$$u^* = \sqrt{uv}$$

Pascal Michaillat, Emmanuel Saez (2022)

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RESEARCH QUESTION

- What is the efficient level of unemployment in the economy?
- Most governments have a mandate of ensuring "full employment".
- Definition of full employment is not well defined.

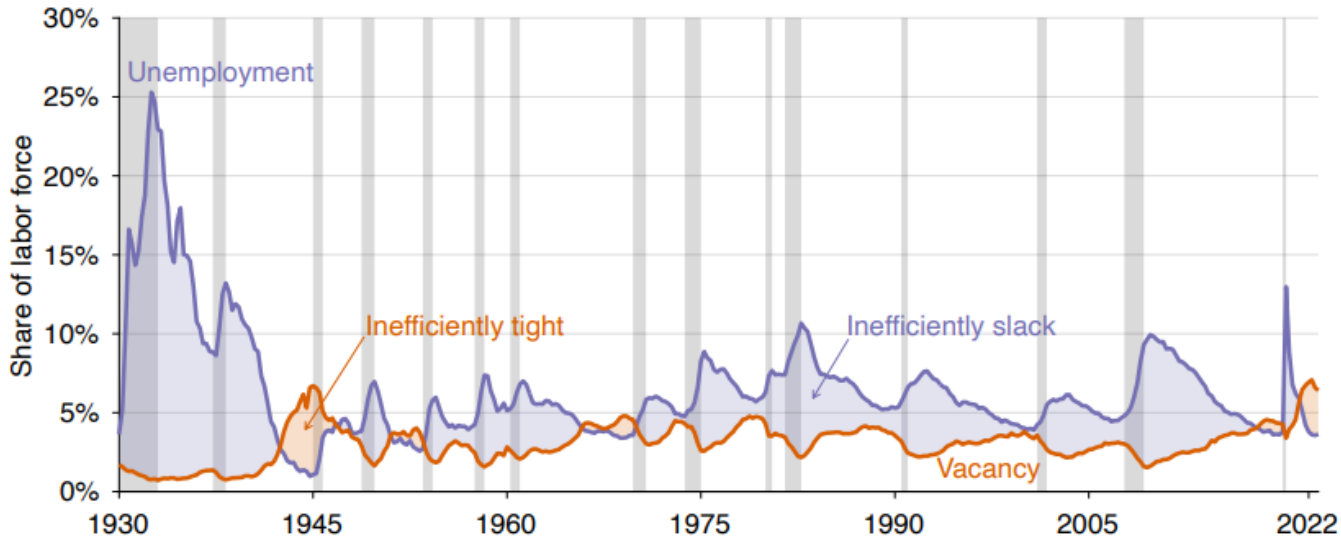
CONTRIBUTION TO PREVIOUS LITERATURE

- Despite most governments having a policy mandate of full employment they have no well defined target. (1946 Employment act for the US)
- Full employment is not equivalent to no unemployment. (Beveridge 1960).
- Given jobseeking activities and recruiting activities (Michaillat and Saez, 2021), this paper derives the social objective and defines full employment.

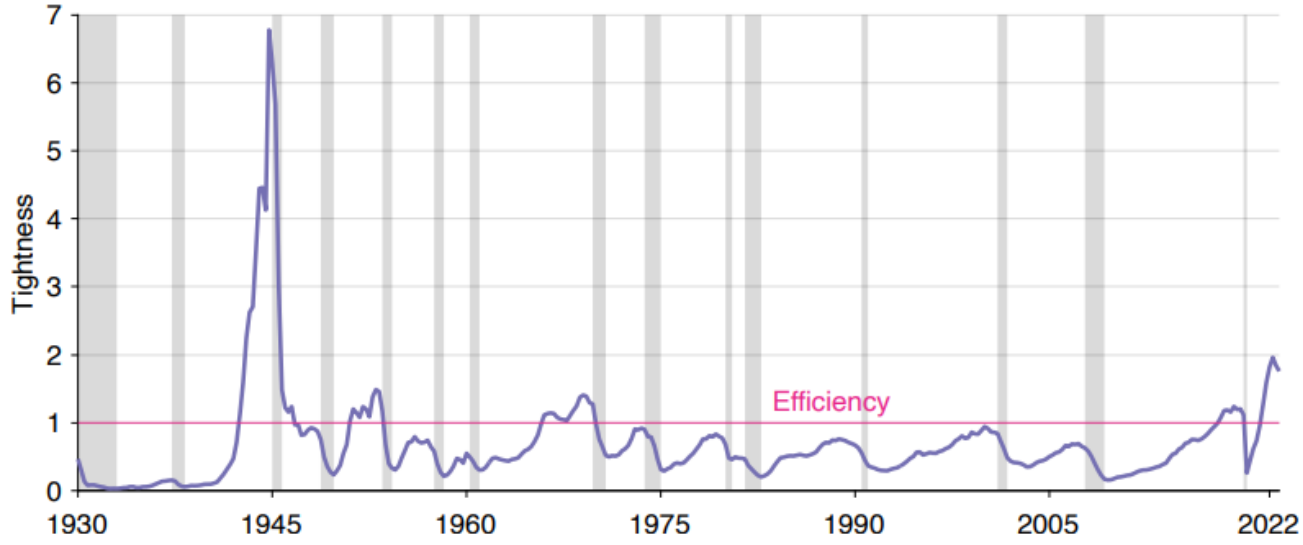
DERIVATION OF FULL EMPLOYMENT

- Social objective- To minimize unused resources that do not contribute to productive output. unemployed and vacancies.
- Minimize $u + v$ subject to the Beveridge curve, $uv = A$
- Minimize $u + \frac{A}{u}$
- FOC wrt u gives $1 - \frac{A}{u^2} = 0 \Rightarrow u^* = \sqrt{A} = \sqrt{uv}$
- Unemployment is at efficient level when $u = v$ or $\theta = 1$.
- Inefficiently slack when $u > v$ and inefficiently tight when $u < v$

US LABOR MARKET

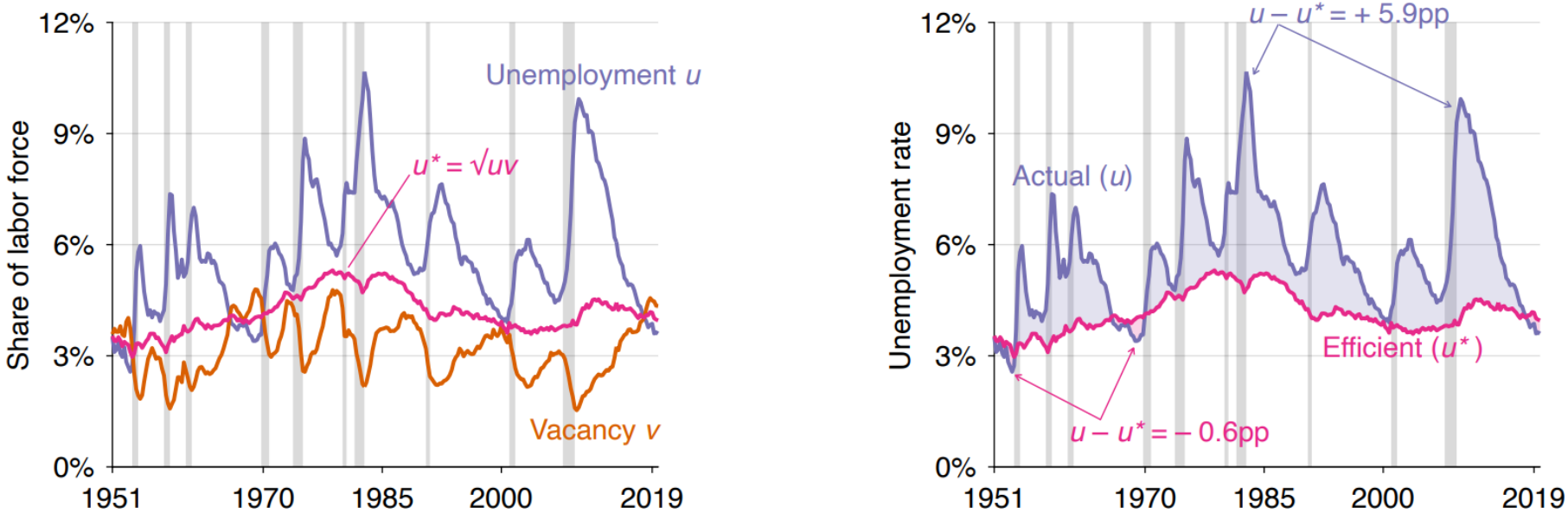


A. Unemployment and vacancy rates, u and v



B. Labor-market tightness, v/u

US LABOR MARKET POST 1950



A. Efficient unemployment rate

B. Unemployment gap

FIGURE 4. Efficient unemployment in the United States, 1951–2019

COMPARISON WITH MICHAILLAT AND SAEZ 2021

- Efficient rate of unemployment in Michaillat and Saez 2021 is

$$u^* = \left(\frac{\kappa \epsilon}{1-\zeta} . v u^{\epsilon} \right)^{\frac{1}{1+\epsilon}}$$