Long Live the Vacancy

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Abstract

The workhorse labor market matching model achieves simplicity by making strong assumptions about vacancies and job separations. Vacancies are assumed to be perfectly elastic and to perish after one period if not filled. Job separation is assumed constant in most versions of the model. These simplifications are appealing: departing from them seems to make it even harder to match the model with the data (Fujita and Ramey, 2007; Mortensen and Pissarides, 1994).

In this paper, we make the point that the introduction of both long-lived vacancies (LLV) and endogenous job separation unambiguously helps to reconcile the labor market matching model with the data. It does so in two ways. Long lived vacancies allow the impact of increased vacancy formation to accumulate over time, so that the required variability of vacancy formation is much lower than the observed variability of the stock of vacancies. This reduces the need to generate a very volatile job surplus. A time-varying job separation rate provides a further source for unemployment fluctuations, again reducing the need to generate volatile vacancy creation. The two features interact in an interesting way: an active separation margin contributes to the variability of the job finding rate, because higher unemployment leads to a depletion of the vacancy stock as highlighted in Coles and Moghaddasi Kelishomi (2014).

The model with long lived vacancies robustly generates a strong negative correlation of unemployment and vacancies (Beveridge curve) even in the presence of endogenous separations, which is considered a litmus test of modern unemployment theory. Explaining both match formation and match separation endogenously, we show that a single shock is sufficient to drive almost all labor market fluctuations — including the great recession.

Keywords: Beveridge Curve, Business Cycles, Job Destruction, Random Matching, Unemployment Volatility, Separations.

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