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Where Are the Workers? A Look into the Decline in Immigration

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Both domestic and international lockdowns characterized the COVID-19 pandemic. While closed businesses and stay-at-home orders affected people most immediately, a potentially overlooked effect of the pandemic has been the unprecedented slowdown in immigration due to closed borders.

At the start of the pandemic in February 2020, there were 13.6 million non-US citizen (immigrant) workers. By April 2020, that number had fallen to 12.2 million[1]: Roughly 1.4 million fewer immigrant workers were in the labor force.

After the pandemic, however, the economic recovery was unprecedently sharp, with the unemployment rate returning to pre-pandemic levels by July 2022.[2] Additionally, the vacancy-to-unemployment ratio, a measure of labor market tightness, was unusually high, peaking at 2.63 in April 2022.

What has caused this tight labor market? Among many possible answers, three main explanations stand out—(1) the decrease in immigration, (2) the increase in early retirements,[3] and (3) the decrease in female labor force participation rates.[4]

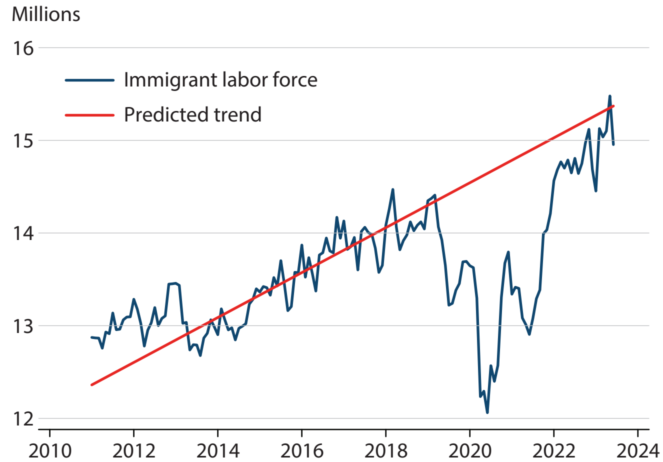
In this essay, we explore whether the missing workers from immigration restrictions can help explain current labor market tightness. Our analysis shows that these restrictions are unlikely the underlying cause of continuing labor market tightness.

Missing Workers and Labor Market Tightness

We first measure the amount of missing immigrant workers by using the aggregate trend of the number of non-US citizen workers in the labor force. We project the trend from 2011-19 forward and compute predicted values for post-2019. In Figure 1, the blue line is the actual number of immigrants in the labor force, and the red line is the predicted trend for these workers. Thus, missing workers equals predicted workers minus actual workers.

The number of missing workers peaked at 2.58 million in June 2020 during the pandemic. There were 415,991 immigrant workers still missing as of June 2023 (though

Figure 1
Immigrant Labor Force



SOURCE: Current Population Survey and authors' calculations.

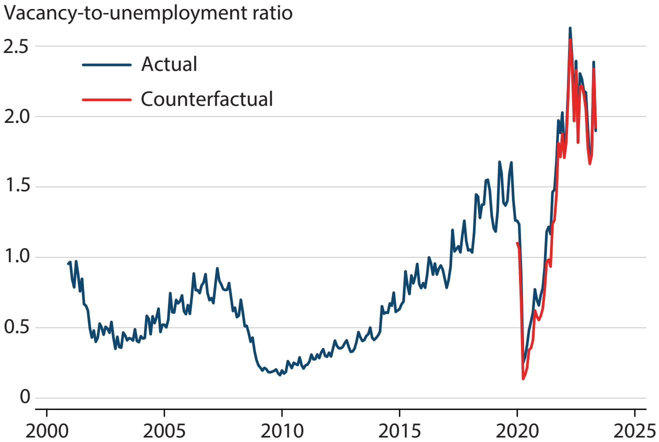
data from May 2023 show a spike in the immigrant labor force that exceeds our predicted trend by 128,486 workers).

We next measure labor market tightness by calculating the vacancy-to-unemployment ratio (Figure 2). For example, the May 2023 vacancy-to-unemployment ratio was 1.90, which means there were 1.9 job openings for every unemployed worker. Pre-pandemic (2015-19) there was an average of 1.1 job openings per unemployed worker, while during the pandemic (2021-22) that average was 1.8.

Simple Counterfactual

What would have been the impact on the aggregate vacancy-to-unemployment ratio if we were to add back in the missing immigrant workers? We show the counterfactual vacancy-to-unemployment ratio in Figure 2, assuming that each missing immigrant would fill one vacancy and the level of unemployment would stay the same. We find that the counterfactual ratio would be very similar to what we see in the data: For February 2023, the vacancy-to-unemployment ratio is 1.66 in the counterfactual, while it's 1.69 in the actual data.

Figure 2
Labor Market Tightness



SOURCE: Job Opening and Labor Turnover Survey, Current Population Survey, and authors' calculations.

So, adding back in the missing immigrant workers has only a small impact on the vacancy-to-unemployment ratio. This is because the number of missing workers, which peaked at 2.5 million, is small relative to the total size of the labor force, which is around 150 million workers.

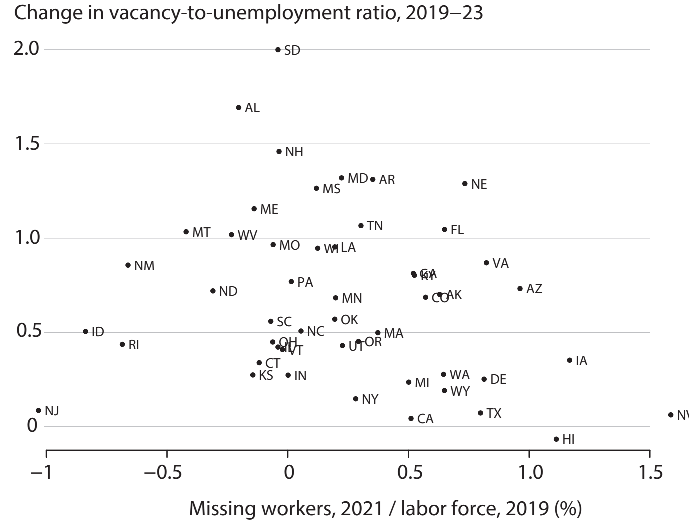
Correlations Across States and Industries

While the aggregate trends suggest that immigration restrictions had minimal impact on the labor market, these trends mask substantial heterogeneity across states and industries. We now ask whether states and industries most affected by immigration restrictions also had the largest increase in labor market tightness (i.e., their vacancy-to-unemployment ratio).

We measure missing workers the same way across states and industries, using American Community Survey data for a bigger sample size while limiting our focus to 2021 and 2022. We then divide the number of missing workers by the pre-pandemic size of the labor force to normalize.

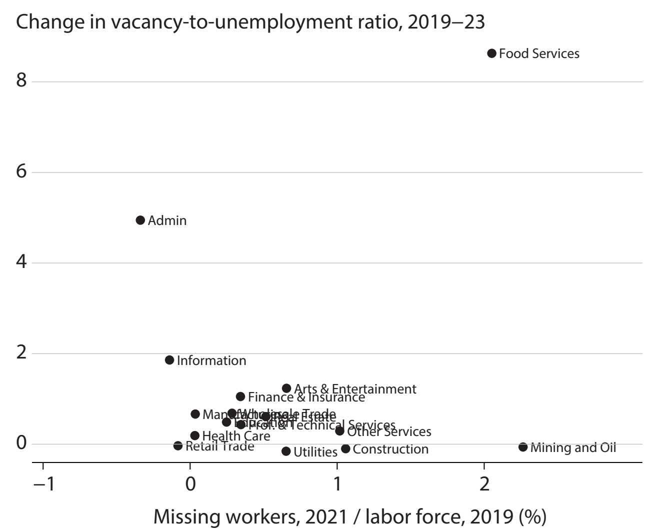
In Figures 3 and 4, each x-axis shows the share of a state's or industry's labor force that is missing immigrant workers, and each y-axis shows the change in the vacancy-to-unemployment ratio between 2019 and 2023. In both cases, there is no significant correlation. This means that states and industries that were most affected by the immigration shock did not systematically have the largest increases in their vacancy-to-unemployment ratios. One notable exception is the food services industry, which had the largest increase in its vacancy-to-unemployment ratio and a large share of missing workers.

Figure 3
Impact on States



SOURCE: American Community Survey, Quarterly Census of Employment and Wages, and Job Opening and Labor Turnover Survey.

Figure 4
Impact on Industries



SOURCE: American Community Survey, Quarterly Census of Employment and Wages, and Job Opening and Labor Turnover Survey.

Conclusion

From our analysis, we conclude that immigration restrictions during the COVID-19 pandemic are likely not the main driver of the high vacancy-to-unemployment ratio. Still, increased immigration could help relax labor market tightness.[5] A growing number of labor and business organizations, both in the US and abroad, are calling for immigration reforms, citing current labor market tightness as a reason to increase immigration.[6] ■

Notes

[1] FRED® via Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/LNU01073395.

[2] FRED® via Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE.

[3] Faria e Castro, Miguel. "The COVID Retirement Boom." Federal Reserve Bank of St. Louis *Economic Synopses*, No. 25, October 2021; https://doi.org/10.20955/es.2021.25.

[4] Bick, Alexander; Gregory, Victoria and Leukhina, Oksana. "How Child Care Impacts Parents' Labor Force Participation." Federal Reserve Bank of St. Louis *On The Economy Blog*; https://www.stlouisfed.org/on-the-economy/2023/jul/how-child-care-impacts-parents-labor-force-participation.

[5] See https://www.globalconstructionreview.com/us-contractors-group-urges-more-immigration-and-training-as-vacancies-soar/.

[6] See https://www.nytimes.com/2022/11/01/world/canada/canada-immigrants.html and https://www.theguardian.com/uk-news/2023/feb/23/uk-now-among-most-accepting-countries-for-foreign-workers-survey-finds.

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