

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

Nobel Lecture IPParis 2021

Roland Rathelot (CREST, IPParis)

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
 - ▶ γ : returns of education for cohort c and state of *birth* j
 - ▶ ρ : returns of education for cohort c and region of *residence* r
 - ▶ δ, μ : fixed effects; X : observables, ε : error
- ▶ Idea: rely on movers to identify γ_{jc} !

School quality: Second stage

- ▶ They now have γ_{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)