

Introduction to the Efficient Unemployment Rate

Pascal Michailat
<https://pascalmichailat.org/c2/>

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:

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

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

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

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

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

- one 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 ∇ $\iff \theta \neq \theta^*$

- 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