

# (Some of) David Card's contributions to labour economics

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## Immigration, Segregation and Ethnic gaps

Education

# The Mariel Boatlift

David Card, The impact of the Mariel boatlift on the Miami labour market, *ILR Review*, 1990.



# Before the Mariel Boatlift

- ▶ Impact of immigrants on labour markets: hot topic
- ▶ Eighties: papers rely cross-city variation in the concentration of migrants
- ▶ Literature well aware of its own limitations
- ▶ Small impact, but is it because of the possible positive bias due to migrants settling in places with dynamic labour markets?

# The Mariel Boatlift: a natural experiment

- ▶ Card studies the consequences of the Mariel Boatlift
  - ▶ Around 120,000 Cubans who entered the U.S. in 1980 and 1981, mostly around Miami
  - ▶ Mariels: relatively less skilled, younger, more male and with low English ability than Cubans living in Miami
- ▶ on the Miami labour market
  - ▶ 7% increase in the labour force of Miami
  - ▶ 20% increase in the number of Cuban workers in Miami

# The Mariel Boatlift: a natural experiment

- ▶ CPS data: individual-level, relatively large sample, detailed ethnicity
- ▶ Event study: look at the evolution between 1979 and 1985 of unemployment rates and log-wages in Miami, compared to the evolution in a selection of other cities (Atlanta, Houston, LA, Tampa)
- ▶ Results: cannot reject that the Mariel Boatlift had no effect on Miami labour market's wage and unemployment
- ▶ Contributions:
  - ▶ Identification assumptions are clear
  - ▶ But how small an impact can we really? And can all places adapt to immigration as easily as 1980 Miami did?

## Some evidence from Germany

Christian Dustmann, Uta Schönberg, and Jan Stuhler, Labor Supply Shocks, Native Wages, and the Adjustment of Local Employment, *Quarterly Journal of Economics*, 2017

- ▶ Directly inspired by Card's Mariel Boatlift strategy but leveraging modern administrative data
- ▶ *Grenzgängerregelung*
  - ▶ 14 months after fall of the Iron Curtain
  - ▶ Czech workers allowed to seek employment (but not to reside) in eligible German border municipalities
  - ▶ Big shock: around 10% of employment in border municipalities

## Some evidence from Germany

- ▶ A 1 pp. increase in the share of Czech leads to
  - ▶ a 0.13% decrease of wages
  - ▶ a 0.93% decrease in native employment
  - ▶ a 0.07% (=1-.93) increase in local employment
- ▶ Larger effects from the unskilled than the skilled workers (twice bigger)
- ▶ Younger natives affected more on wages and less on employment

# Compositional amenities

David Card, Christian Dustmann, and Ian Preston, Immigration, Wages, and Compositional Amenities, *Journal of the European Economic Association*, 2012

- ▶ Immigration:
  - ▶ has small effects on wages and employment
  - ▶ is still hugely unpopular
- ▶ On top of its impact on labour market, immigration changes the composition of the local population
- ▶ Natives may value being surrounded by other natives (*compositional amenities*)

# Compositional amenities

- ▶ Use data for 21 countries from the 2002 European Social Survey (ESS)
  - ▶ many questions on the labour market and social impacts of immigration
  - ▶ desirability of increasing or reducing immigrant inflows
- ▶ Measure the the relative importance of economic and compositional concerns in driving opinions about immigration policy
  - ▶ compositional concerns: 2–5 times more important in explaining variation in individual attitudes toward immigration policy than concerns over wages and taxes
  - ▶ most of the difference in opinion between more- and less-educated respondents is attributable to heightened compositional concerns among people with lower education

# Tipping points and segregation dynamics

David Card, Alex Mas, and Jesse Rothstein, Tipping and the Dynamics of Segregation, *Quarterly Journal of Economics*, 2008

- ▶ Sociology: evidence of *white flight*
  - ▶ Schelling hypothesised the existence of tipping points in the share of minority in a place, beyond which white would leave
- ▶ Test for discontinuities in the dynamics of neighborhood racial composition
  - ▶ Regression discontinuity methods combined with Census tract data 1970-2000
- ▶ Results:
  - ▶ White population flows exhibit tipping-like behavior in most cities, with a distribution of tipping points ranging from 5% to 20% minority share
  - ▶ Little evidence of nonlinearities in rents or housing prices around the tipping point
  - ▶ Tipping points are higher in cities where whites have more tolerant racial attitudes

Immigration, Segregation and Ethnic gaps

Education

## School inputs and returns to education

David Card and Alan Krueger, Does school quality matter? Returns to education and the characteristics of public schools in the United States, *Journal of Political Economy*, 1992



# School inputs and returns to education

- ▶ Context:
  - ▶ 1960s-80s: descriptive literature linking school inputs/expenditures to student achievement → little correlation
- ▶ Contributions:
  - ▶ Considers labour-market outcomes rather than academic achievement
  - ▶ Identification strategy

# Movers: First stage

- ▶ They estimate the earnings equation:

$$y_{ijkc} = e_{ijkc}(\gamma_{jc} + \rho_{rc}) + \delta_{jc} + \mu_{kc} + X_{ijrc} + \varepsilon_{ijkc}$$

- ▶  $y$ : earnings for indiv  $i$  of cohort  $c$  born in state  $j$ , living in state  $k$
  - ▶  $e$ : years of education
  - ▶  $\gamma$ : returns of education for cohort  $c$  and state of *birth*  $j$
  - ▶  $\rho$ : returns of education for cohort  $c$  and region of *residence*  $r$
  - ▶  $\delta, \mu$ : fixed effects;  $X$ : observables,  $\varepsilon$ : error
- ▶ Idea: rely on movers to identify  $\gamma_{jc}$ !

## School quality: Second stage

- ▶ They now have  $\gamma_{jc}$ , the returns of education for cohort  $c$  and state of birth  $j$
- ▶ They can estimate:

$$\gamma_{jc} = a_j + Q_{jc}b$$

- ▶  $Q$  are quality measures (pupil/teacher ratio, term length, teacher wage)
  - ▶  $a$  are state FE
- ▶ Results: Returns to education are higher for indiv who attended schools with less pupils per teacher and better paid teachers

# School quality and ethnic gaps

David Card and Alan Krueger, School quality and black-white relative earnings: A direct assessment, *Quarterly Journal of Economics*, 1992

- ▶ Context:
  - ▶ Black-white earning gap has been shrinking between 1960 and 1980
  - ▶ At the same time, school quality has improved in schools located in U.S. South
- ▶ CK use a similar strategy as previous paper to
  - ▶ estimate the impact of better quality school on wages for blacks and whites
  - ▶ attribute the contribution of better school quality to the reduction of the ethnic gap
- ▶ Result: Around 20%!

# Yes, school quality matters! But how and why?

- ▶ C. Kirabo Jackson, Rucker C. Johnson, Claudia Persico, The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms, *Quarterly Journal of Economics*, 2016
  - ▶ Same question as CK with modern data
  - ▶ Even better identification strategy:
  - ▶ 10% increase in per pupil spending each year for all 12 years of public school → 0.31 more completed years of education and 7% higher wages
- ▶ Opening the black box of school quality: one of the most vivid subfields in labour economics in the last two decades
  - ▶ The importance of teachers (Chetty, Rothstein and co-authors)
  - ▶ The importance of peer effects

# The offspring

- ▶ Difficult to conceive a labour economist that has not been influenced one way or another by David Card's work
- ▶ His work is influential in many subfields
  - ▶ Minimum wages and wage inequality
  - ▶ Immigration, gender gaps, ethnic gaps, segregation
  - ▶ Education (in particular education quality)
  - ▶ Unemployment insurance and active labour market policies
- ▶ Card is active in many of these fields (e.g. Gérard, Lagos Severnini, and Card, just published in the AER, about ethnic gaps in Brazil)