

Labor mobility and the level of unemployment in a currency union

by Erin Gibson, Christopher House, Christian Proebsting and Linda Tesar

Discussion by: Fabrizio Perri
Minneapolis Fed

Conference on Macroeconomics of Emerging Markets
In honor of Martín Uribe
May 2024

Summary of the paper

Motivating facts

- ▶ **US**: high interstate labor mobility (in resp. to shocks), u **lower** and more correlated across states
- ▶ **EU**: low intercountry mobility, u **higher** and less correlated across countries

Question

- ▶ How much of the u gap can be accounted by differences in labor mobility ?

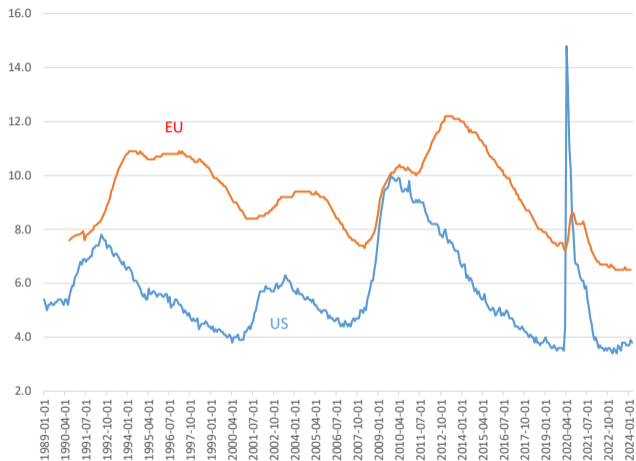
Answer

- ▶ Write down a business cycle model of a currency union, where u is driven by adverse productivity shocks + sticky wages (Schmitt-Grohe - Uribe, 2013)
- ▶ Moving from EU to US mobility lowers u by 0.5%

Outline of discussion

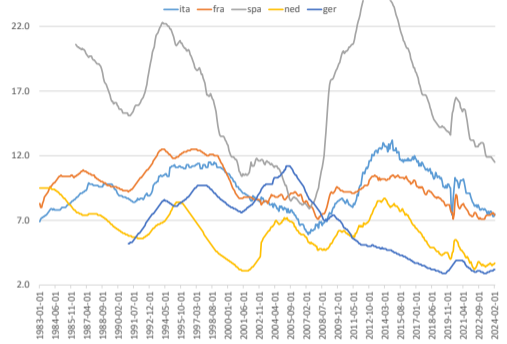
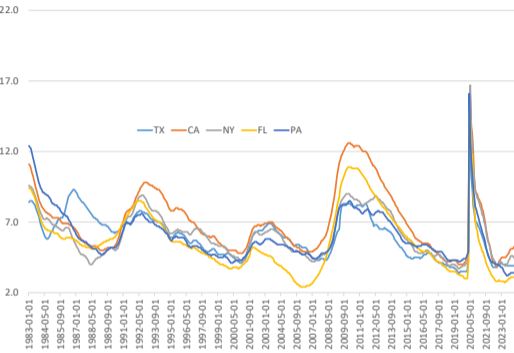
- ▶ Some data: cyclical v/s structural unemployment in EU and US
- ▶ A simplified plucking model
- ▶ Some final thoughts

Unemployment in US v/s EU: aggregate



▷ Looking at aggregate data differences seem more structural than cyclical

Unemployment in US v/s EU: largest 5 states



- ▷ EU unemployment not uniform across states as US
- ▷ Differential (across states) response to cycles might explain part of high EU u
- ▷ Open borders might affect the level of u !

A simplified plucking model

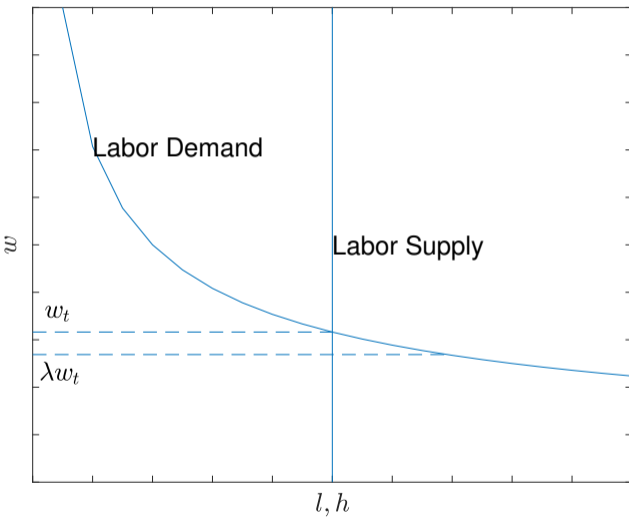
- ▷ Two equal countries, $i = 1, 2$
- ▷ Labor Demand, $l_{it} = L(Z_{it}, w_{it})$, $L_1 > 0$, $L_2 < 0$
- ▷ Labor Supply, $h_{1t} = h_{1t-1} - m_t$, $h_{2t} = h_{2t-1} + m_t$, m_t is migration from 1 to 2
- ▷ Downward rigid wages, $w_{it} \geq \lambda w_{it-1}$
- ▷ Unemployment:

$$u_{it} = \begin{cases} 0 & \text{if } w_{it} > \lambda w_{it-1} \text{ mkt clearing wage above constraint} \\ h_{it} - l_{it} > 0 & \text{if } w_{it} = \lambda w_{it-1} \end{cases}$$

Two regimes

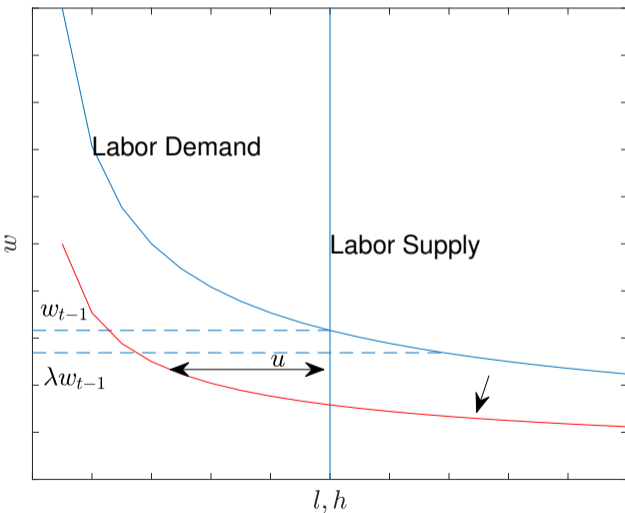
- ▶ closed borders, $m_t = 0$, for every t
- ▶ open borders, $u_{1t} = u_{2t}$, for every t
 - ▶ Unemployment main driver of migration

Initial steady state



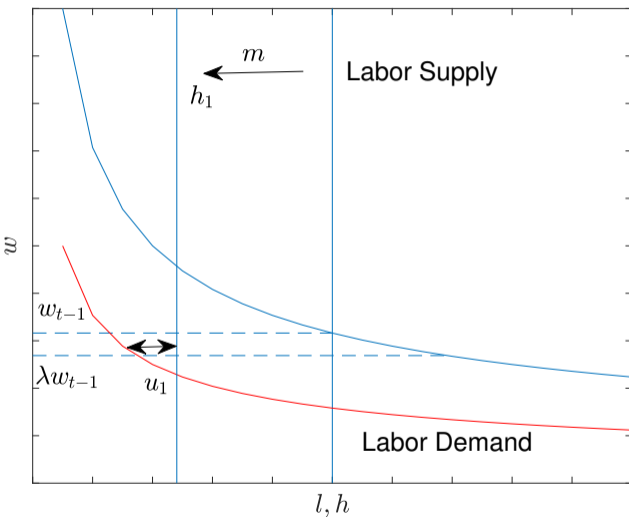
- ▷ Labor demand equal to labor supply
- ▷ $u = 0$

Negative productivity shock in country 1



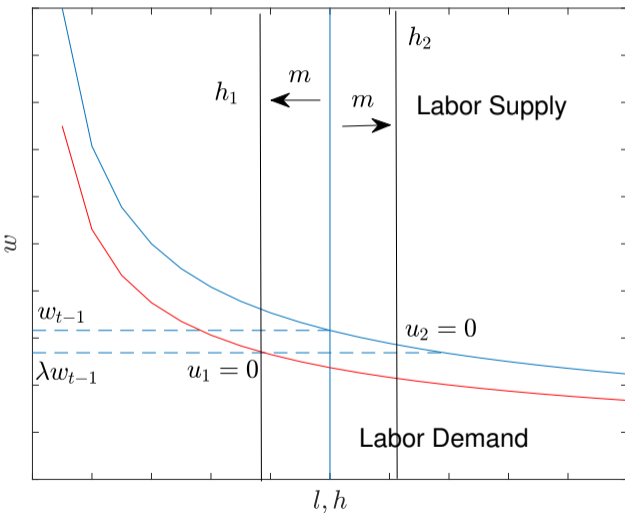
- ▷ Labor demand falls
- ▷ Wage constraint binds
- ▷ Labor demand less than supply
- ▷ Equilibrium unemployment, $u > 0$
- ▷ **Closed borders:** unemployment persists until productivity recovers or wages fall

Negative shock with open borders



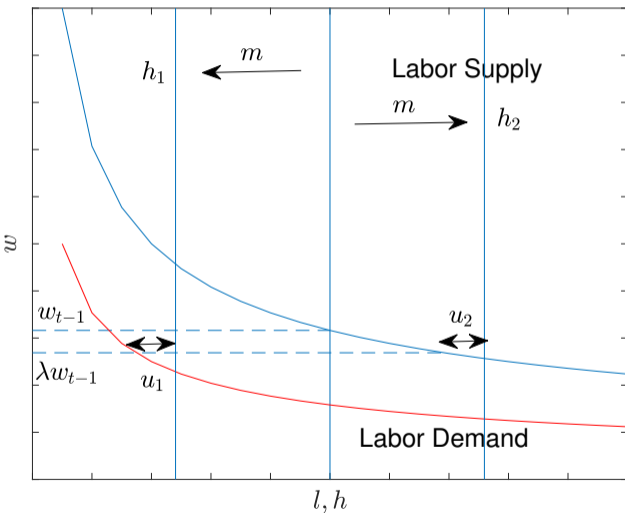
- ▷ Domestic workers migrate abroad
- ▷ Domestic labor supply shrinks
- ▷ Surge in domestic u much smaller!

Effects abroad



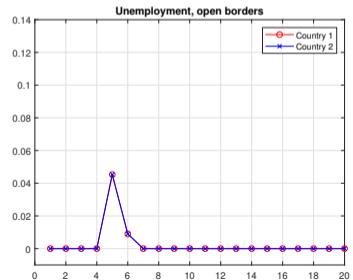
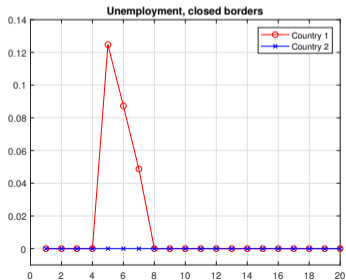
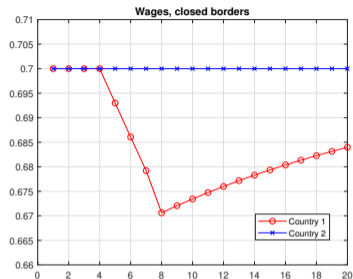
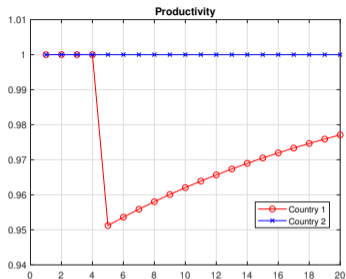
- ▷ When $u_1 > u_2$ domestic workers migrate
- ▷ Foreign labor supply increases
- ▷ If shock small (and w not too rigid), w_2 falls but does not hit constraint, $u_1 = u_2 = 0$
- ▷
- ▷
- ▷

Effects abroad



- ▷ When $u_1 > u_2$ domestic workers migrate
- ▷ Foreign labor supply increases
- ▷ If shock small (and w not too rigid), w_2 falls but does not hit constraint, $u_1 = u_2 = 0$
- ▷ If shock large, $u_1 = u_2 > 0$, unemployment increases (a bit) also abroad
- ▷ In foreign country excess wage flexibility (because no shock) absorbs some workers w/out causing u to increase!
- ▷ open borders \simeq risk sharing!

Impulse responses



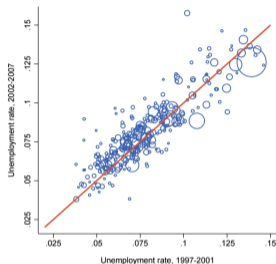
▷ Opening borders makes unemployment:

- ▷ Lower (union average)
- ▷ Less persistent
- ▷ More correlated

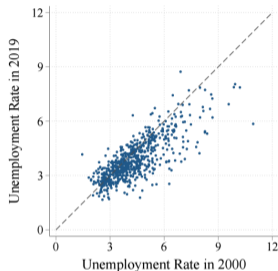
Mobility and wage rigidity

- ▷ Are the benefits of mobility increasing with wage rigidity?
- ▷ For an individual country, yes
- ▷ For the union, no!
- ▷ When wages are flexible: little benefit
- ▷ When wages partially rigid: benefit
- ▷ When wages very rigid: small or no benefit, as domestic gain in unemployment translate in foreign losses!

Mobility and unemployment differentials



France: Bilal, 2023



U.S.: Kuhn, Manovskii, and Qiu 2023

- ▷ Recent evidence points to large and persistent differences in unemployment across locations **within** country
- ▷ Potentially relevant to quantify how much mobility can impact unemployment differentials

Conclusion

- ▷ Important research agenda on the role of labor mobility in currency areas
- ▷ Paper highlights crucial connections between mobility, adjustment to shocks and frictions in the labor markets