

Firm's Recruiting Process

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<https://www.pascalmichailat.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

$$\text{employees} = \text{producers} + \text{recruiters}$$

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

$$n = l - \hat{p} \times \frac{l}{\hat{q}(\theta)} \quad \leftarrow \text{recruiting proba}$$

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

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

Matching wedge:

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

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

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

↑
employees

↑
producers

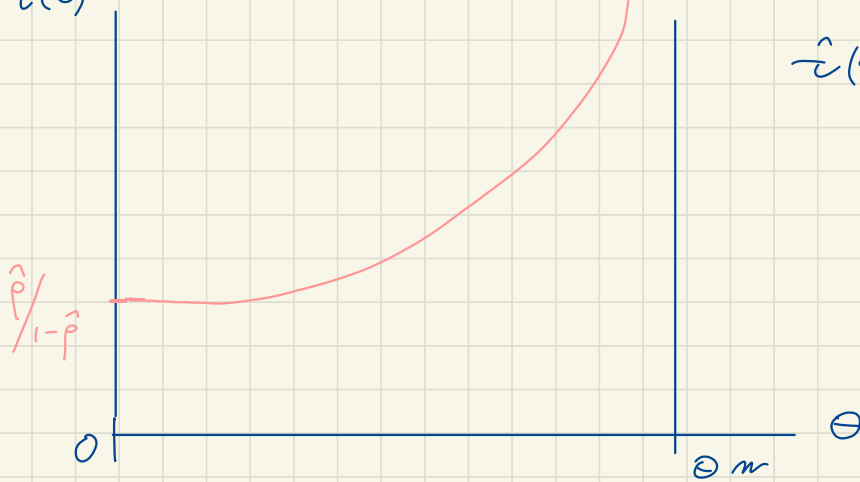
$$l = [1 + \hat{\tau}(\theta)] n$$

recruiter
producers

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

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

where $\hat{q}(\theta^n) = \rho$ $\lim_{\theta \rightarrow \theta^n} \hat{\tau}(\theta) = +\infty$



$$\hat{\tau}(\theta) = \frac{\hat{\rho}}{1-\hat{\rho}}$$