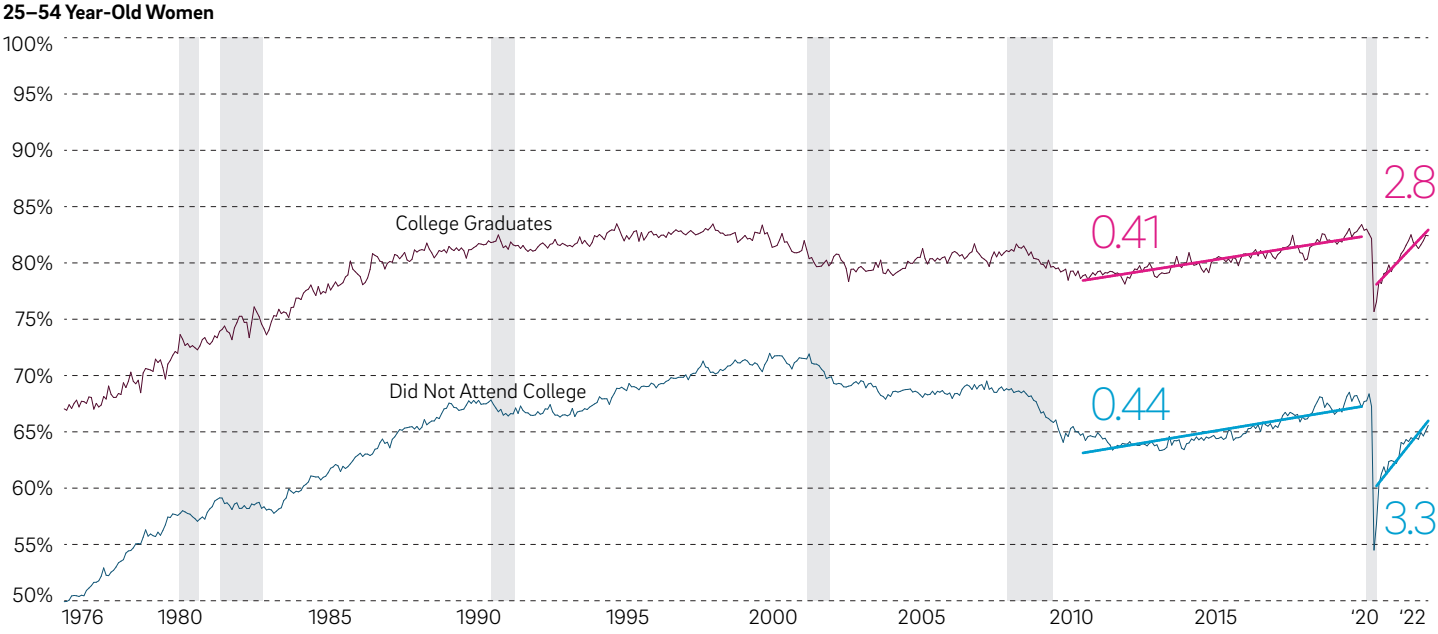
Many economists suggest that the natural employment rate for men without a college degree has drifted downward, but the data raise doubts about this conclusion. Assuming there are limits to how fast employment can recover, the U.S. economy's expansion after the Great Recession might have been too brief for this group's employment to climb back to its natural rate; their employment rate might have climbed even higher but for the pandemic.

FIGURE 4

Strong Growth in Women's Employment Makes It Hard to See How Pre-2000 Recessions Affected Them

But it seems that for women without a college degree, the employment rate grows faster at the end of an expansion.

Employment-to-population ratio, women 25–54 years old, 1976–2022



Source: Flood et al. (2021).

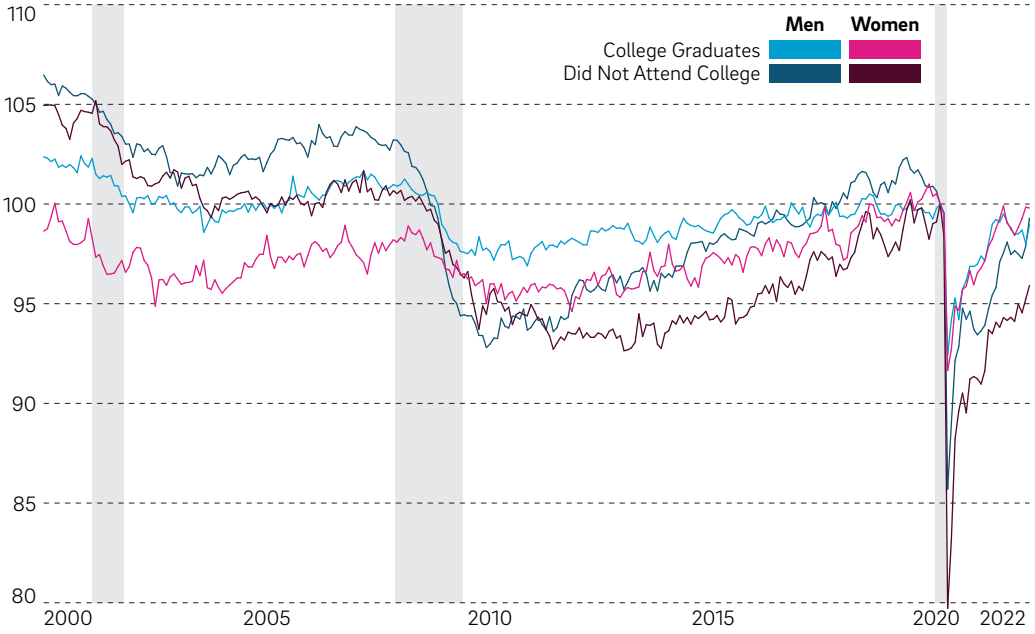
Note: The figure also plots linear trend lines for some of the expansions, highlighting the average percentage point increase in the employment rate per year during each expansion.

FIGURE 5

The Pandemic Recession Was Extremely Severe for All Groups

But women without a college degree suffered more during the recovery.

The employment-to-population ratio, normalized to 100 as of February 2020, for four demographic groups, 2000–2022



Source: Flood et al. (2021), author's calculations.

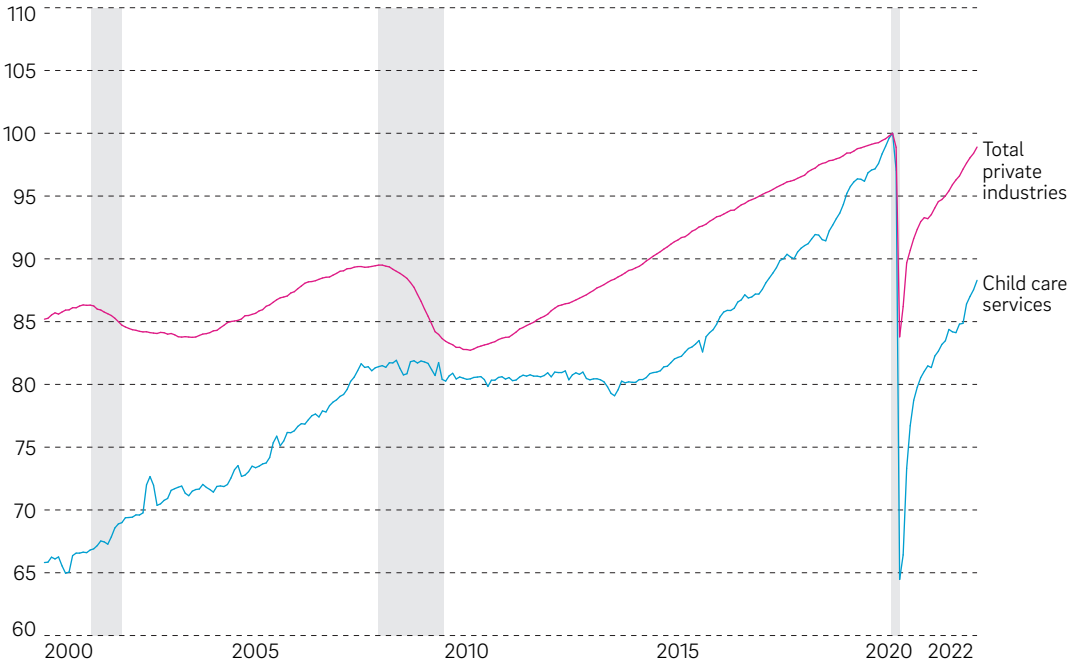
FIGURE 6

The Recovery in Child Care Services Employment Lags the Recovery in Other Sectors

This lag may be holding back the labor market recovery of women without a college degree.

Total employment in all private industries and in child care services, normalized to 100 as of February 2020

Employment in Child Care Services



Source: Haver Analytics, U.S. Bureau of Labor Statistics' Current Employment Statistics, author's calculations.

Comparing Women With & Without a College Degree

The employment rate for women increased strongly until the 2000s, which makes it hard to discern how recessions affected women before then (Figure 4). Similar to the case for men without a college degree, the expansion following the Great Recession improved the employment rate of both college-educated and less-than-college-educated prime-age women quite steadily. The employment rate increased around 0.4 percentage point a year for both groups during the expansion, without an apparent slowdown.

Indeed, for women without a college degree, the employment rate seems to have grown faster at the end of the expansion. Keep in mind that inflation was still lower than the Federal Reserve's target at the end of this expansion. These facts make it difficult to estimate where the natural employment rate lies for both college-educated and less-than-college-educated women.

A Remarkably Fast COVID Recovery, but Not for Everyone

To find out how different groups fared in the expansion following the pandemic shock, I normalized the employment-to-population ratio of each group to 100 as of February 2020, just before the recession hit. I then compare the recovery to these normalized employment rates.

The pandemic recession was extremely severe, surpassing the severity of the Great Recession (Figure 5). And, as in previous recessions, men without a college degree suffered a bigger decline in employment than did college-educated men. However, the

subsequent recovery has been remarkably fast. For college-educated men and women, the recession is over, and both groups are very close to their prepandemic employment-to-population ratio. For men without a college degree, the recovery started slowly but then sped up. By February 2022, their employment rate was only 1 percentage point below its prerecession level.

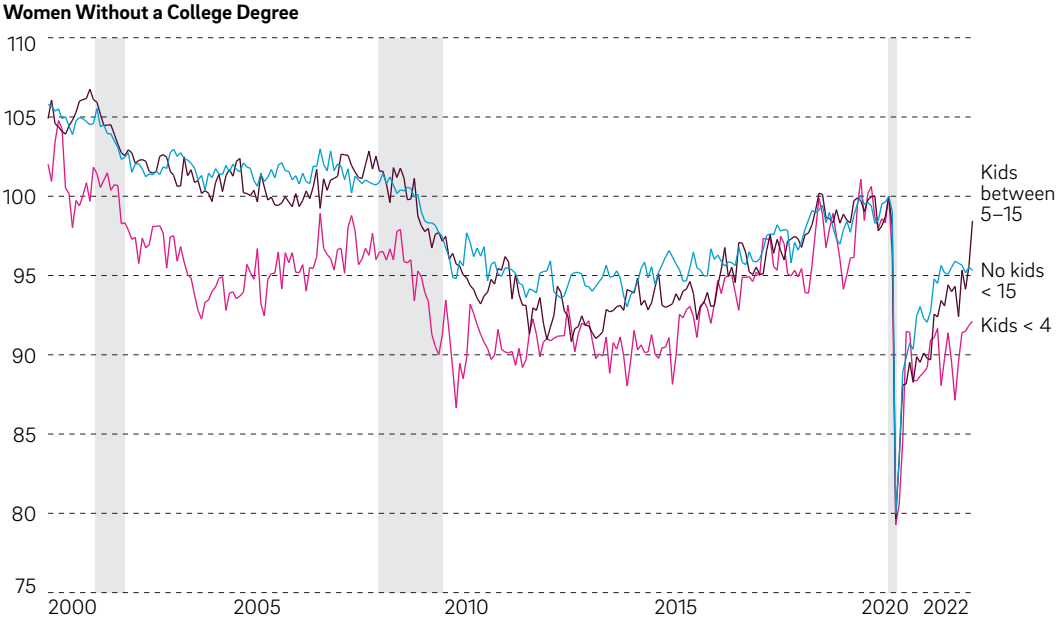
An outlier relative to previous recessions is the employment losses of women without a college degree. In the Great Recession, the decline in their employment rate was around half of the decline for men without a college degree, while in the COVID recession, their normalized employment rate declined 5 percentage points more. Two years into the pandemic, as of February 2022, their normalized employment rate was still 4 percentage points below its prerecession level.

FIGURE 7

Employment of Women with Kids Spiked After Pandemic's Nadir

But employment of women with preschool children has lagged.

Number of prime-age women without a college degree and with or without dependent children, in millions, 2000–2022



Source: Flood et al. (2021), author's calculations.

The Role of Child Care in the Labor Market Recovery

School closures and the decline in child care availability may be depressing the labor market recovery of women without a college degree.[3] As of February 2022, total private employment was back to its prepandemic level, but child care services employment was still 12 percentage points below its prepandemic level (Figure 6).

Why is this industry still lagging? Perhaps because many child care providers went out of business when demand collapsed—and given their typically low profit margin and the recent wage and rent inflation, it is difficult to bring them back. Although child care services employment is not a huge share of aggregate employment, one would expect its decline to disproportionately affect the employment of women.

To isolate the differing effects of school closures and the lack of child care services, I divided prime-age women without a college degree into three groups: women whose youngest child is less than 5 years old (that is, preschool children); women whose youngest child is from 5 to less than 15 years old (that is, school-age children); and women with no children younger than 15 years old. I found that employment of women with school-age children has quickly increased since October 2021 (Figure 7). This makes sense, as almost all U.S. schools opened fully in-person in the 2021-2022 academic year: According to surveys conducted by the Institute of Education Sciences, on the last day of the 2020-2021 school year, 62 percent of schools offered full-time in-person education; that share increased to 100 percent in September 2021. This suggests that school closures were indeed depressing employment for this group.

On the other hand, for women without a college degree and with preschool children, the employment rate was stalled at 8 percentage points below its prepandemic level two years into the pandemic. This is consistent with the fact that finding affordable child care is a continuing challenge for this group.

The Effect of COVID on Older Workers

Next, I compared the employment rate for the population 55 and over with the rate for the population 25-54 years old, again normalizing the employment rate in February 2020 to 100. So as not to overwhelm the reader, I do not distinguish with respect to gender.

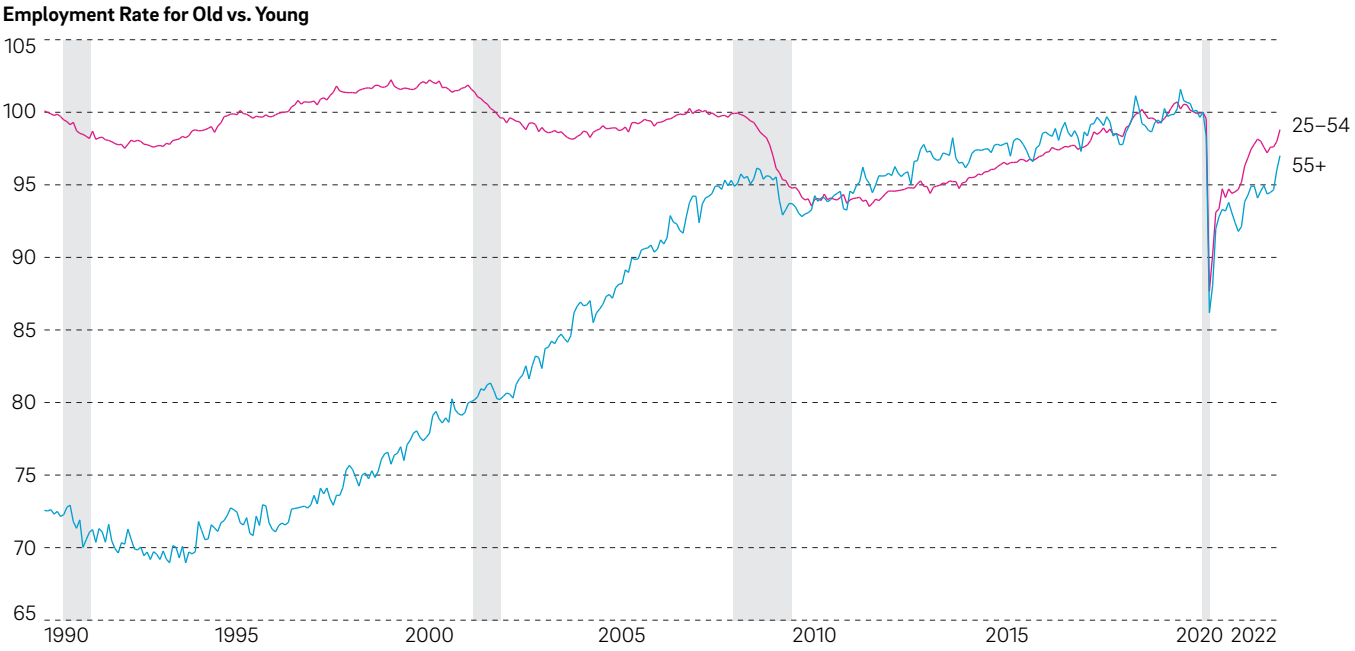
What effect do recessions have on the employment rate of older workers? Before the Great Recession, it's hard to say, because their employment rate was on an upward trend in the early 2000s. But we can see that the Great Recession's impact on the employment rate was milder for the older group (Figure 8). During the Great Recession, the employment rate for the 25-54 population declined 6 percentage points, whereas it declined only 2 percentage points for the 55+ population. It is well known that older people might have a harder time finding a job once they become unemployed. On the other hand, they are less likely than younger workers to lose their jobs, perhaps because of their longer tenure in their jobs. For these older workers, a longer tenure outweighs the greater difficulty in finding a job, leading to a smaller decline in employment for older people during recessions.[4]

This contrasts with what happened during the COVID recession. In 2020, the employment rate of older people declined more than for younger people. This difference persisted throughout the expansion: In February 2022,

FIGURE 8

Older Workers Suffered Less During the Great Recession and More During COVID

The employment-to-population ratio, normalized to 100 as of February 2020, for people 55 and older, and for people 25–54 years old, 1990–2022



Source: Flood et al. (2021), author's calculations.

the employment rate for the prime-age population was 1 percentage point below its prepandemic level, whereas for the older group it was 3 percentage points lower. It might be particularly difficult to absorb older people back into the labor force, given that COVID risks continue, and older people, once they become unemployed, are more likely to retire.[5]

Conclusion

The U.S. labor market quickly recovered from the COVID shock, but the recovery was uneven. For some groups, such as prime-age men and college-educated, prime-age women, the recovery is almost complete, and their employment is back at its prepandemic level. The employment rate of prime-age women without a college degree, however, is still low relative to before the pandemic. Older people also suffered more in this recession.

On the other hand, the COVID shock has revolutionized the labor market by making work-from-home more acceptable. A question not addressed in this article is whether this revolution is increasing the employment of groups averse to long commutes or being away from home, and whether some of the fast recovery can be attributed to this revolution. On the other hand, this revolution affects groups differently. Surveys conducted by the Bureau of Labor Statistics show that during the pandemic, 70 percent of college-educated workers could telework, while only 30 percent of high school graduates without a college degree could.[6] A more prevalent work-from-home option might exacerbate inequities in the labor market and explain the employment lag of women without a college degree.

Notes

1 Employment rates apply only to the noninstitutional population and exclude people not working because they are in school or training. The underlying data are micro IPUMS-CPS, and all series are deseasonalized. Except for the COVID recovery, I start the trend recovery line at one year after the trough of the NBER recession, because the labor market starts recovering a bit later than GDP. I end the trend line three months before the peak (that is, before the recession begins), because in some cases the labor market slows down just before a recession. For the COVID recovery, given the short range of the data, I start the trend line in May 2020.

2 Aaronson et al. (2019) similarly argue that when the labor market is already strong, a further increment of time during which the economy grows provides extra benefits to some disadvantaged groups, relative to earlier in the labor-market cycle.

3 Because of this, the popular press sometimes refers to the COVID recession as a "shecession" (she-recession). Ippei Shibata also explores the effect of women's occupational and sectoral employment on their higher job losses during the COVID recession.

4 See Richard Johnson's in-depth analysis of how older workers were affected during the Great Recession.

5 Sewin Chan and Ann Stevens show that the lower earnings potential of older people after a job loss leads them to retire early.

6 See Dey, Frazis, and Loewenstein (2020).

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