Quiz on Labor Supply

Pascal Michaillat

Question 1

In the matching model, when we derive the labor supply, we assume that:

A. Inflows into unemployment equal outflows from unemployment.

B. Inflows into unemployment are larger than outflows from unemployment.

C. Inflows into unemployment are smaller than outflows from unemployment.

D. Inflows into unemployment equal inflows into the labor force.

E. Inflows into employment equal inflows into the labor force.

Question 2

Consider a matching model of the labor market with labor force of size H, a recruiting cost of $r > 0$ recruiters per vacancy, a job-separation rate $s > 0$, and a Cobb-Douglas matching function: $m = \omega \times U^{\eta} \times V^{1-\eta}$. We define the labor market tightness as $\theta = V/U$. Compute labor supply L^s.

A. $L^s(\theta) = \frac{f(\theta)}{s \times f(\theta)} \times H$ where $f(\theta) = \omega \times \theta^{1-\eta}$

B. $L^s(\theta) = \frac{f(\theta)}{s + f(\theta)} \times H$ where $f(\theta) = \omega \times \theta^{-\eta}$

C. $L^s(\theta) = \frac{f(\theta)}{s + f(\theta)} \times H$ where $f(\theta) = \omega \times \theta^{1-\eta}$

D. $L^s(\theta) = f(\theta) \times H$ where $f(\theta) = \omega \times \theta^{1-\eta}$

E. $L^s(\theta) = \frac{s}{s + f(\theta)} \times H$ where $f(\theta) = \omega \times \theta^{1-\eta}$

Question 3

The labor supply $L^s(\theta)$ from the previous question has the following properties:

A. It is increasing and concave in θ with $L^s(0) = 0$ and $L^s(\infty) = H$.

B. It is increasing and convex in θ with $L^s(0) = 0$ and $L^s(\infty) = H$.

C. It is decreasing and concave in θ with $L^s(0) = H$ and $L^s(\infty) = 0$.

D. It is decreasing and convex in θ with $L^s(0) = H$ and $L^s(\infty) = 0$.

E. It is increasing and concave in θ with $L^s(0) = 0$ and $L^s(\infty) = \infty$.

F. It is increasing and convex in θ with $L^s(0) = 0$ and $L^s(\infty) = \infty$.

Question 4

Why is the labor supply increasing in labor market tightness in the matching model?

A. A higher tightness makes it more expensive to hire producers.

B. A higher tightness makes it cheaper to hire producers.

C. A higher tightness makes it easier to fill vacancies.

D. A higher tightness makes it easier to find jobs.

E. A higher tightness reduces the job-separation rate.

F. None of the above.

Question 5

If the labor-force participation rate suddenly increases, what necessarily happens in the matching model?

A. The labor supply curve is not affected.

B. The matching function is more effective.

C. The matching functions is less effective.

D. The labor supply curve shifts inward.

E. The labor supply curve shifts outward.

F. None of the above.

Question 6

In the matching model, what would an increase in the job-separation rate do?

A. It would have no effect on the labor supply curve.

B. It would shift the labor supply curve inward.

C. It would shift the labor supply curve outward.

D. It would make the matching function more effective.

E. It would make the matching function less effective.

F. None of the above.