



## Vacancies and Unemployment

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Job openings (vacancies) and the number of unemployed workers tend to move in opposite directions over the business cycle. Expansions are usually associated with plentiful vacancies and a low number of unemployed workers. During recessions the unemployment pool swells while employers seek to fill fewer job openings.

The inverse relationship between vacancies and unemployment is known as the Beveridge curve (see chart). Points in the upper-left corner of the chart generally characterize economic expansions and points in the bottom-right corner represent recessions. Each series of connected points creates a Beveridge curve for a particular business cycle. The solid portions of the lines represent the recessionary periods and the dashed portions represent the subsequent recoveries. The current recession is more pronounced than previous recessions (indicated by uncharacteristically high unemployment and very few vacancies).

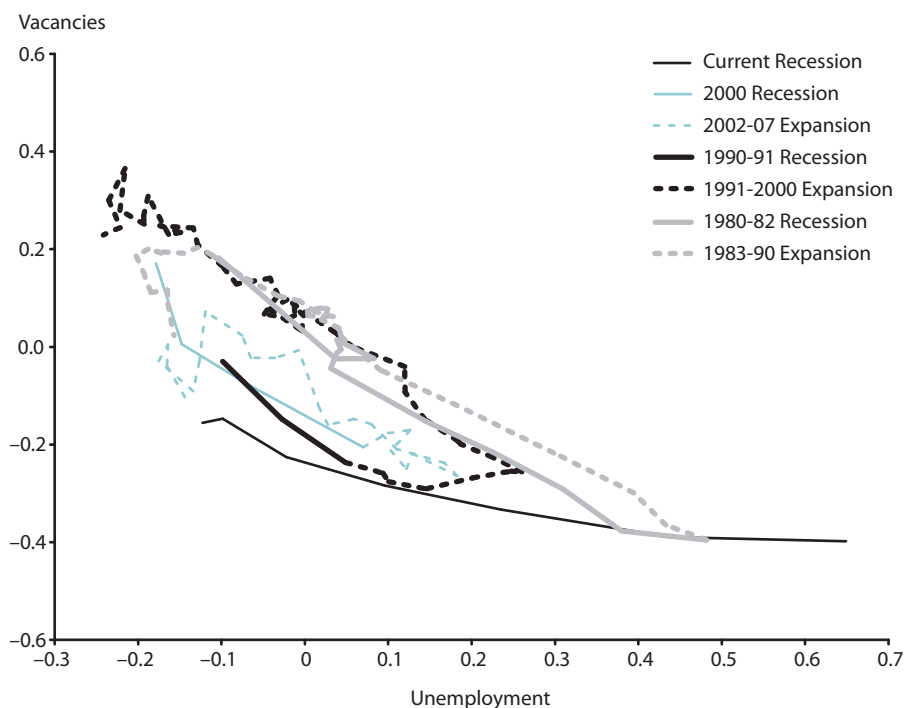
The inward and outward “shifting” of the curve is of particular interest. Among other things,<sup>1</sup> increased labor market efficiency in matching unemployed workers with open positions shifts the curve toward the origin. The most recent points lie on a curve closer to the origin.<sup>2</sup>

In a recovery, typically vacancies increase faster than the number of unemployed workers decreases, generating a counterclockwise pattern. This pattern is evident during the 1983-90 expansion, where the curve moves quickly away from the bottom-right corner of the chart. However, the “jobless recoveries” following the 1990-91 and 2001 recessions are different: During both recoveries, vacan-

cies remained low and the number of unemployed increased for a considerable time.

Research has shown that the 1990-91 and 2001 recessions were highly structural: Industries that laid off workers continued to decline after the recession ended.<sup>3</sup> A recent notable shift was from a manufacturing-based economy to a service-based economy. In fact, during the 1990-91 and 2001 recessions, manufacturing jobs accounted for roughly three-fourths and one-half of all jobs lost. The difficulties associated with the reallocation of workers from one sector to another are one possible explanation for jobless recoveries.

**Beveridge Curves (1980:Q2–2009:Q2)**



NOTE: The chart plots the percentage deviation from trend of total unemployment and the Help-Wanted Advertising Index (a proxy for vacancies). The trend is extracted by applying a Hodrick-Prescott ( $10^5$ ) filter to the data.

SOURCE: Conference Board and Bureau of Labor Statistics.

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What does this all imply about the possibility of another jobless recovery? It depends on the path of the adjustment back toward the upper-right corner in the chart. During the current recession, employment declines have been more dispersed. Only one-fourth of job losses have occurred in manufacturing; the sectors hit by the housing and financial crisis (construction and financial services sectors) shouldered more of the burden. Still unknown is the extent to which these sectors will recover and rehire workers or if these workers will be forced to look elsewhere for new jobs. The latter scenario would suggest the possibility of another jobless recovery. ■

<sup>1</sup> For example, an increased labor force participation rate would shift the curve outward.

<sup>2</sup> See Bleakley, Hoyt and Fuhrer, Jeffrey C. "Shifts in the Beveridge Curve, Job Matching, and Labor Market Dynamics." Federal Reserve Bank of Boston *New England Economic Review*, September/October 1997, pp. 3-19.

<sup>3</sup> See Groshen, Erica L. and Potter, Simon. "Has Structural Change Contributed to a Jobless Recovery?" Federal Reserve Bank of New York *Current Issues in Economics and Finance*, August 2003, 9(8).