

Introduction to Efficient Unemployment Rate

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Why do we focus on the efficient unemployment rate?

Why don't we keep track of the entire allocation?

- in one-market models: all variables are explicit functions of market tightness θ
one structure of economy / environment is taken into account (production function, matching function, ...)

Dynamic model:

$$u(\theta) = \frac{\lambda}{\lambda + f(\theta)}$$

$$f(\theta) = \mu \theta^{1-\eta}$$

$$\tau(\theta) = \frac{\lambda p}{q(\theta) - \lambda p}$$

$$\gamma(\theta) = [1 - u(\theta)] a h$$

$$c(\theta) = \gamma(\theta) / [1 + \tau(\theta)]$$

- once market tightness θ is known \rightarrow can compute all other variables in allocation
- can summarize any allocation by θ
- efficiency \checkmark iff $\theta = \theta^*$
- inefficiency \checkmark iff $\theta \neq \theta^*$

- Given structure of model \rightarrow summarize any allocation by their \emptyset

- in general, in model with n matching markets \rightarrow keep track of n market tightnesses

example: two-market model. all

variables can be computed from product + labor market tightnesses α, \emptyset

- Why not focus on efficient market tightness?

- more natural \rightarrow can do it

- but people are less familiar w/ tightness

- people are more familiar w/ unemployment gap than tightness gap

What about NAIRU, what about CBO's natural rate of unemployment?

NAIRU: unemployment rate to keep inflation stable

natural rate (CBO): trend unemployment rate