Discussion of

$u^* = \sqrt{uv}$

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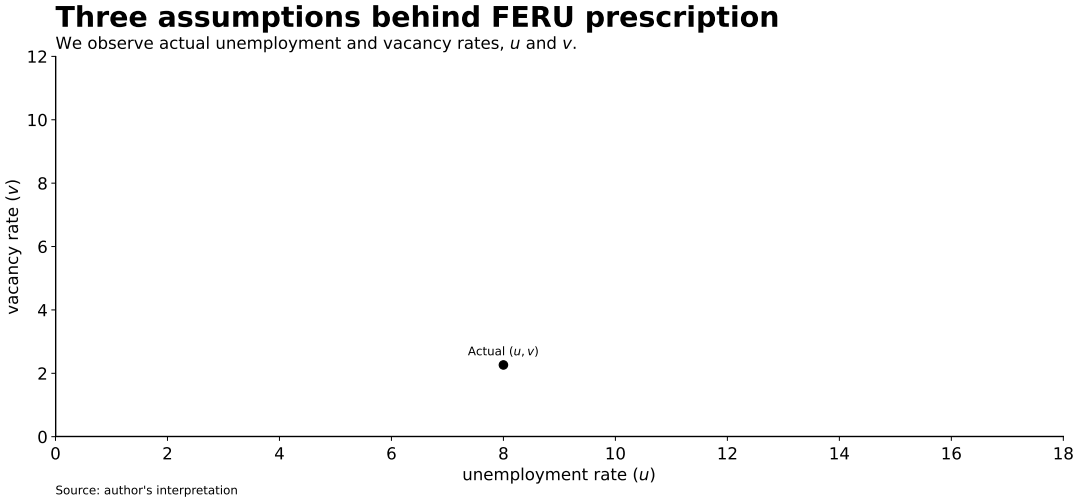
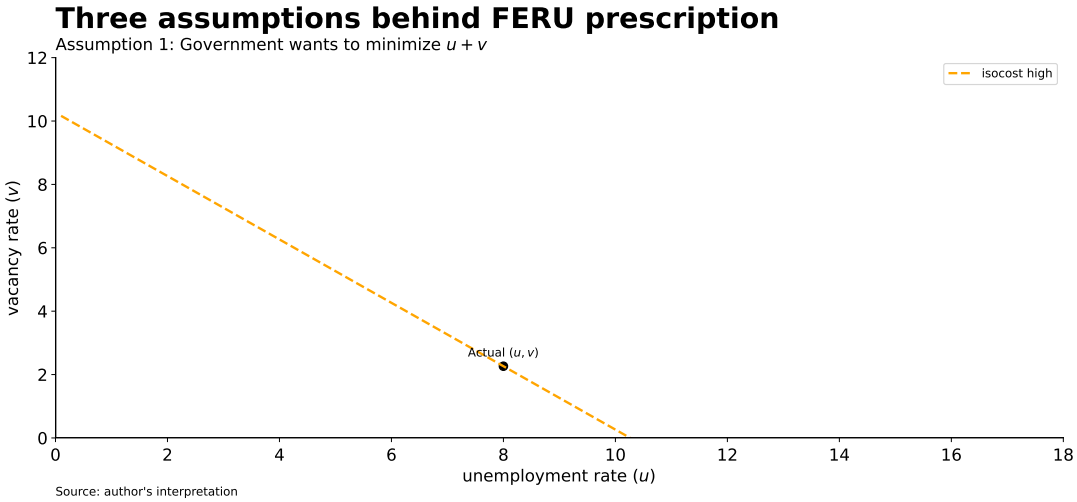
Focus discussion on three main assumptions behind FERU



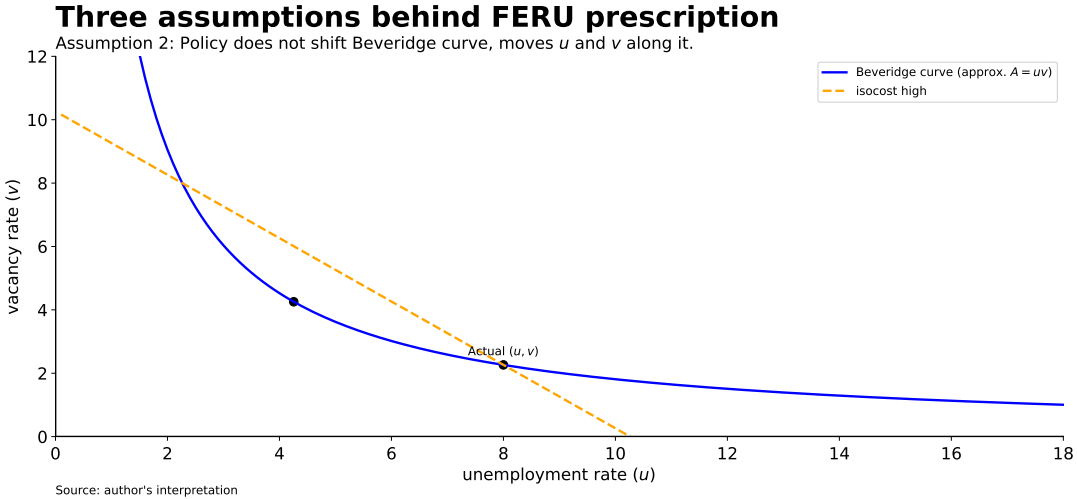
Suppose we observed unemployment rate of 8% and vacancy rate of 2.25%

Focus discussion on three main assumptions behind FERU



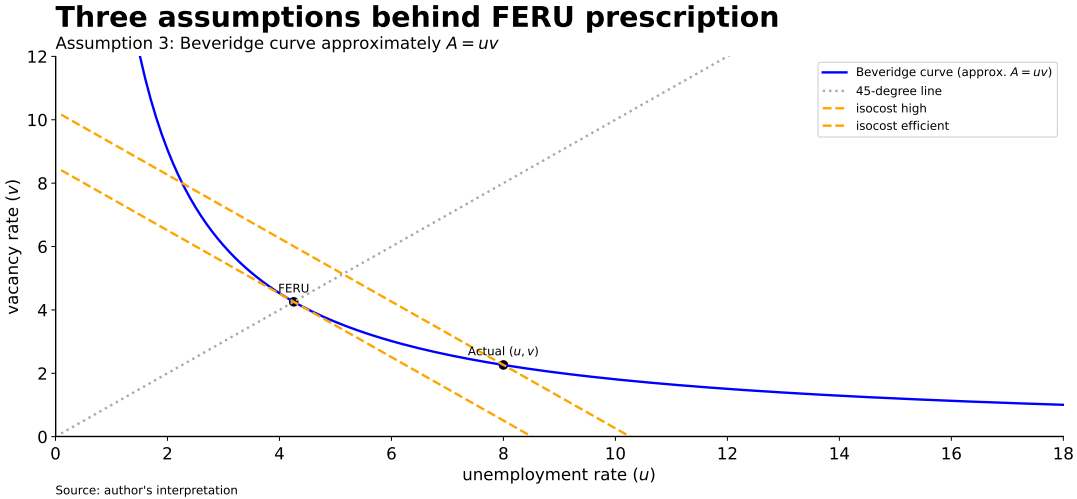
Government would be indifferent between observed u and v and all combinations on iso-cost curve

Focus discussion on three main assumptions behind FERU



... would want to reduce u and/or v. But is subject to constraint, i.e. the Beveridge curve. Approximated in this paper by $A = uv$ and current u and v are on it

Focus discussion on three main assumptions behind FERU



Cost minimization yields FERU: $u^* = v^* = \sqrt{A} = \sqrt{uv}$

Most importantly, ...

Assumption 1

Should the government minimize $u + v$?

Measurement issues with summing u and v

Main assumption: cost of serving vacancy to recruit unemployed = monthly wage

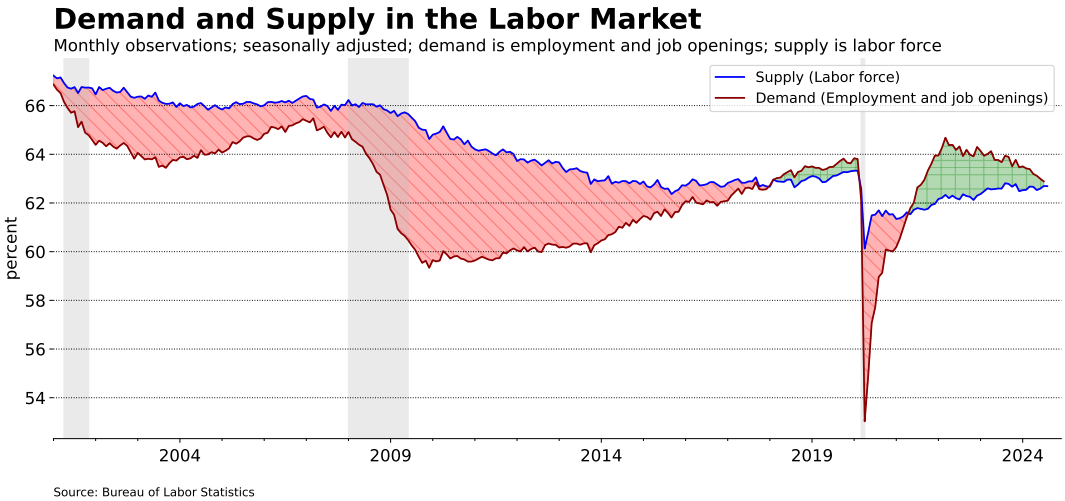
- Only measured at one point in business cycle. Studies not cited suggest substantial cyclical fluctuations in recruiting costs. Davis *et al.* (2013)
- Cost-of-hires measures include all hires and overstate cost of hiring out of unemployment Hiring from non-participation and other employers presumably more costly (SHRM)
- Unpriced benefits and costs of u and v, beyond labor cost of recruitment.

Job openings literally interpreted as level of unmet labor demand for unemployed

- Job openings measured in terms of *jobs*, unemployed in terms of *persons*
- Job openings not only for recruitment of the unemployed
- Many people get hired without there being a job opening
- JOLTS job openings definition narrow and does not cover all types of vacancies

Job openings don't measure the level of unmet labor demand but instead closely capture its fluctuations (Barnichon, 2010, Figure 1).

Literal interpretation of JOLTS data yields structural imbalance



Labor market "imbalance" is deviation from the FERU. But relies on JOLTS job openings measuring unmet labor demand for unemployed.

Theoretical example: Unemployment not cyclical to begin with

Example: Minimizing $u + v$ appropriate in search and matching framework

$$\text{Choose } (u, v) \text{ to max } (1-u)\,p - pv, \text{ s.t. } u = \frac{1}{1 + \frac{\omega}{\lambda}\sqrt{\frac{v}{u}}} \tag{1}$$

Section II.H in the paper

In example u and v, do not depend on level of productivity, p

- In equilibrium in this example, not analyzed in the paper, unemployment rate is acyclical.

Authors assume away the source of unemployment fluctuations in the model

Offsetting fluctuations in vacancy posting cost. Special case of discussion in Pissarides (2009)

Example does point to other way of thinking about policy goal

Efficient labor market policy choice

$$\text{Choose } (p, u, v) \text{ to max } (1-u)\,p - cv - \phi(p) \tag{2}$$

subject to

$$u = \frac{1}{1 + \frac{\omega}{\lambda}\sqrt{\frac{v}{u}}} \quad \text{and} \quad cv = \omega\sqrt{uv}\,J(p, u) \tag{3}$$

- $J(p, u)$ is value of match and determines job creation.
- $\phi(p)$ is cost of stimulating labor demand.

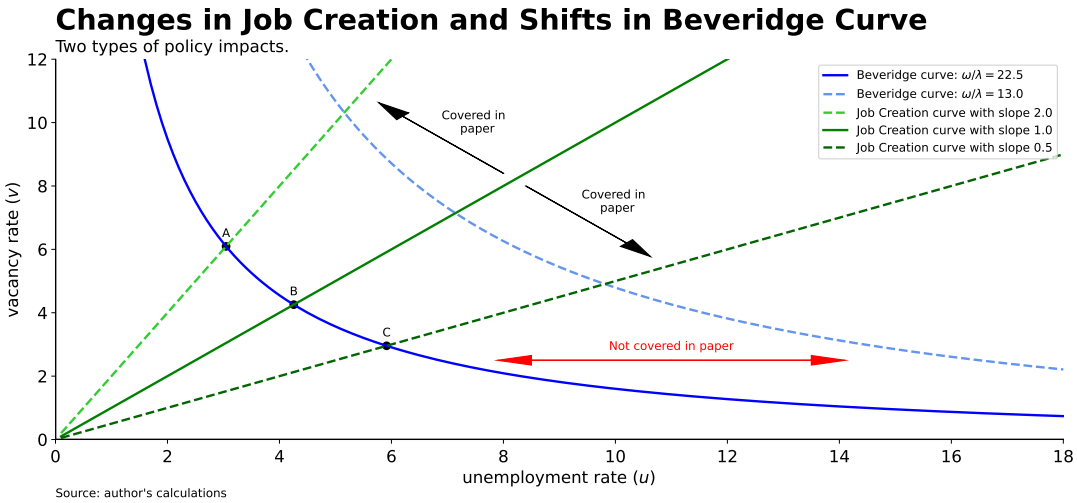
e.g. inflation due to high v/u-ratio (Ball *et al.*, 2022; Barnichon and Shapiro, 2024; Benigno and Eggertsson, 2023)

Scope of applicability of policy prescription...

Assumption 2

Policy choices do not affect the position of the Beveridge curve

Paper covers policies that keep Beveridge curve fixed



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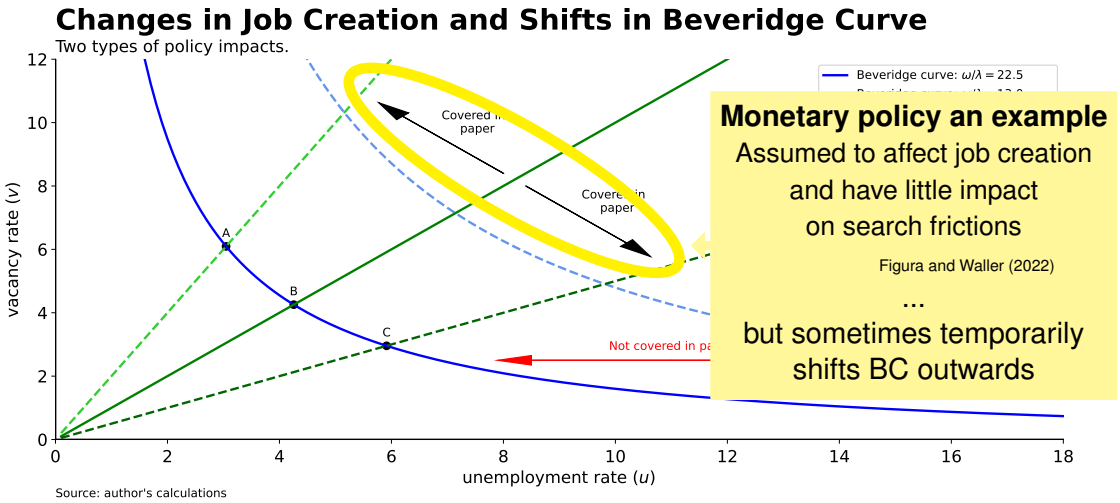


Monetary policy an example

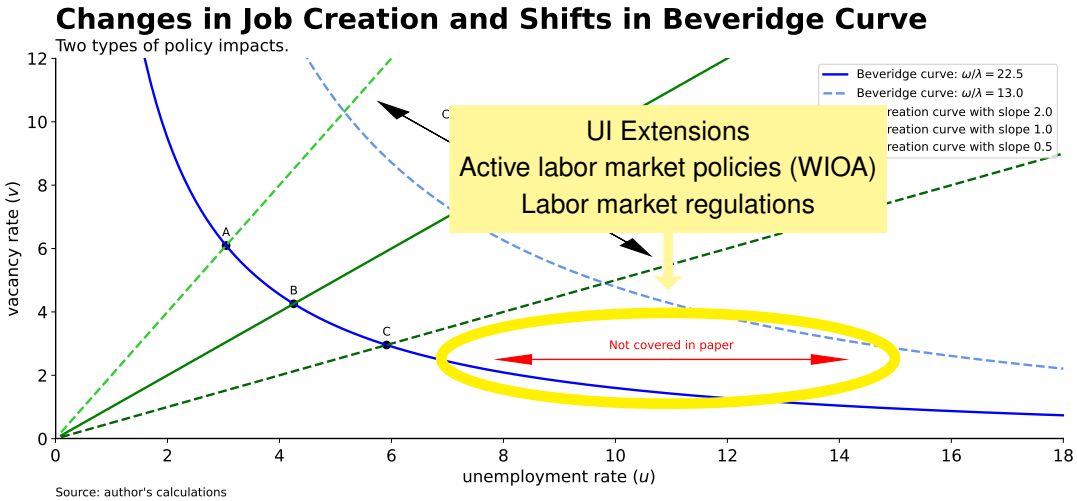
Assumed to affect job creation and have little impact on search frictions

Figura and Waller (2022)

...

but sometimes temporarily shifts BC outwards

But many policies affect the position of Beveridge curve



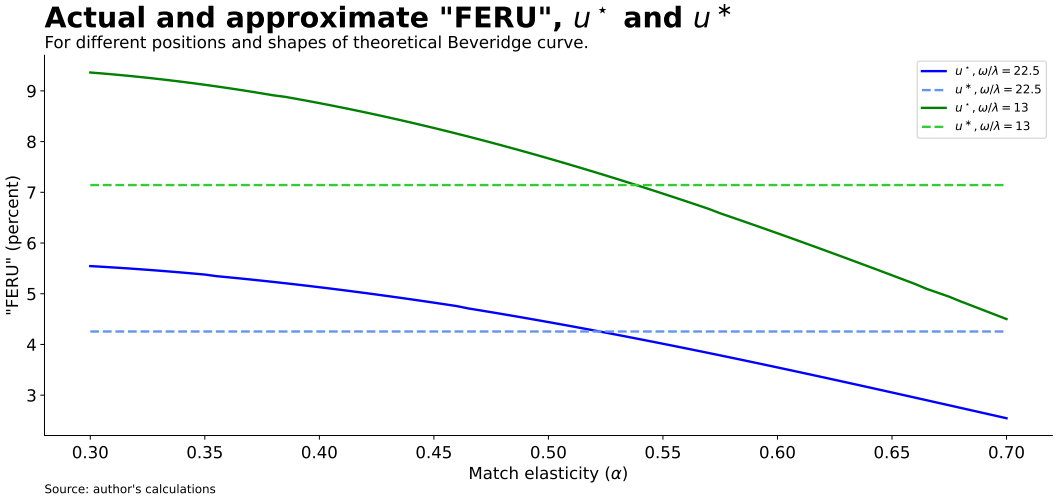
Not only important to understand fluctuations over time but also differences across countries Nickell (1997); Blanchard and Wolfers (2000)

If one buys into Assumptions 1 and 2, prescription depends on...

Assumption 3

Beveridge curve is well approximated by $A = uv$

u^* “close” to $u^\star$ for $\alpha \approx 0.5$



Summary

"$u^* = \sqrt{uv}$" might not be the "$E = mc^2$" of economics...

Useful starting point for furthering discussion about *maximum employment*

- What types of conceptual and normative frameworks provide context for this discussion.

Aim to be more specific about what *maximum employment* means than

"a broadbased and inclusive goal that is not directly measurable"

(Federal Open Market Committee, 2020)

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