Lecture Recap

(Labour Market)

Lecture Recap

Labor Market Glossary

- Labor Force (L_t) = Employed (N_t) + Unemployed (U_t)

Lecture Recap

Labor Market Glossary

- Labor Force (L_t) = Employed (N_t) + Unemployed (U_t)
- Definitions:
  - Job Separation Rate (s)
  - Job Finding Rate (f)
  - Unemployment Rate $u_t = U_t/L_t$

Lecture Recap

Labor Market Glossary

- Labor Force (L_t) = Employed (N_t) + Unemployed (U_t)
- Definitions:
  - Job Separation Rate (s)
  - Job Finding Rate (f)
  - Unemployment Rate $u_t = U_t/L_t$
- $U_{t+1} - U_t = sN_t - fU_t \implies u_{t+1} - u_t = s(1 - u_t) - fu_t$

Lecture Recap

Labor Market Glossary

- Labor Force (L_t) = Employed (N_t) + Unemployed (U_t)
- Definitions:
  - Job Separation Rate (s)
  - Job Finding Rate (f)
  - Unemployment Rate $u_t = U_t/L_t$
- $U_{t+1} - U_t = sN_t - fU_t \implies u_{t+1} - u_t = s(1 - u_t) - fu_t$
- Labor market flows: *fluid* vs *sclerotic*.

Lecture Recap

Labor Market Glossary

- Labor Force (L_t) = Employed (N_t) + Unemployed (U_t)
- Definitions:
  - Job Separation Rate (s)
  - Job Finding Rate (f)
  - Unemployment Rate $u_t = U_t/L_t$
- $U_{t+1} - U_t = sN_t - fU_t \implies u_{t+1} - u_t = s(1 - u_t) - fu_t$
- Labor market flows: *fluid* vs *sclerotic*.
- Expected unemployed duration: $1/f$.
- Expected employed duration: $1/s$.

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$
- Vacancy filling rate $q_t = M_t/V_t = F(U_t, V_t)/V_t$

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$
- Vacancy filling rate $q_t = M_t/V_t = F(U_t, V_t)/V_t$
- Labor market tightness $\theta_t = V_t/U_t = v_t/u_t$

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$
- Vacancy filling rate $q_t = M_t/V_t = F(U_t, V_t)/V_t$
- Labor market tightness $\theta_t = V_t/U_t = v_t/u_t$
- Vacancy filling rate $q(\theta)$ is decreasing in θ.
- Job finding rate $f(\theta)$ is increasing in θ.

THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$
- Vacancy filling rate $q_t = M_t/V_t = F(U_t, V_t)/V_t$
- Labor market tightness $\theta_t = V_t/U_t = v_t/u_t$
- Vacancy filling rate $q(\theta)$ is decreasing in θ.
- Job finding rate $f(\theta)$ is increasing in θ.
  - $f(\theta) = \theta q(\theta)$

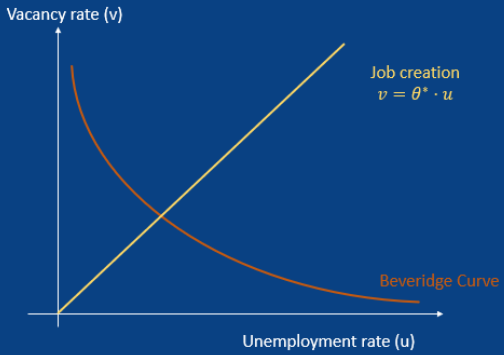
THE UNIVERSITY OF MELBOURNE

Lecture Recap

- Job matches $M_t = f_t U_t$; Vacancies V_t
- Matching function $M_t = F(U_t, V_t)$
  - Job finding rate $f_t = M_t/U_t = F(U_t, V_t)/U_t$
- Vacancy filling rate $q_t = M_t/V_t = F(U_t, V_t)/V_t$
- Labor market tightness $\theta_t = V_t/U_t = v_t/u_t$
- Vacancy filling rate $q(\theta)$ is decreasing in θ.
- Job finding rate $f(\theta)$ is increasing in θ.
  - $f(\theta) = \theta q(\theta)$
- Value of a filled position J_t; cost of posting a vacancy c_t.
- Firms post vacancies until $q(\theta) J_t = c_t$.

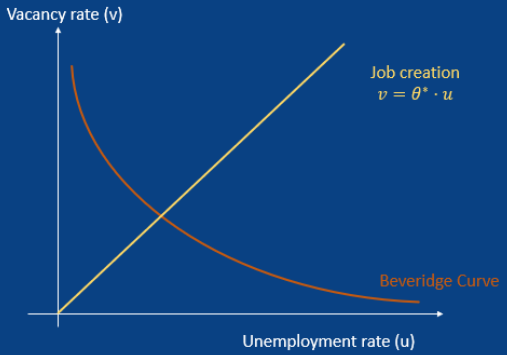
Lecture Recap

Beveridge Curve



Lecture Recap

Beveridge Curve

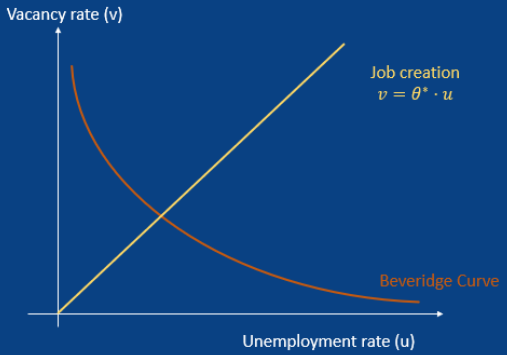


- Beveridge curve (BC) obtained from steady-state relationship between u and v.

$$u = \frac{s}{s + f(\theta = v/u)}$$

Lecture Recap

Beveridge Curve



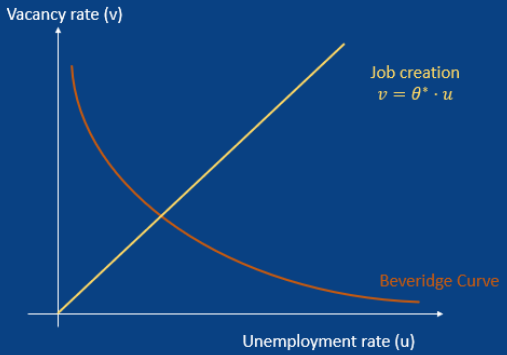
- Beveridge curve (BC) obtained from steady-state relationship between u and v.

$$u = \frac{s}{s + f(\theta = v/u)}$$

- Lower matching efficiency A shifts BC outwards.

Lecture Recap

Beveridge Curve



- Beveridge curve (BC) obtained from steady-state relationship between u and v.

$$u = \frac{s}{s + f(\theta = v/u)}$$

- Lower matching efficiency A shifts BC outwards.
- Job creation curve rotates with change in θ^*.
  - θ^* increases with match efficiency A, value of a filled job J, and decreases with vacancy creation costs c.