

# MODELING MIGRATION-INDUCED UNEMPLOYMENT

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Pascal Michailat

June 2025

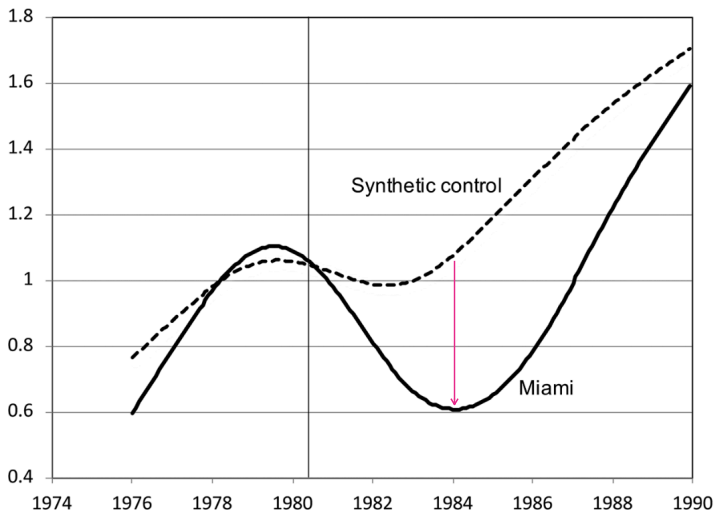
Available at <https://pascalmichailat.org/14/>

## MIGRATION INDUCES UNEMPLOYMENT EVERYWHERE EXCEPT IN EXISTING MODELS

- In international/return/domestic migration experiments:
  - Newcomers raise unemployment rate of locals
- In popular perceptions and voting patterns:
  - People are worried that immigrants steal their jobs
- But not in existing labor-market models:
  - Walrasian model: no unemployment
  - DMP model: newcomers are seamlessly absorbed
- This model: migration induces unemployment

## MIGRATION INDUCES UNEMPLOYMENT: EVIDENCE

# TIGHTNESS FELL BY 40% AFTER MARIEL BOATLIFT (ANASTASOPOULOS, BORJAS, COOK, LACHANSKI 2021)



## UNEMPLOYED LOCALS PER 100 ARRIVALS IN EXPERIMENTS

Country	Period	Event	Reference
DOMESTIC MIGRATION			
21 USA	1935–40	Great Depression	Boustan, Fishback, Kantor (2010)
RETURN MIGRATION			
20 FRA	1962	Algerian War	Hunt (1992)
22 PRT	1974–77	Angolan independence	Makela (2017)
31 DEU	1996–2001	Berlin Wall	Glitz (2012)

# UNEMPLOYED LOCALS PER 100 ARRIVALS IN EXPERIMENTS

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## INTERNATIONAL MIGRATION

24–27	DZA → FRA	1962	Algerian War	Borjas, Monras (2019)
15	CUB → USA	1980–81	Mariel Boatlift	Card (1990)
66–77	CZE → DEU	1991–93	Berlin Wall	Dustmann, Schoenberg, Stuhler (2016)
30–40	E. Europe → DEU	1987–2001	Berlin Wall	d'Amurio, Ottaviano, Peri (2010)
35–83	YUG → Europe	1983–99	Yugoslav Wars	Angrist, Kugler (2003)
21–47	YUG → Europe	1991–2001	Yugoslav Wars	Borjas, Monras (2019)
63–80	N. Africa → ITA	2011	Arab Spring	Labanca (2016)

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## SUMMARY STATISTICS: UNEMPLOYED LOCALS PER 100 ARRIVALS

Mean: 37	Median: 31	Min: 15	Max: 72	Std deviation: 20
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## AND THERE MIGHT BE MORE EVIDENCE OUT THERE (SCHEVE, SLAUGHTER 2001)

“The 1992 National Election Studies survey asked other questions about immigration that we do not analyze. For example, respondents were asked whether they think Asians or Hispanics ‘take jobs away from people already here.’ We do not focus on this question because its responses cannot clearly distinguish among our three competing economic models. All our models assume full employment, so no natives could have jobs ‘taken away’ by immigrants.”

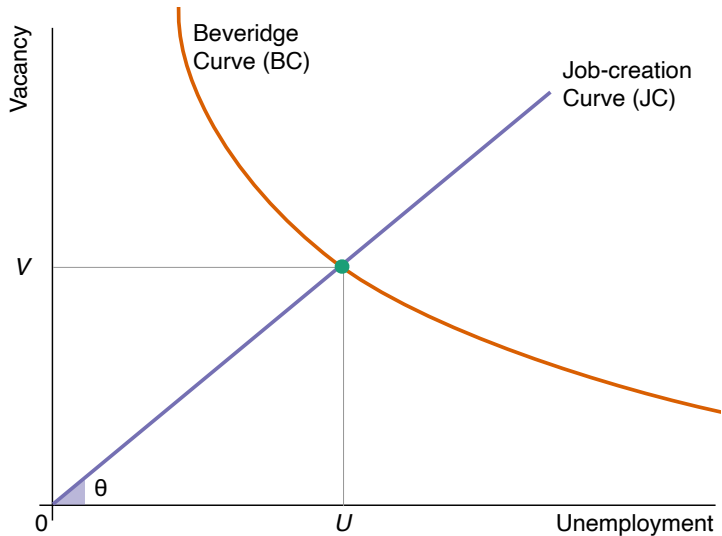
## JOB STEALING IN 1992 NATIONAL ELECTION STUDIES SURVEY

	How likely is it?			
	Extremely	Very	Somewhat	Not at all
The growing number of these immigrants takes jobs away from people already here				
Hispanics	20%	29%	38%	13%
Asians	19%	30%	37%	13%

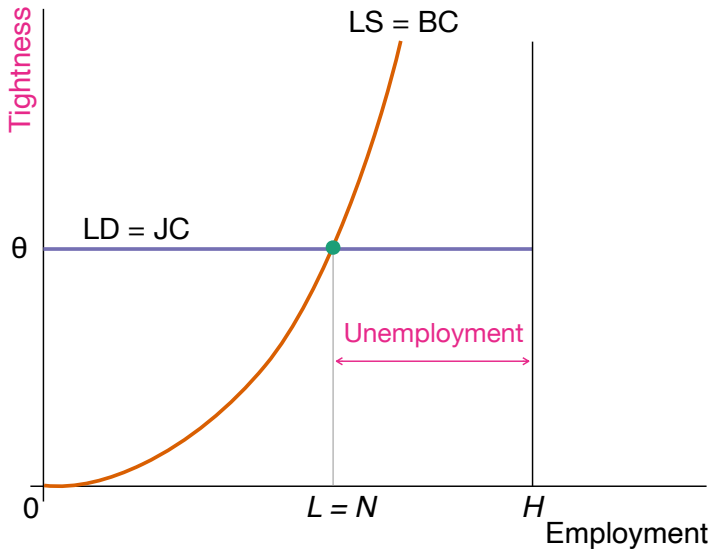


## MIGRATION INDUCES UNEMPLOYMENT: MODEL

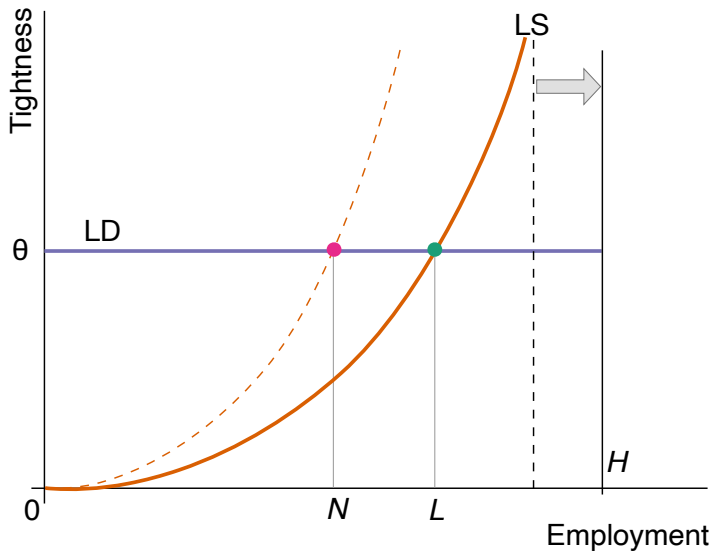
# MIGRATION INDUCES NO UNEMPLOYMENT IN DMP MODEL



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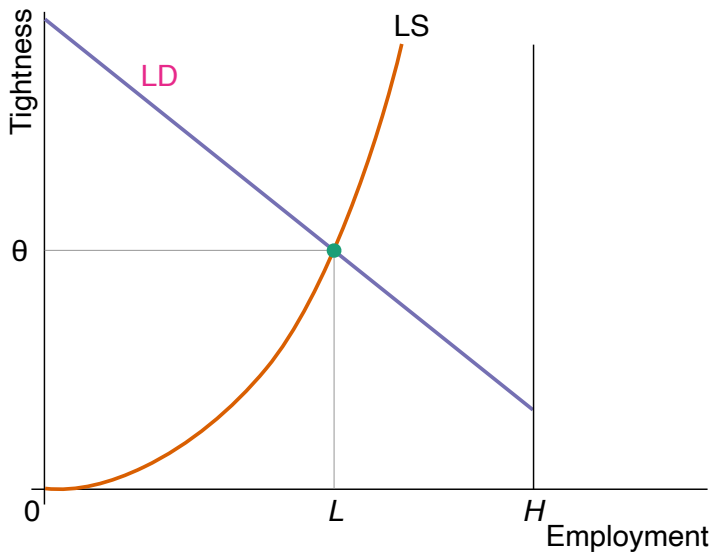
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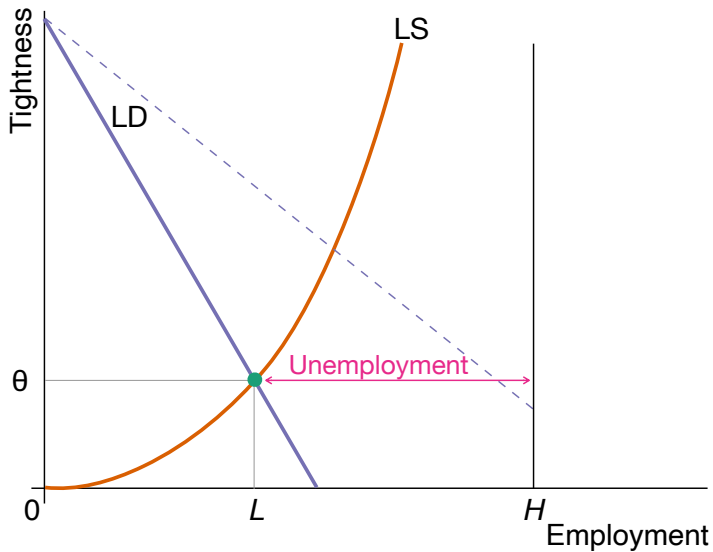
## ADDING JOB RATIONING TO DMP MODEL (MICHAILLAT 2012)

1. Linear production function  $\leadsto$  concave production function
  - Labor demand is downward sloping in  $w$  and  $\theta$
  - Somewhat limited number of jobs
2. Bargained wages  $\leadsto$  rigid wages
  - Labor demand responds to business-cycle shocks
  - Fewer jobs in bad times
  - Response of wages to migration calibrated to evidence

## MODEL SOLUTION: BORJAS MEETS CARD



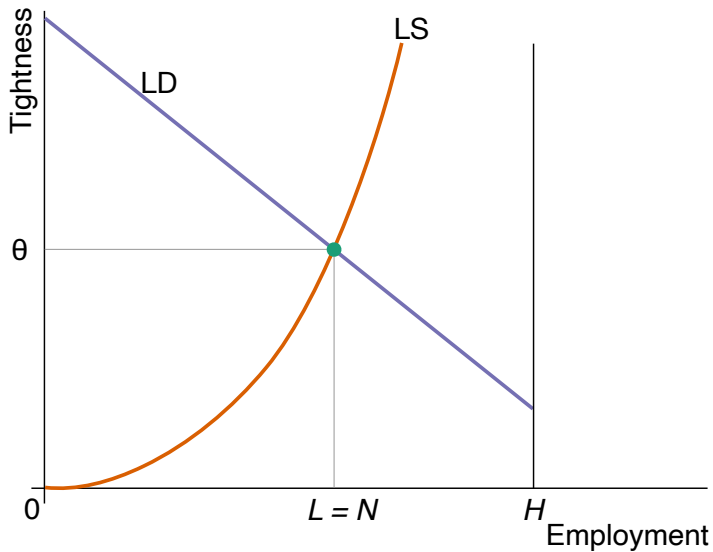
## BAD TIMES: LOW LABOR DEMAND



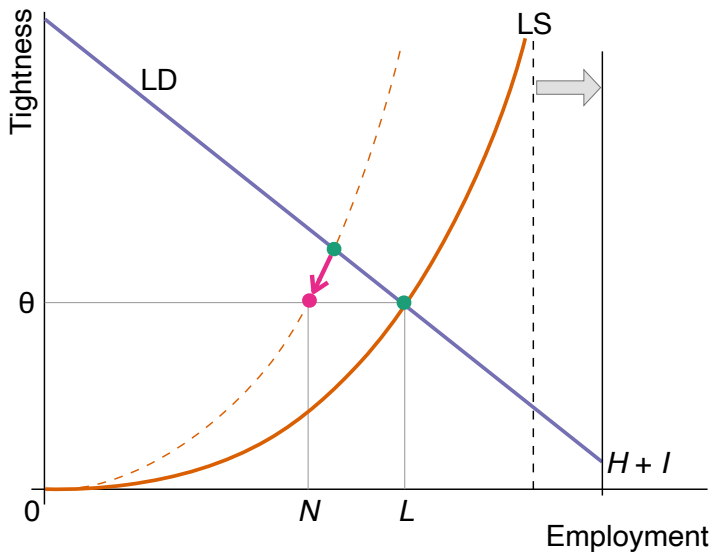
# MIGRATION INDUCES UNEMPLOYMENT: COMPARATIVE STATICS



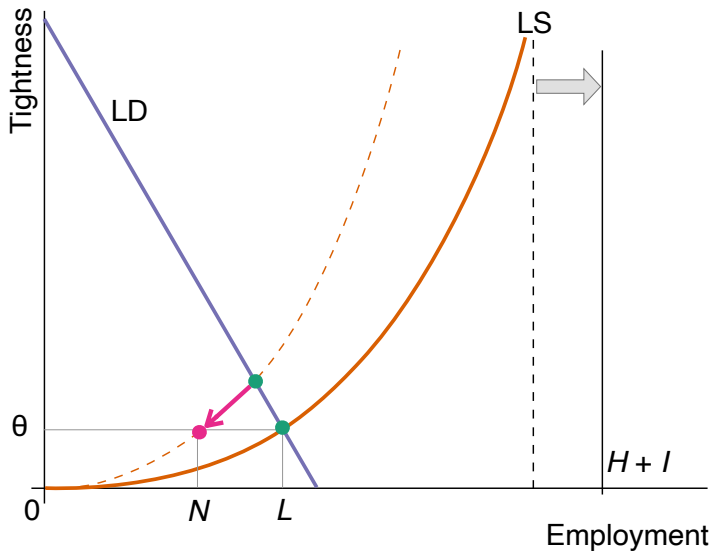
## IN-MIGRATION LOWERS LOCAL JOB-FINDING RATE



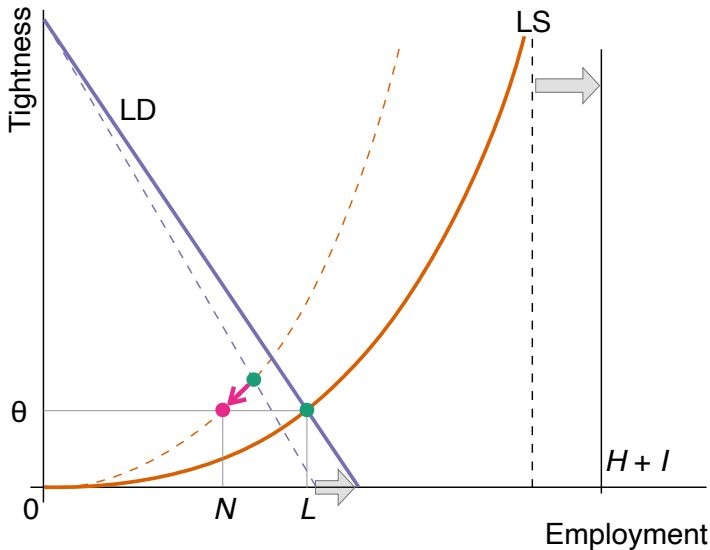
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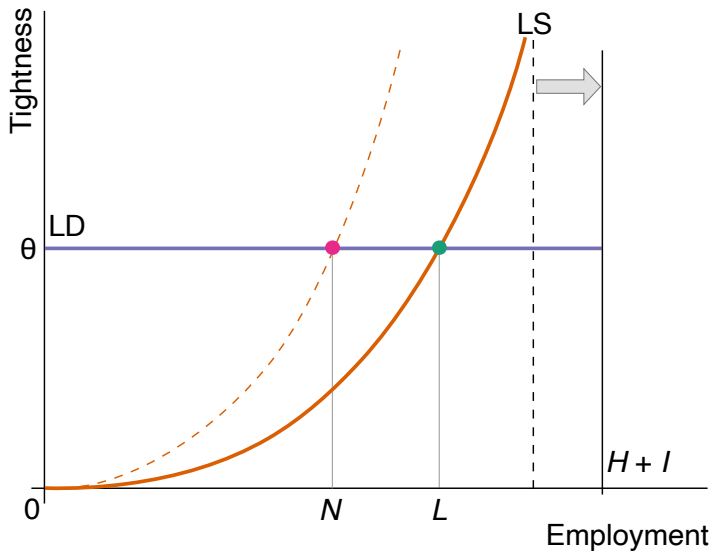
## STRONGER JOB STEALING IN BAD TIMES



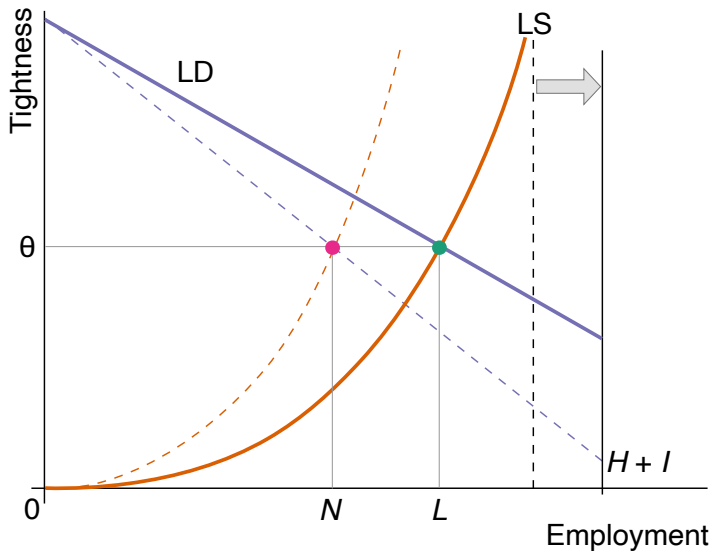
## WEAKER JOB STEALING IF WAGES FALL



## CARDIAN CASE: LINEAR PRODUCTION FUNCTION



## BORJASIAN CASE: FLEXIBLE WAGES



# IMMIGRATION POLICY

## DISTRIBUTIONAL CONSEQUENCES OF MIGRATION

- Local workers are **hurt by in-migration**
  - Local labor income  $\downarrow$  with in-migration
  - Because local employment  $\downarrow$
  - And wages  $\downarrow$
- Incidence depends on assumptions:
  - Fully on unemployed workers if wages  $\rightarrow$
  - Fully on employed workers if tightness  $\rightarrow$
  - On both if tightness  $\downarrow$  and wages  $\downarrow$
- Firm owners **benefit from in-migration**
  - Firm profits  $\uparrow$  with in-migration
  - Because recruiting becomes easier
  - And wages  $\downarrow$



## SOME POLITICAL PREDICTIONS

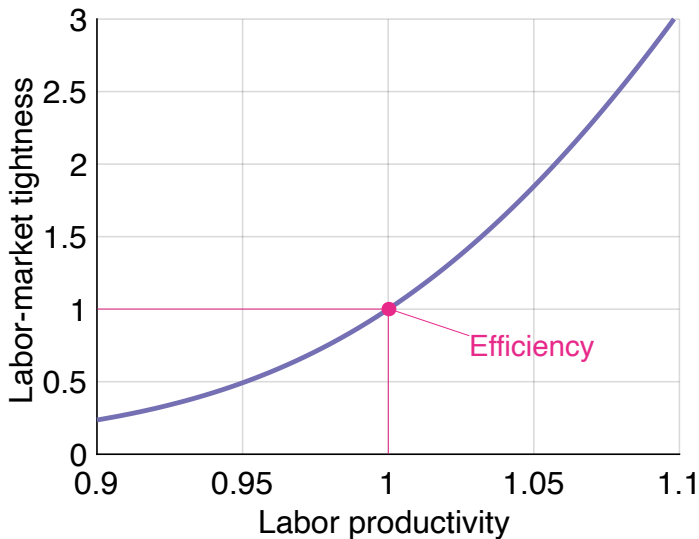
- Pro-labor parties & unions oppose immigration
  - American Federation of Labor was lobbying to extend the Chinese Exclusion Act (Long, Medici, Qian, Tabellini 2024)
  - “Our white population suffered in every department of labor and trade, having in numerous instances been **driven out of employment** by the competition of the Chinese.”
- Pro-business parties & business lobbies support immigration
  - Charles Crocker—president of the Southern Pacific Railroad—argued in Congress against the Chinese Exclusion Act
- Voters flock to anti-immigration parties when unemployment is high
  - Austrian voters shift toward FPO in response to immigration **more when local unemployment rate is higher** (Halla, Wagner, Zweimuller 2017)

# OPTIMAL MIGRATION POLICY FOR MACROSTABILIZATION

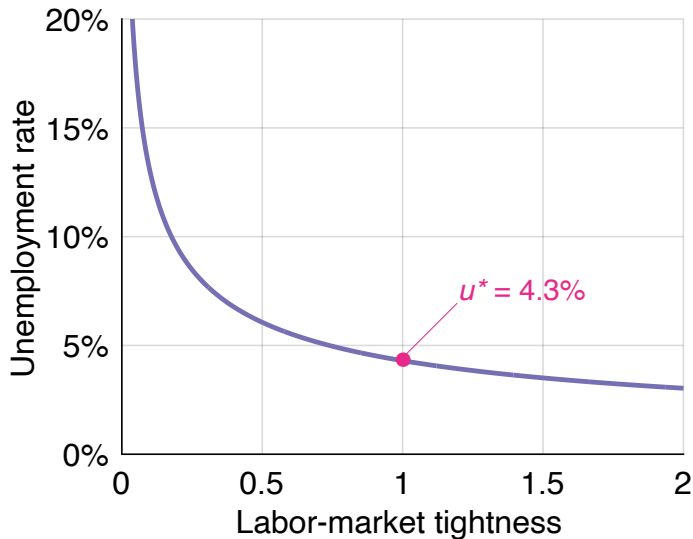
- In-migration improves local welfare in inefficiently tight labor market
    - By reducing tightness, in-migration **raises firm profits** more than it lowers local labor income
  - In-migration reduces local welfare in inefficiently slack labor market
    - By reducing tightness, in-migration **lowers local labor income** more than it raises firm profits
- ⇒ Optimal in-migration is **procyclical**
- When labor market is inefficiently slack: no in-migration
  - When labor market is inefficiently tight: enough in-migration to lower tightness below its efficient level

**NUMERICAL ILLUSTRATION WITH US CALIBRATION**

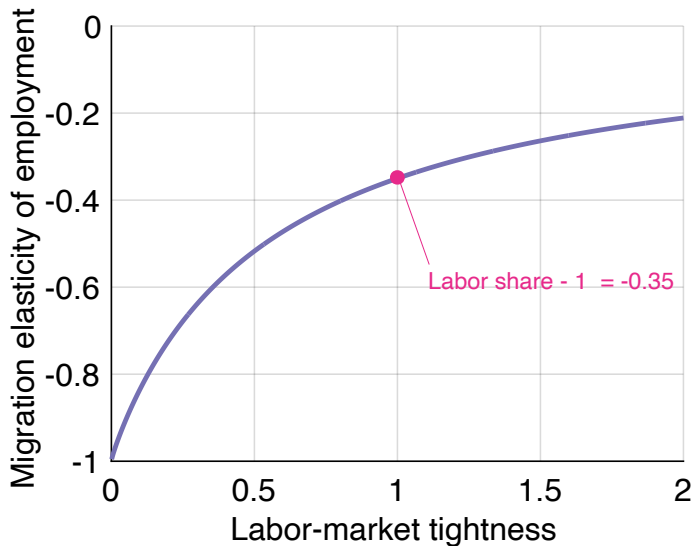
## BUSINESS CYCLE DRIVEN BY PRODUCTIVITY SHOCKS



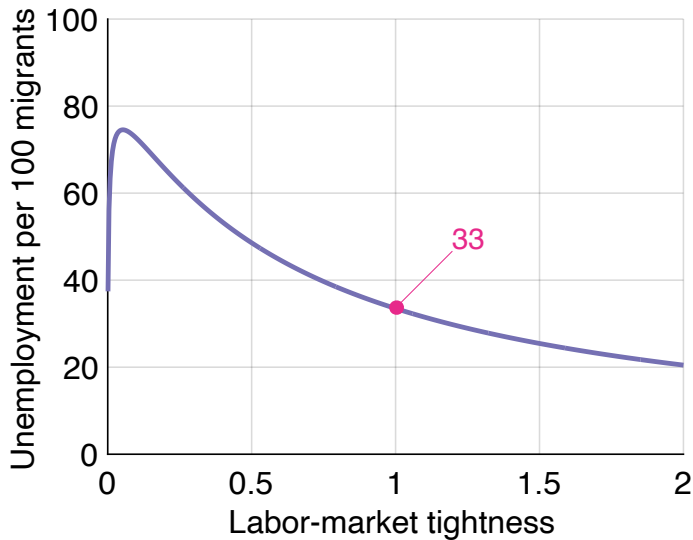
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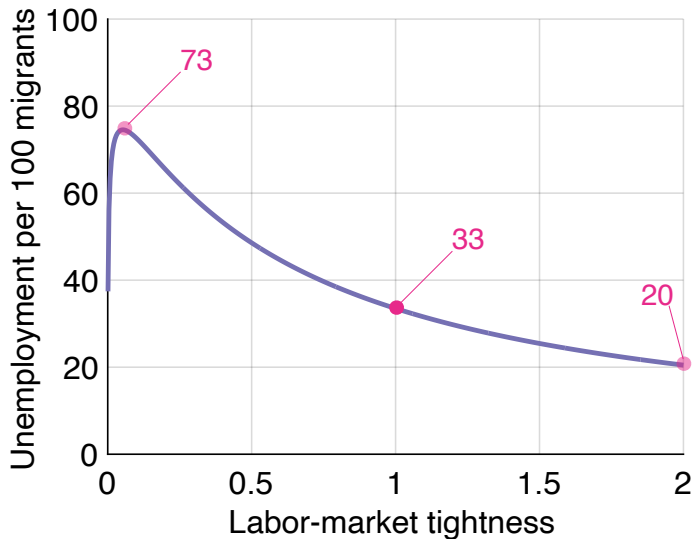
## IN-MIGRATION REDUCES LOCAL EMPLOYMENT



## ... MATCHING EXPERIMENTAL EVIDENCE

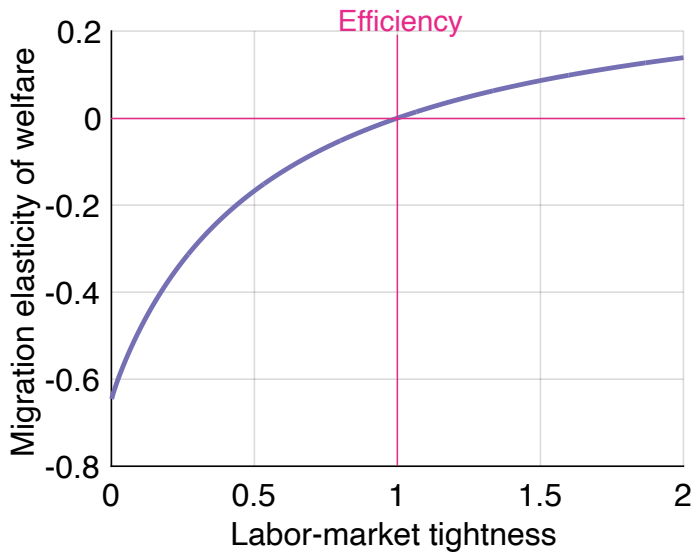


...WITH SIGNIFICANT VARIATION OVER THE BUSINESS CYCLE

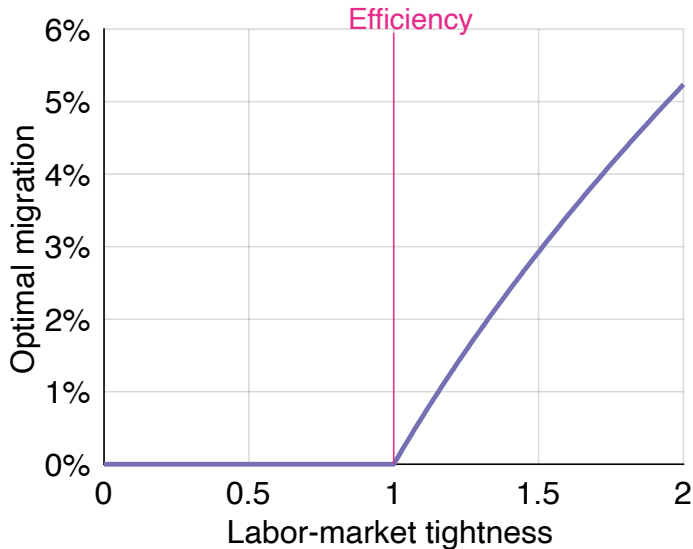




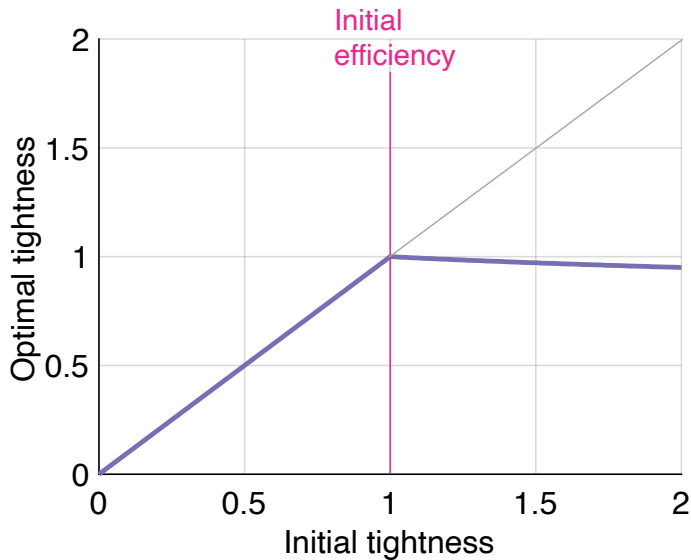
## EFFECT OF IMMIGRATION ON WELFARE



## OPTIMAL IMMIGRATION POLICY IS PROCYCLICAL



## OPTIMAL IMMIGRATION PREVENTS OVERHEATING



# LACK OF IMMIGRATION IN THE US AFTER PANDEMIC

