

How to Reduce Unemployment Without Creating Poverty

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Problem Set 4

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Pissarides: Unemployment, Vacancies, and Real Wages (1985)

Question 1

Derive the equilibrium productivity:

$$x = b + \frac{\beta}{1 - \beta} \theta k \quad (1)$$

that yields zero surplus

Question 2

a) Assuming $a(\bar{x}) = 1$, derive equation:

$$\frac{r + s}{q(\bar{\theta})} + \beta \bar{\theta} = (1 - \beta) \frac{y^e - b}{k} \quad (2)$$

that determines the value of θ both in and out of steady-state equilibrium.

b) Provide an explanation why the dynamics of unemployment is given by:

$$\dot{u} = s - [s + p(\bar{\theta})]u, \quad (3)$$

and why the number of vacancies change in the same proportion as unemployment