

ON THE EFFICIENCY OF MATCHING AND RELATED MODELS OF SEARCH AND UNEMPLOYMENT

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CONTEXT

- Matching models are generally inefficient.
- Substantial body of work on the natural rate of unemployment
 - Trend unemployment
- Is it too high? Is it too low? Is it just right?
 - No consensus

QUESTION

- Is the equilibrium rate of unemployment efficient?

ANSWER: I

- The planner chooses $\{s, r, y^*, u, v\}$ by maximizing the following:

$$\mathcal{L} = Y + \lambda[a(y^*)m(s, r, u, v) - (n - u)b] + \mu(v - k - u + n)$$

- With constant returns to scale in the matching function, there is a solution to this that internalizes the entry and exit externalities and makes factor mobility efficient.

ANSWER: II

- The Pareto efficient allocation is the one where social contribution equals private gain from participating in the matching process.
- In other words,

$$\beta = \eta$$

where

- β is the workers' bargaining power
- η is the elasticity of the matching function with respect to unemployment

POSITIONING

- Large body of research on the natural rate of unemployment
- However, models have very little structure in common and also yield different results
 - Comparison is difficult!
- This paper offers a general framework with matching frictions and equilibrium unemployment
 - Integration and extension of work by Diamond, Mortensen, Pissarides

CONCLUSION

- Paper studies the efficiency of the natural rate of unemployment
- With constant returns to scale in the matching technology, there exists a surplus-sharing solution that is efficient.