

# MODELING JOB STEALING

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April 2024

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

## JOB STEALING IS EVERYWHERE BUT IN EXISTING MODELS

- in international/return/domestic migration experiments:
  - arrival of new workers raises unemployment rate of incumbents
- in popular perceptions:
  - people are worried that immigrants steal their jobs
- but in existing labor market models:
  - Walrasian model: anyone who wants a job can get a job
  - DMP model: new entrants are seamlessly absorbed

## A LABOR MARKET MODEL WITH JOB STEALING

- richer description of immigration effects:
  - effect on labor market tightness & unemployment
  - resolve the Borjas-Card controversy
- richer understanding of immigration policy:
  - optimal policy responds to business-cycle conditions
  - actual policy depends on political system: populist, capitalist, ...
- application to other labor supply shocks:
  - wartime mobilization
  - coronavirus pandemic

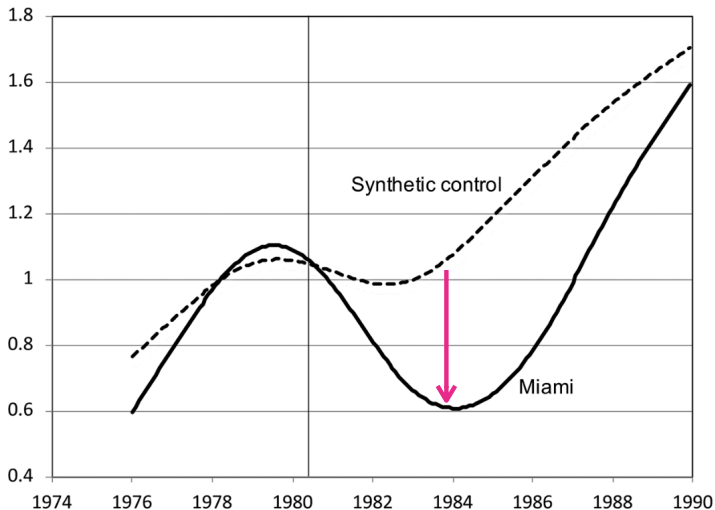
## EVIDENCE OF JOB STEALING

## JOB STEALING IS PREVALENT IN EXISTING STUDIES

- **US workers**  $\leadsto$  new cities during the Great Depression
  - 100 arrivals in a city  $\Rightarrow$  **21** residents in unemployment + 19 residents moved out
  - “NO JOBS in California / If YOU are looking for work—KEEP OUT / **6 men for every job** / No state relief available for non-residents”
  - source: Boustan, Fishback, Kantor (2010)
- **French repatriates from Algeria**  $\leadsto$  France in the 1960s
  - 100 repatriates in labor force  $\Rightarrow$  **20** natives in unemployment
  - source: Hunt (1992)
- **Algerians refugees**  $\leadsto$  France in the 1960s
  - 100 refugees in region-education cell  $\Rightarrow$  **27** natives in unemployment
  - source: Borjas, Monras (2019)

- Cuban immigrants  $\leadsto$  Miami in the 1980s
  - 100 Cubans in labor force  $\Rightarrow$  13 Cubans in unemployment
  - source: Card (1990)
- ethnic Germans, East Germans, foreigners  $\leadsto$  Germany in 1987–2001
  - 100 new immigrants in employment  $\Rightarrow$  30–40 old immigrants in unemployment
  - source: d'Amurio, Ottaviano, Peri (2010)
- Czech commuters  $\leadsto$  German border towns in 1991–1993
  - 100 commuters in employment  $\Rightarrow$  71 natives in unemployment
  - cause: reduced inflows of natives into employment
  - source: Dustmann, Schoenberg, Stuhler (2016)

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



## AND THERE MIGHT BE MORE EVIDENCE OUT THERE

- “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.”
- source: Scheve, Slaughter (2001)



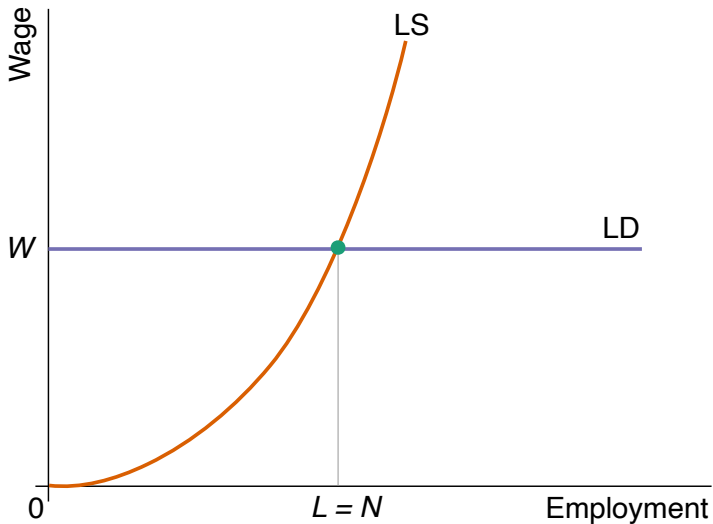
## JOB STEALING IS ALSO PREVALENT IN POPULAR PERCEPTIONS

	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%

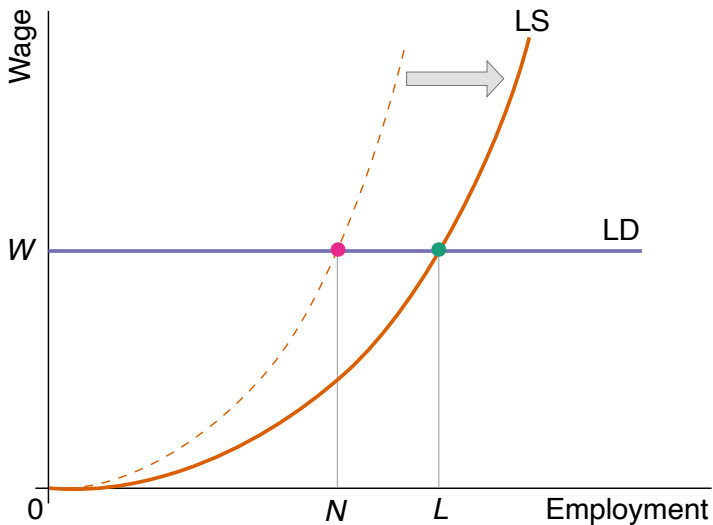
Source: 1992 National Election Studies survey

**ABSENCE OF JOB STEALING IN EXISTING MODELS**

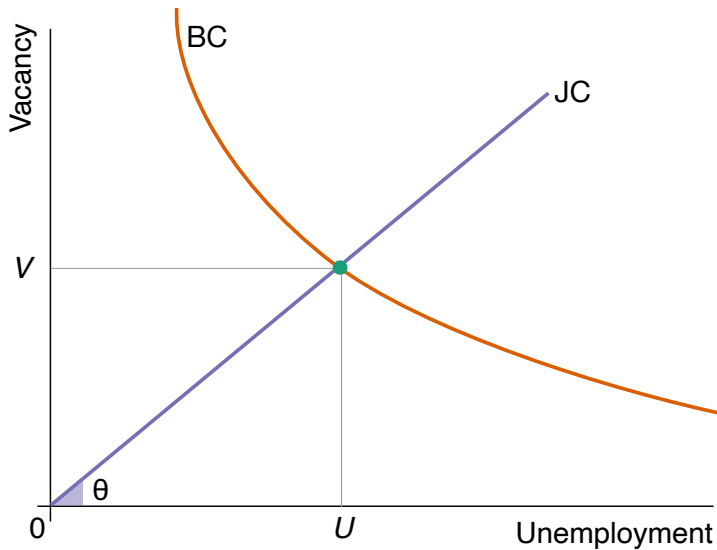
## NO JOB STEALING IN CARD MODEL



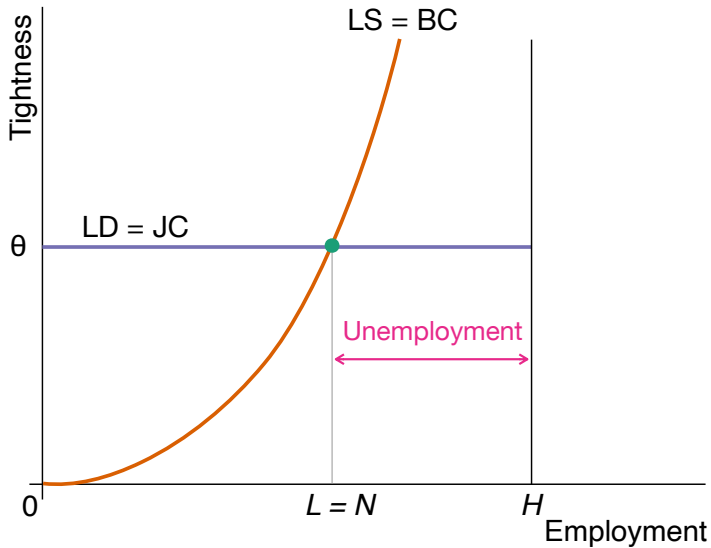
## NO JOB STEALING IN CARD MODEL



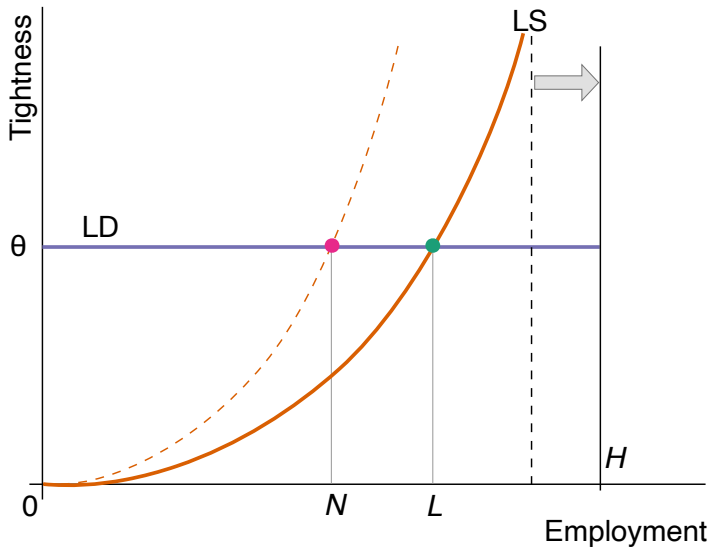
## NO JOB STEALING IN DMP MODEL



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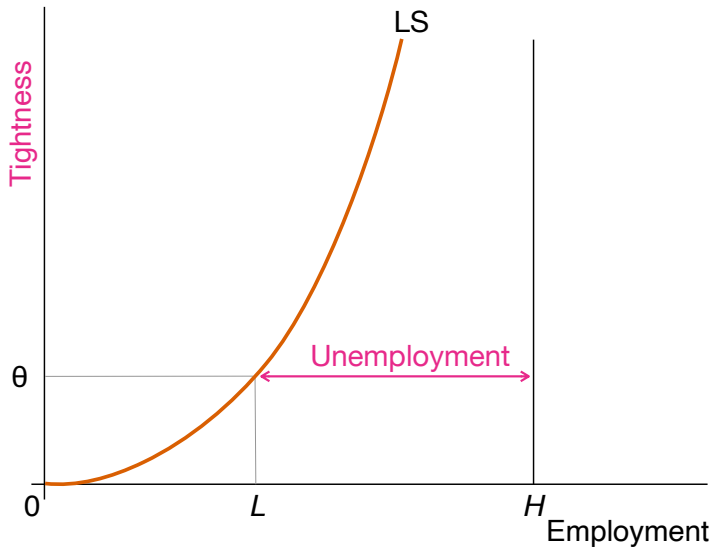
## A MODEL WITH JOB STEALING



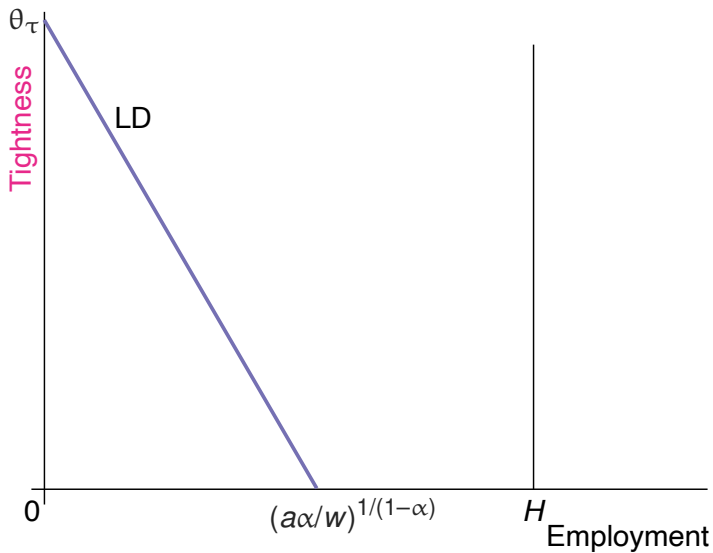
# DMP MODEL WITH 2 GENERALIZATIONS (MICHAILLAT 2012)

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  $\leadsto$  somewhat rigid wages
  - labor demand responds to business-cycle shocks
  - fewer jobs in bad times
  - response of wages to immigration calibrated to evidence

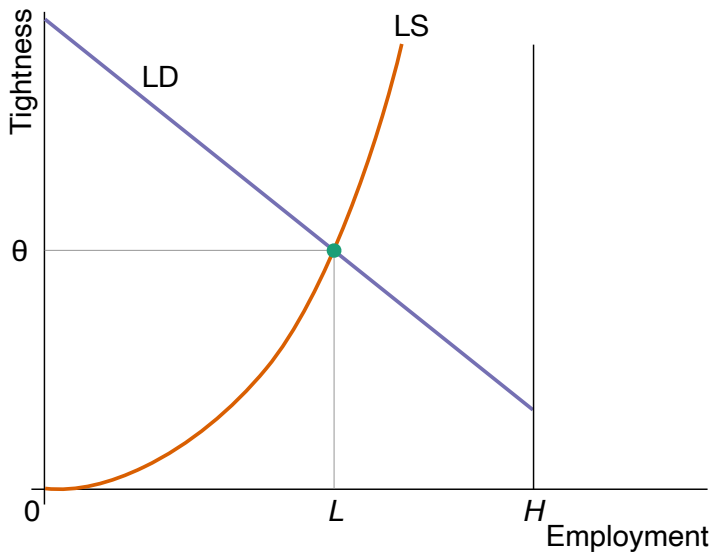
## LABOR SUPPLY



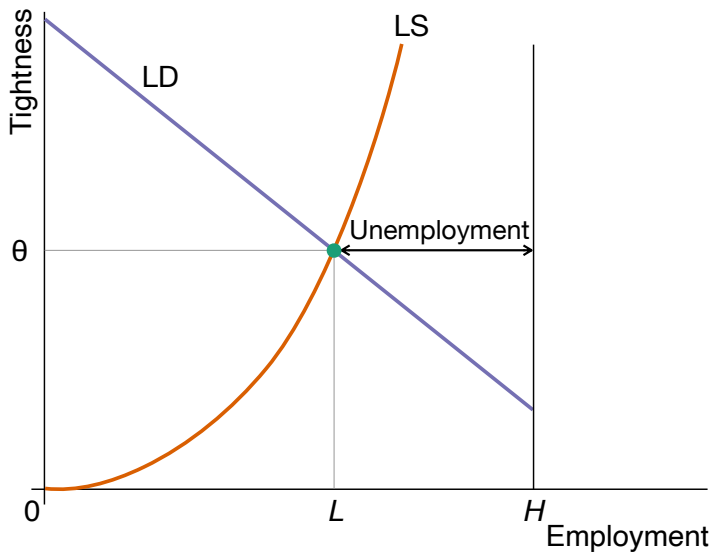
## LABOR DEMAND



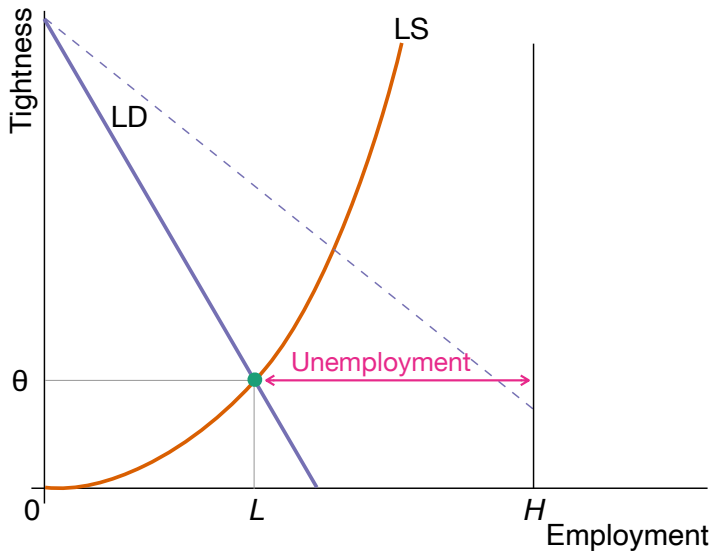
## MODEL SOLUTION: BORJAS MEETS CARD



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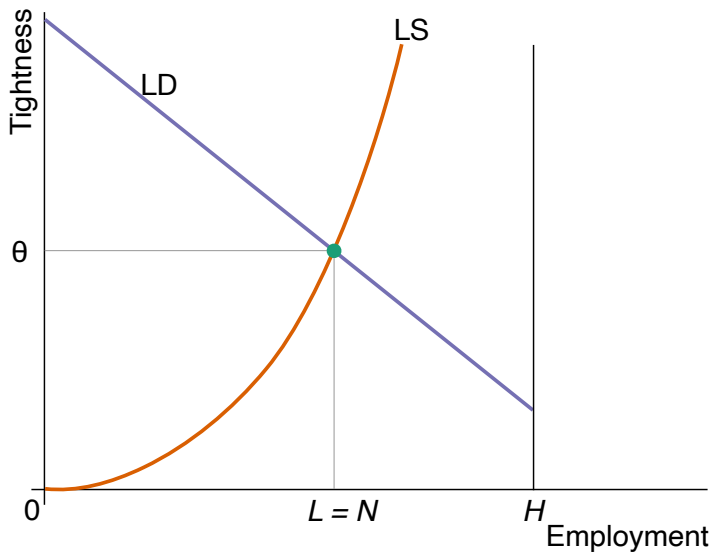


## BAD TIMES: LOW LABOR DEMAND



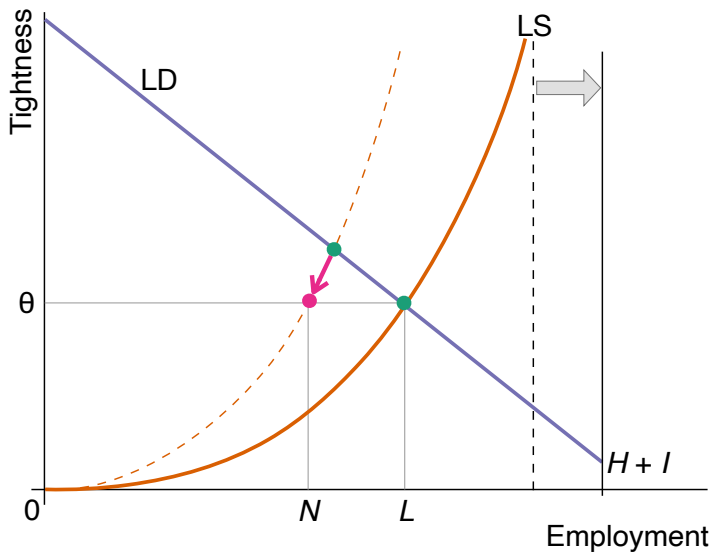
## EFFECTS OF AN IMMIGRATION WAVE

## JOB STEALING: JOB-FINDING RATE OF NATIVES ↓

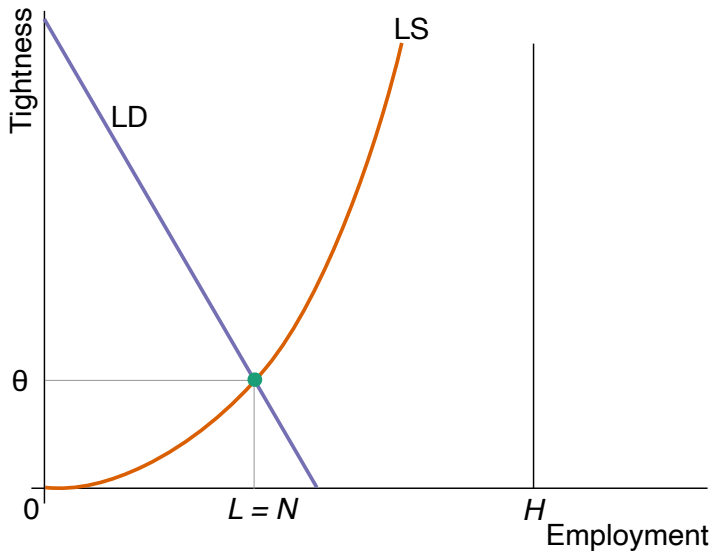




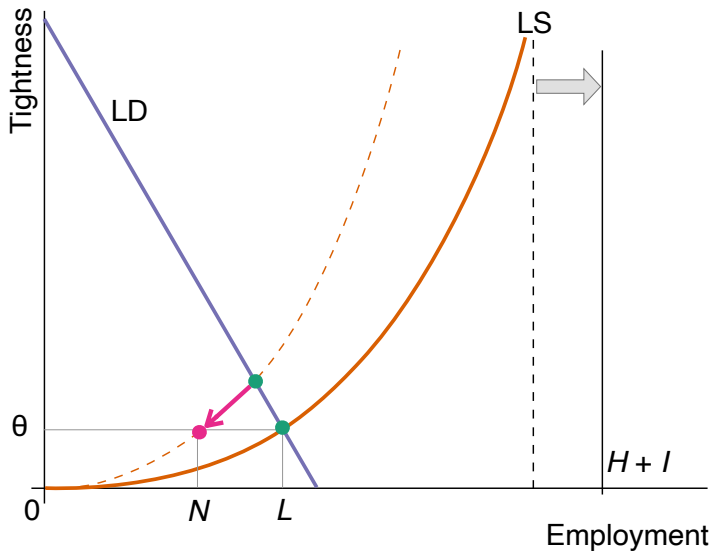
## JOB STEALING: JOB-FINDING RATE OF NATIVES $\downarrow$



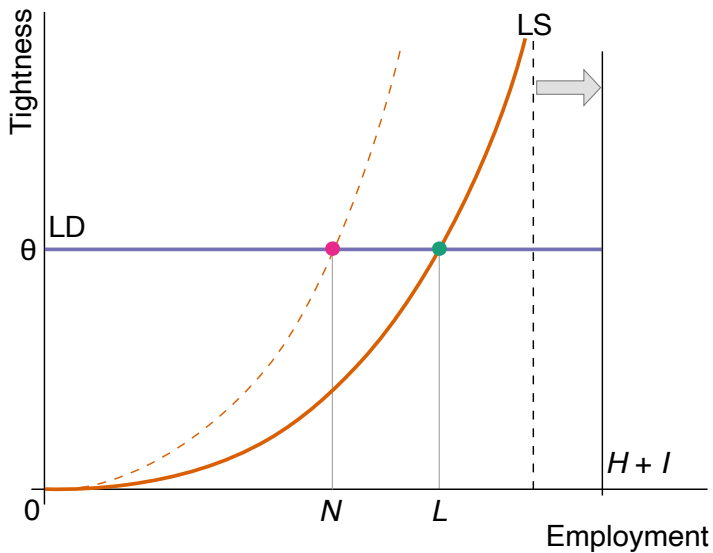
## STRONGER JOB STEALING IN BAD TIMES



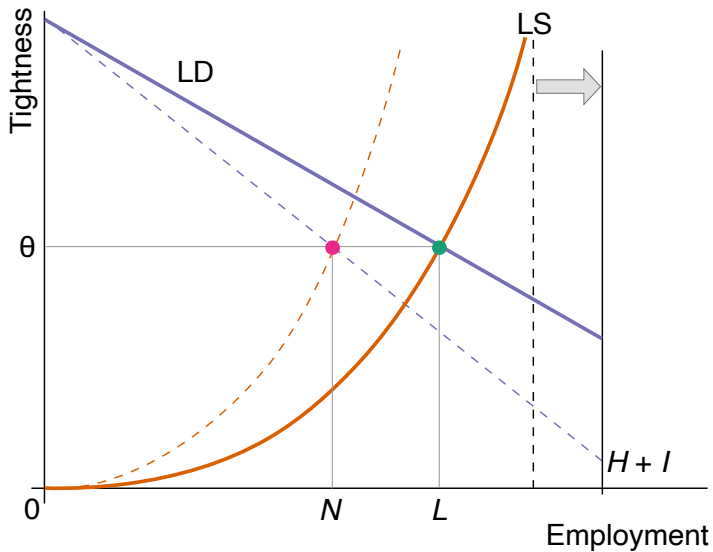
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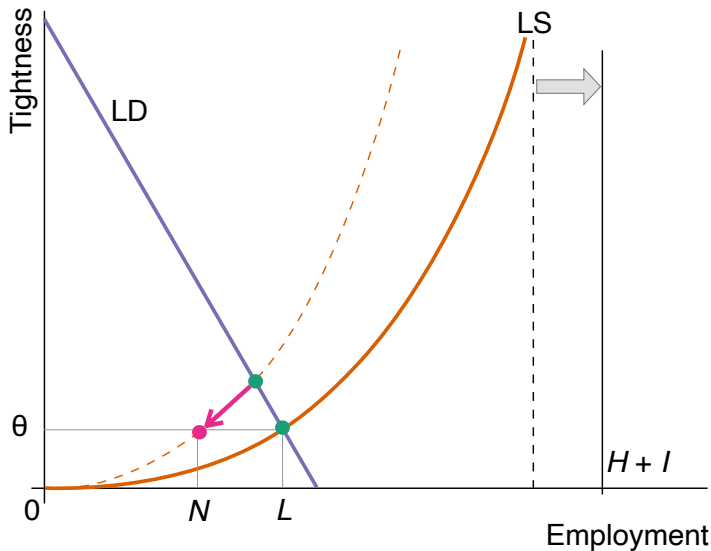
## PURE CARD SCENARIO: NO EFFECT



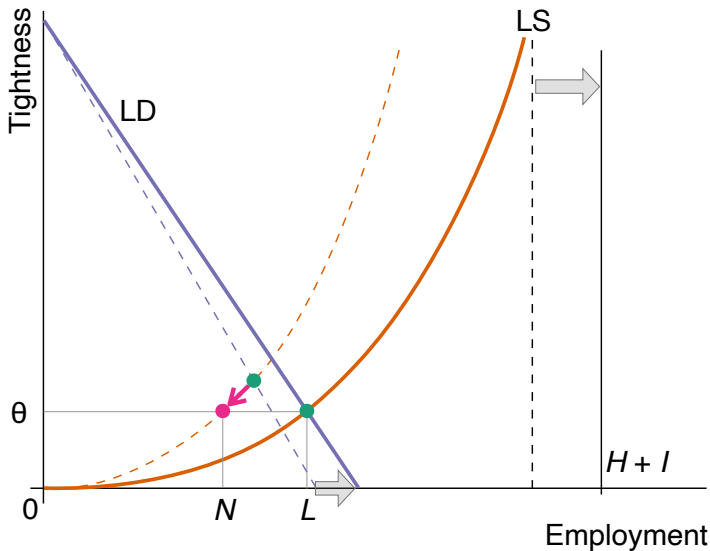
## PURE BORJAS SCENARIO: ONLY WAGE



## PURE JOB-STEALING SCENARIO: ONLY JOB-FINDING RATE



## GENERAL SCENARIO: WAGE & JOB-FINDING RATE



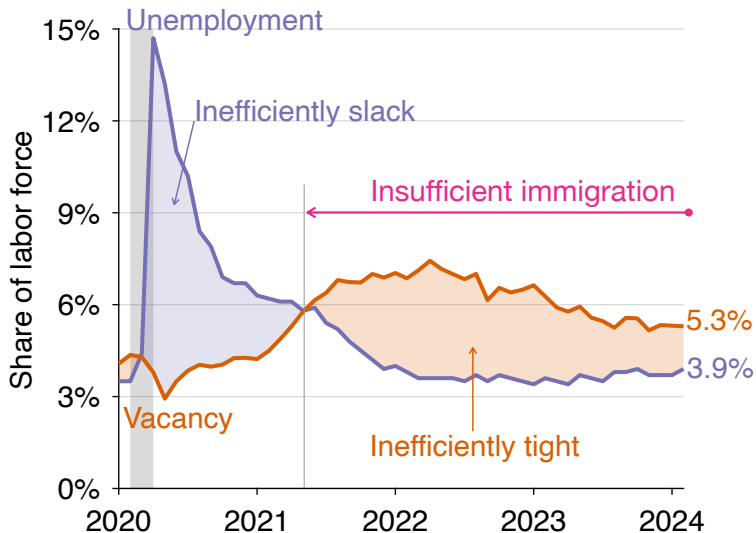
# IMMIGRATION POLICY



## IMMIGRATION AS STABILIZATION POLICY

- in model with job stealing, immigration should be **procyclical**
- immigration improves native welfare in inefficiently tight labor market
  - by reducing tightness, immigration raises firm profits more than it lowers native labor income
- to maximize native welfare, immigration should **lower tightness until labor market is inefficiently slack**
- immigration might complement monetary policy
  - monetary policy takes 12–18 months to affect tightness

# LACK OF IMMIGRATION AFTER CORONAVIRUS PANDEMIC

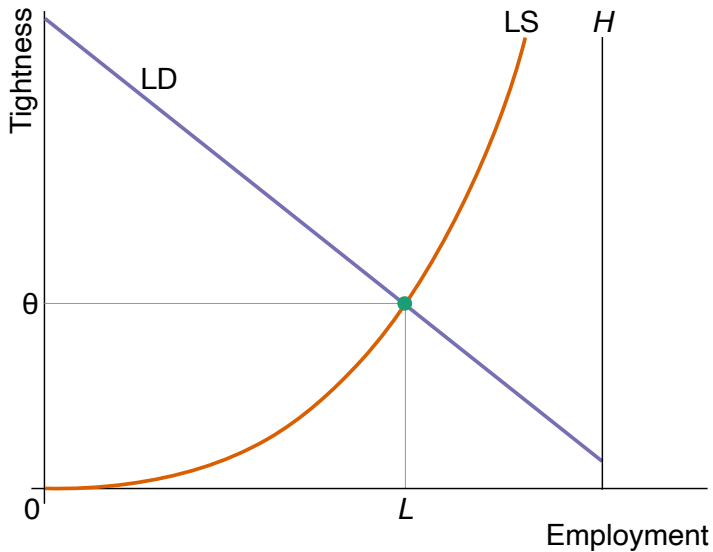


## SOME POLITICAL PREDICTIONS

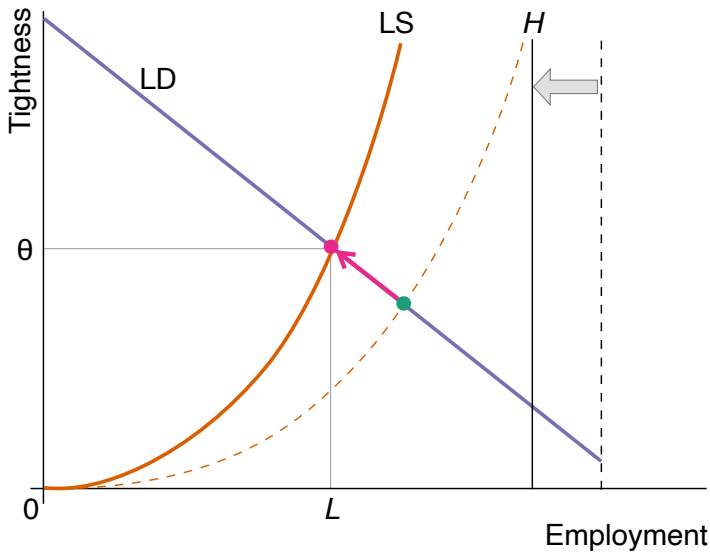
- populist parties & unions oppose immigration, especially in bad times
  - aim to maximize labor income, which is reduced by immigration
  - elasticity of employment wrt labor force is more negative in bad times
- capitalist parties & businesses support immigration
  - aim to maximize profits, which are improved by immigration
- communists & socialist regimes conditionally support immigration
  - workers own firms, so aim to maximize total income
  - support when labor market is inefficiently tight
  - opposition when labor market is inefficiently slack

## OTHER LABOR SUPPLY SHOCKS

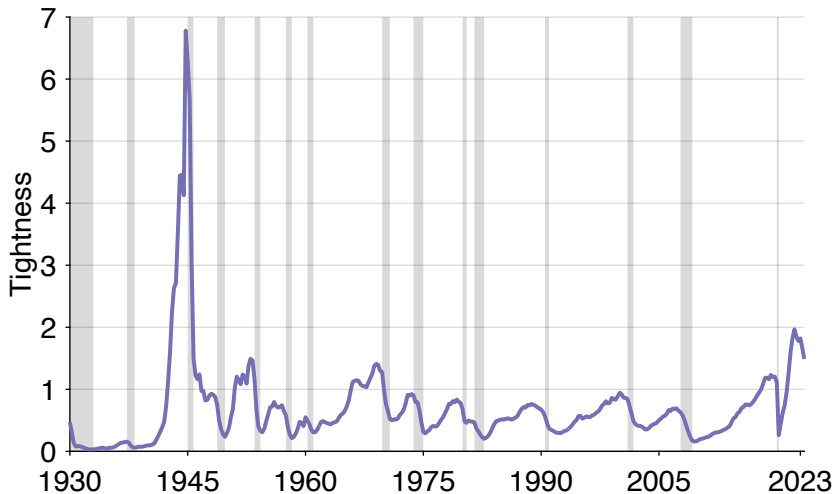
TIGHTNESS  $\uparrow$  WHEN LABOR-FORCE PARTICIPATION  $\downarrow$



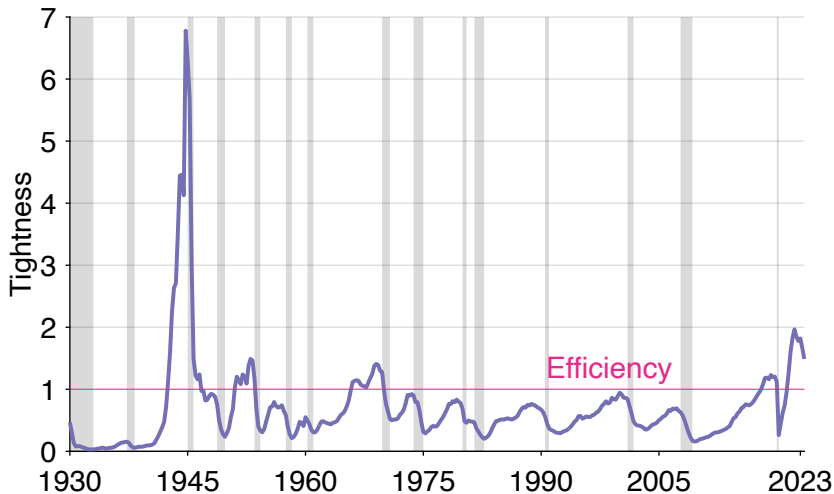
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## INEFFICIENTLY TIGHT ECONOMY WITH LOW PARTICIPATION

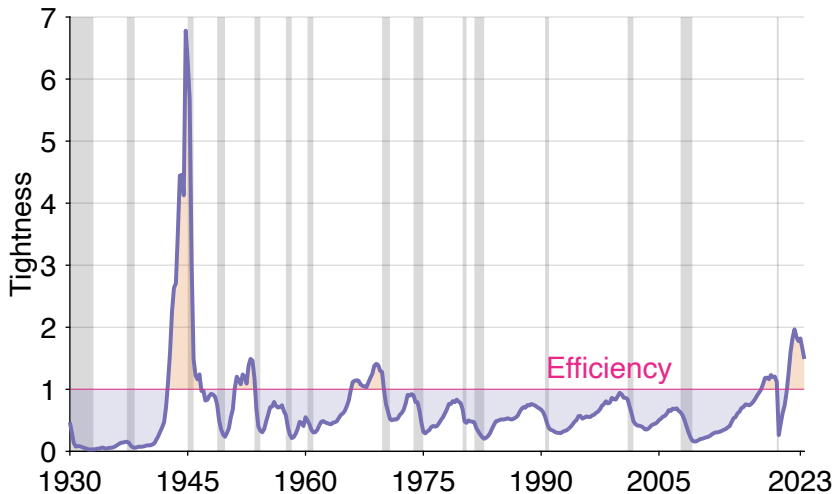


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