Firm's Recruiting Process

Pascal Michaillat
https://www.pascalmichaillat.org/t5.html

Firm is recruiting ℓ workers by posting $\hat{v}$ vacancies

→ Compute matching wedge $\hat{\tau}(\theta)$: gap b/w # of producers n & # of employees ℓ

employees = producers + recruiters

$$\ell = n + \hat{v} \times \hat{p}$$

$$n = \ell - \hat{p} \times \frac{\ell}{\hat{q}(\theta)}$$

recruiting proba

$$n = \left[\frac{\hat{q}(\theta) - \hat{p}}{\hat{q}(\theta)} \right] \cdot \ell$$

$$\ell = \frac{\hat{q}(\theta)}{\hat{q}(\theta) - \hat{p}} \times n$$

Matching wedge :

$$\hat{\tau}(\theta) = \hat{p} / [\hat{q}(\theta) - \hat{p}]$$

$\hat{\tau}(\theta)$ is increasing in θ

$$\ell = \left[1 + \frac{\hat{p}}{\hat{q}(\theta) - \hat{p}} \right] \times n$$

ℓ ↑ employees

n ↑ producers

$$\ell = [1 + \hat{\tau}(\theta)]\, n$$

recruiter / producer

$\hat{\tau}(\theta)$: matching wedge, # recruiters per producer

$\hat{\tau}(\theta) > 0$, increasing in θ, defined on $[0, \theta^M)$

where $\hat{q}(\theta^M) = \rho$. $\lim_{\theta \to \theta^M} \hat{\tau}(\theta) = +\infty$