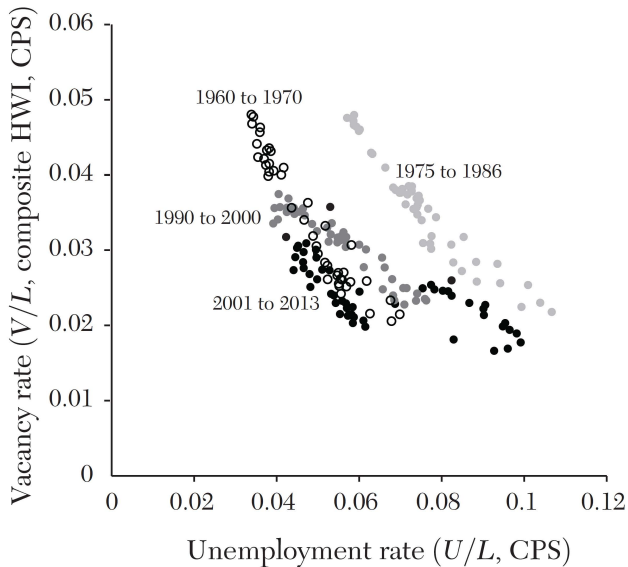


THE BEVERIDGE CURVE: A SURVEY

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BEVERIDGE CURVE IN THE U.S.



THE STYLIZED FACTS

- Two key stylized facts:
 - Unemployment and vacancies move in opposite directions at cyclical frequencies
 - The position has shifted periodically in many developed economies
- Why it is important?
 - Beveridge curve shows the functioning of labor markets
 - Specifically, (1) the efficiency of the matching process, and (2) the nature of shocks to the labor market
- The challenge is explaining the amplitude, comovement, persistence, and the shift of the locus

MODELLING THE BEVERIDGE CURVE

- The flow of motions of unemployment and vacancy:

$$\begin{aligned}\frac{dU}{dt} &= \lambda(L - U) - m(U, V) \\ \frac{dV}{dt} &= \gamma - m(U, V)\end{aligned}$$

- Imposing $dU/dt = 0$ and constant returns to scale:

$$\lambda = m\left(\frac{u}{1-u}, \frac{v}{1-u}\right)$$

- Keeping λ and m constant, unemployment rate and vacancy rate show negative relationship
- How can we characterize γ in a richer setting?

THE CANONICAL SEARCH MODEL: PISSARIDES (1985)

- Pissarides (1985) endogenize the determination of γ by search and matching model
- Once a firm and a worker match, the firm can produce a good
- Job vacancy filled prob is $m(u, v)/v \equiv q(\theta)$, where $\theta \equiv v/u$
- The value to the firm of a vacant job V , and a filled job J :

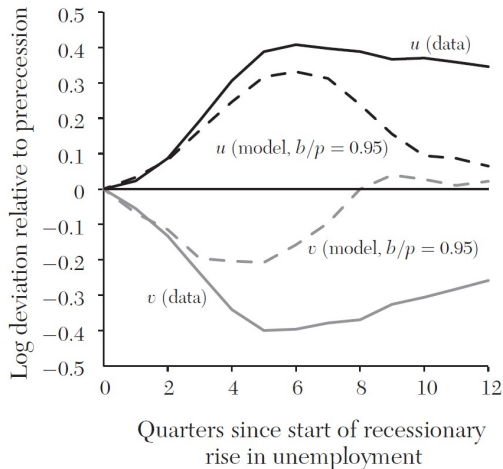
$$rV = -c + q(\theta)(J - V)$$

$$rJ = p - w + \lambda(V - J)$$

- For worker's side, we set the same kind of equations
- We impose free-entry condition $V = 0$ and Nash bargaining over wage

MODEL EVALUATION

- The model can partly capture the $u - v$ relation, but it is not perfect
- For instance, vacancy is a jump variable in the model



DEPARTURE FROM THE SIMPLE MODEL

- Sticky wage
 - Amplifies the negative comovement of unemployment and vacancy
- Entry Cost
 - Vacancy dynamics become persistent
- Participation Margin
 - Considering labor force participation decision
- Search Intensity
 - E.g., unemployment insurance may affect the intensity
- Heterogeneity across the Labor Markets
 - Frictions to the move across different labor markets reduce the matching efficiency