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Measuring Job Openings in the U.S. Labor Market

Introduction

The number of job openings is an economic indicator that can provide information about the potential strength or weakness of the labor market. It is often used in comparison to another commonly cited labor market indicator: the unemployment rate. The unemployment rate—the number of individuals without a job but looking for work as a share of the labor force—measures excess labor supply, while the job openings rate is a measure of unmet labor demand.

Interest in job openings, or job vacancies, is cited frequently in the media and during congressional hearings. Part of this interest is due to the high number of job openings in the United States in recent years. Although job openings have decreased somewhat since their peak of 11.4 million in July 2022, they remain higher than before the COVID-19 pandemic.

How are job openings data collected?

The Bureau of Labor Statistics (BLS) began collecting data consistently on job openings in 2000 through the Job Openings and Labor Turnover Survey (JOLTS). JOLTS collects monthly data from a sample of 21,000 business establishments. In addition to job openings, data are collected on new hires (i.e., new employees, not internal transfers or promotions) and job separations (i.e., employees whose positions were eliminated or who quit, retired, or were laid off or fired).

Job openings are defined in JOLTS as the total number of positions open on the last business day of the month. A job opening exists only if

- a specific position exists and there is work available for that position (either full or part-time),
- the job could start within 30 days, and
- the employer is actively recruiting outside workers

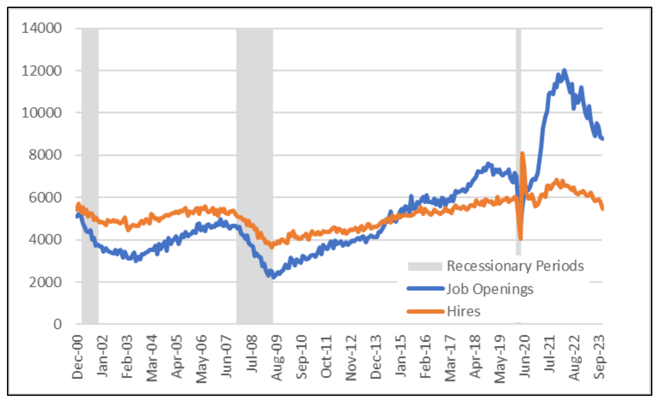
JOLTS does not include the following in job openings: positions open only to internal transfers, promotions or demotions, or recalls from layoffs; openings for positions with start dates more than 30 days in the future; positions for which employees have been hired but the employees have not yet reported for work; and positions to be filled by employees of temporary help agencies, employee leasing companies, outside contractors, or consultants.

BLS currently publishes JOLTS data by broad industries, by state, and by establishment size groups. The President's FY2024 budget request includes additional funding to increase the JOLTS sample size in order to publish JOLTS data by more detailed industries and to release preliminary JOLTS data a month earlier than they are currently released.

Trends in Job Openings

The number of job openings reported by JOLTS generally falls during recessions and rises during economic expansionary periods. In 2021 and 2022, the number of job openings rose to levels much greater than those observed before the pandemic, with a high of over 12 million in March 2022 (shown in **Figure 1**).

Figure 1. Total U.S. Nonfarm Job Openings and Hires
(seasonally adjusted, in thousands)



Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS)

The job openings rate, calculated as the number of job openings divided by the sum of the number of nonfarm employees and the number of job openings, has followed similar trends to the number of job openings. The rate was 3.7 when data collection began in December 2000, bottomed out at 1.7 in April and July 2009, and peaked at a high of 7.4 in March 2022.

High levels of job openings indicate unmet demand for workers. This could be a result of a mismatch (e.g., by skill, by compensation, by geography) between unemployed job seekers and prospective employers or a general shortage of workers available to fill job openings. However, the low cost of posting job openings on the internet also means firms can keep vacancies open for long periods while waiting for the applicant with the optimal combination of skills and salary requirements for the open job.

Increases in job openings can indicate a growing economy with high levels of job creation, especially when combined with a declining unemployment rate. A high and increasing number of job openings may be a sign of full employment when the unemployment rate is very low or an indication of a mismatch between supply and demand in the labor market if openings only increase in certain economic sectors or geographic areas. Combining job openings data with hires data and unemployment data provides additional context and insights into underlying trends in the labor market.

Job Openings and Hires

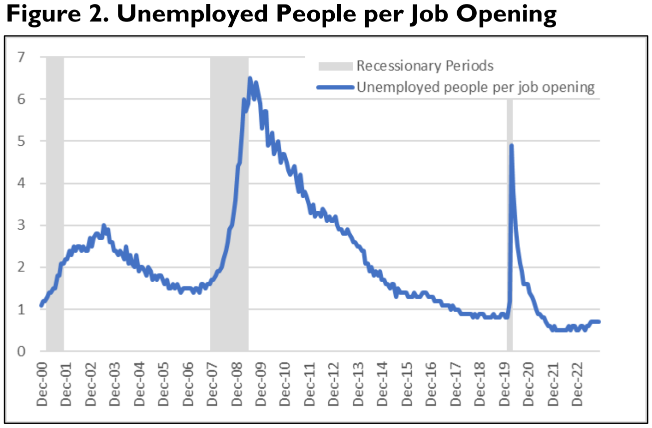
Job openings and hires are related—when a person is hired to an open position, the corresponding job opening may disappear. Consequently, these two variables are often compared. As shown in **Figure 1**, from 2000 to 2014 the number of hires exceeded the number of job openings. Since then, job openings have exceeded hires (except in May and June of 2020). The gap between the number of job openings and the number of hires reached its highest level in March 2022 and generally has been declining since then.

The Number of Unemployed Workers and Job Openings

Many job openings can be filled by unemployed people (those who are not working, are available to work, and are currently searching for work). Thus, the ratio of the number of unemployed people to the number of job openings (shown in **Figure 2**) provides information on labor shortages or surpluses. During the 2007-2009 recession, this ratio rose rapidly with multiple unemployed workers for each job opening, suggesting a labor surplus. The ratio gradually fell after 2009 and was below 1.0 starting in March 2018. A ratio below 1.0 means more job openings than unemployed people in the labor market as a whole, suggesting a labor shortage. The ratio remained below 1.0 until the COVID-19 recession, and rapidly returned below 1.0 in May 2021. It has been below 1.0 since then.

The number of unemployed people only includes people searching for work in the past month. It does not include people who are out of the labor force (those who are not working and not actively searching for work) or those working fewer hours than they would prefer.

Figure 2. Unemployed People per Job Opening



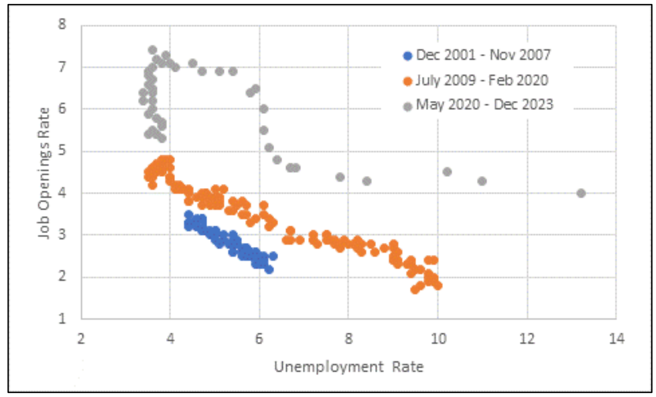
Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS) and Current Population Survey (CPS)

The Relationship Between the Unemployment Rate and the Job Openings Rate

In general, lower unemployment rates are associated with higher job openings rates: both indicate a strong labor market. However, the precise relationship between the job openings rate and the unemployment rate has not been steady over time. **Figure 3** shows this relationship (known as the Beveridge Curve) for the three most recent expansionary periods. Each dot in the figure represents the unemployment and job openings rates during one month. The curve traced out by these dots differs in each period.

Figure 3. The Job Openings Rate Compared with the Unemployment Rate

(seasonally adjusted, expansionary periods only)



Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS) and Current Population Survey (CPS)

In each expansion, the same unemployment rate has been associated with a higher job openings rate than in the previous expansion (i.e., the curve has shifted upward). The change between the 2001-2007 expansion and the 2009-2020 expansion was attributed to

- reductions in employers' recruiting efforts,
- a mismatch between job seekers' skills and the skills required for the available jobs, and
- an erosion of workers' skills and networks when they were out of work for long periods.

The shift in this curve between the 2009-2020 expansion and the current expansion has been attributed to increases in workers switching jobs without ever being unemployed.

Since March 2022, the job openings rate has been falling with little increase in the unemployment rate. The historically high level of job vacancies in early 2022 has been suggested as the reason that a decrease in demand for labor during 2022 and 2023 was not accompanied by an increase in unemployment.

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