**Richmond Fed** 

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## **Bend It Like Beveridge**

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As discussed in a previous post ("More on Mismatch"), the Beveridge curve (BC) — the negative relationship between the unemployment and job openings rates — has shifted outward by an unprecedented magnitude during the pandemic. But since the Fed began tightening in March 2022, job openings have declined without much of a change in the unemployment rate. That is, the BC has actually bent inward.

February's job openings report represented a further step toward normalization: Job openings fell by 632,000, and the job openings rate fell from 6.4 percent in January to 6.0 percent in February. (See Figure 1 below.) In this post, we'll explore two hypotheses about how the decline in job openings might unfold:

- 1. Industries experiencing less difficulty hiring will be quicker to withdraw their open job postings, as their staffing needs have been easier to fill.
- 2. Industries seeing fewer workers quit will be quicker to withdraw their open job postings, as they have less staffing demand stemming from attrition.

We'll look at whether February's Job Openings and Labor Turnover Survey (JOLTS) data are consistent with these two stories, which may give us clues on how future labor market normalization might proceed.

Beveridge Curve Feb-2022 Oct-2021 2000-2008 Mar-2022 2009-2017 Jun-2021 2018- March 2020 May-2021 - Pre-Covid Aug-2022 6.0 Feb-2023 Apr-2021 Job Openings Rate (percent) Post-Covid Mar-2021 - Apr 2020 - Feb 2023 Feb-2021 Oct-2020 Jul-2020 Jan-2021 Sep-2020 Aug-2020 Jun-2020 Nov-2020 May-2020 Dec-2020 4.0 Apr-2020 2.0 1.0 2.5 3.5 4.5 5.5 6.5 7.5 8.5 9.5 10.5 11.5 12.5 13.5 14.5 Unemployment Rate (Percent)

Figure 1: The Beveridge Curve

Source: Bureau of Labor Statistics via Haver Analytics

To evaluate the first hypothesis of whether industries with less difficulty hiring will shed job openings more quickly, we'll look at whether there's a relationship between past hiring challenges in the industry and retention of job openings in the industry as of the latest JOLTS report. To measure industries' hiring challenges versus pre-pandemic levels, we use the difference between the industry's current hires-per-job-opening ratio and its 2019 average. To measure retention of job openings, we look at the level of job openings in February 2023 versus three months ago.

The results are shown in Figure 2 below. Moving up the vertical axis indicates more retention of job openings, and moving right along the horizontal axis indicates greater ease of hiring versus pre-pandemic levels. The size of each industry's bubble corresponds to the level of payroll employment in each industry. If industries experiencing less difficulty in hiring were also quicker to eliminate open positions in February, we'd expect a downward sloping relationship, which is born out in the data. There seems to be some evidence that industries experiencing easier hiring are closing out open job postings more rapidly, at least in the latest report.

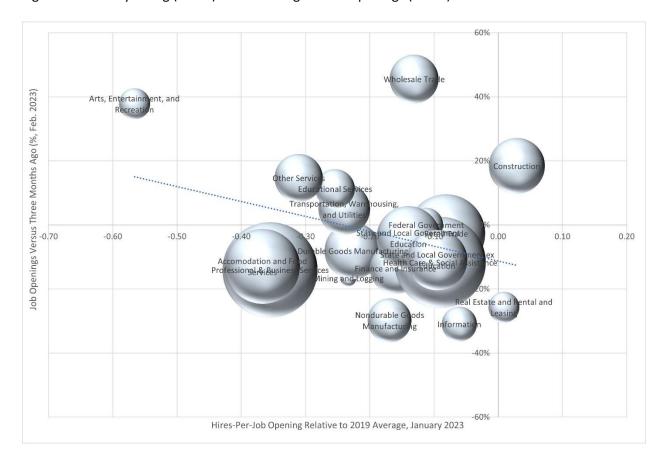


Figure 2: Difficulty Hiring (X-axis) Versus Change in Job Openings (Y-axis)

Source: Author's calculations using Bureau of Labor Statistics data via Haver Analytics. Bubble size is proportional to level of employment in each industry.

To evaluate the second hypothesis, we look at whether industries with lower quit rates also maintain fewer job postings. In Figure 3 below, we plot the industry's January quit rate relative to its 2019 average against the same measure of job openings retention used in Figure 2 above. We normalize quit rates by subtracting their 2019 average to measure whether quits are elevated versus pre-pandemic levels. In Figure 3, moving up the vertical axis indicates more retention of job openings in February, while moving right along the horizontal axis indicates a higher quit rate versus pre-pandemic levels. If industries seeing fewer quits were also faster to shed job openings, we'd expect a positive relationship in Figure 3. But the relationship between quit rates and job retention appears to be weak.

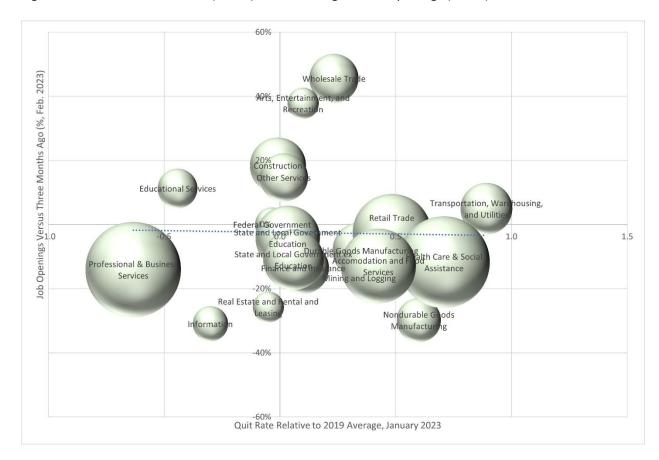


Figure 3: Quits Relative to 2019 (X-axis) Versus Change in Job Openings (Y-axis)

Source: Author's calculations using Bureau of Labor Statistics data via Haver Analytics. Bubble size is proportional to level of employment in each industry.

Our preliminary findings suggest that, across industries, the decline in job openings may be more related to hiring challenges rather than quit rates. Industries that have had to fight harder to hire workers may see more resilience in labor demand and a slower decline in job openings as the labor market cools. But industries experiencing elevated quit rates may not feel much pressure to open new vacancies to hire replacement staff. As the BC bends back from its initial outward shift, these forces will affect the mix of industries that are hiring and thus the landscape of labor demand.

Views expressed in this article are those of the author and not necessarily those of the Federal Reserve Bank of Richmond or the Federal Reserve System.