

# **Economic Aspects of Immigration**

**David Card**  
**UC Berkeley**

## **Four main questions:**

**1. How do immigrant inflows affect the labor market for low-skilled natives?**

- local**
- national**

**2. How do immigrant inflows affect other economic outcomes?**

- wages of “non-competing” groups**
- profits of employers (value of ag. land)**
- prices of goods and services**
- housing market**
- government finances**

**3. How quickly do immigrants adapt/ assimilate once they arrive?**

- earnings growth**
- language**
- attitudes/values**
- fertility**

**4. How do the US-born children of immigrants compare to natives?**

# **Question 1: Local perspective**

## **Two key background facts**

**#1: immigrants are over-represented at lowest skill levels, under-represented at middle skill levels**

**#2: immigrants are clustered in certain cities**

**natives**

**immigrants**

---

**Dropouts**

**15%**

**38%**

1-8 yrs school

3

22

9-11 yrs

12

16

**High School**

**39**

**24**

**Some College**

**24**

**16**

**BA**

**15**

**13**

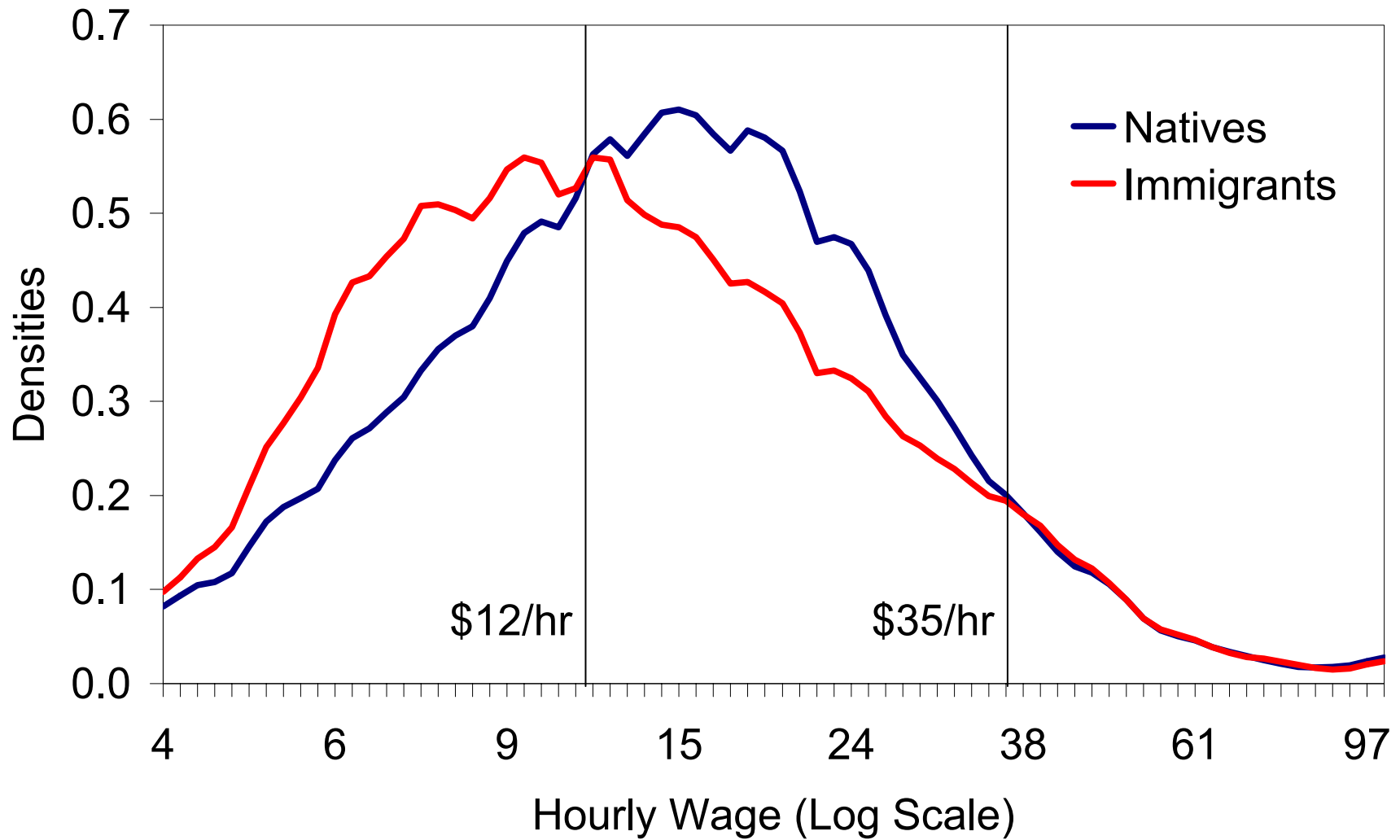
**Advanced degree**

**7**

**9**

source: 2000 Census, people age 18-64

# Hourly Wage Distributions of Men, 2000 Census



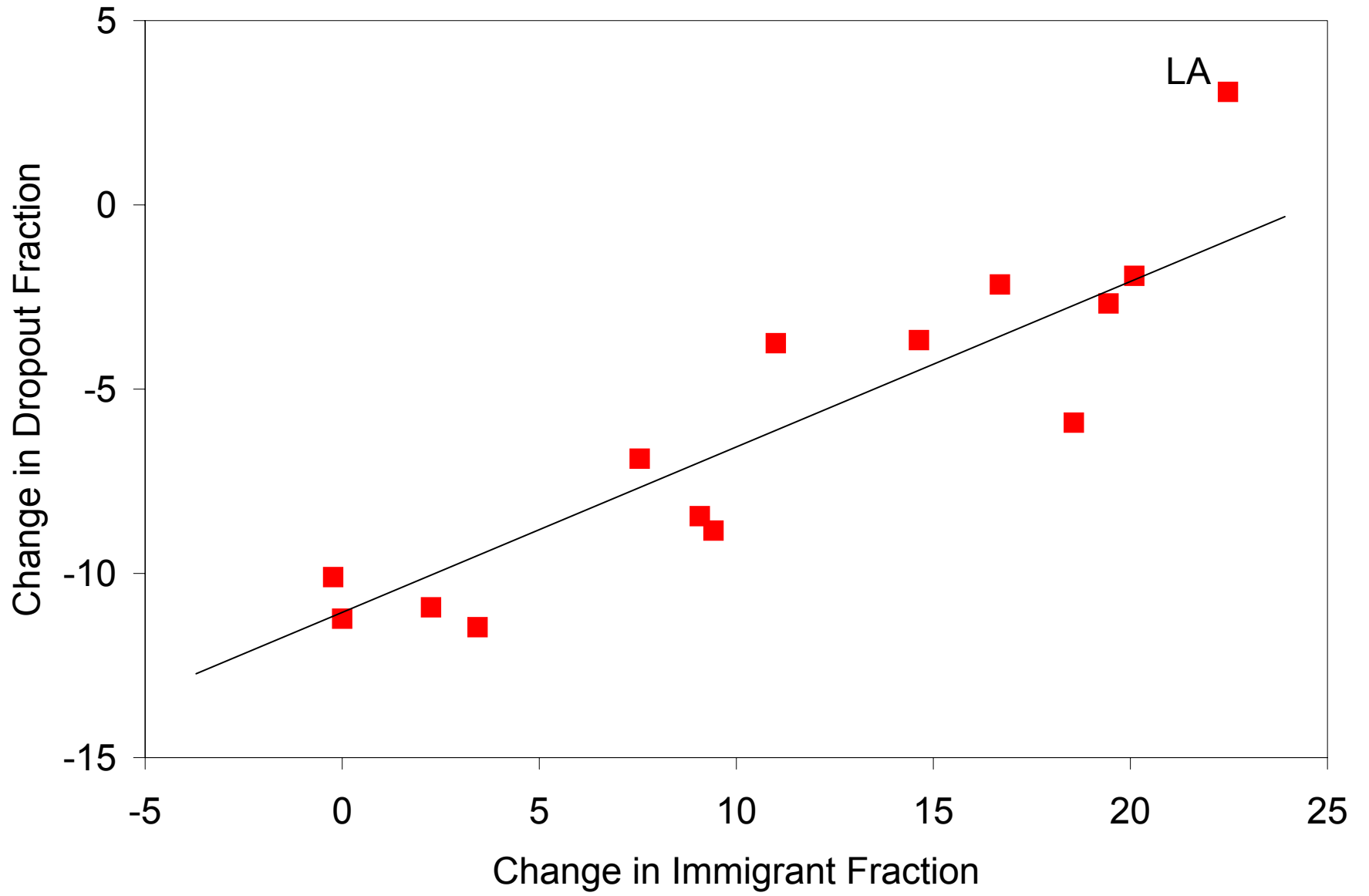
## Immigrant Densities and Fraction Dropouts, 1980 and 2000

	1980		2000	
	Percent Immigrants In City	Percent Dropouts In City	Percent Immigrants In City	Percent Dropouts In City
All Cities	10	24	18	18
New York	23	29	42	24
Los Angeles	25	27	48	30
Chicago	12	26	21	17
Philadelphia	5	25	8	14
Detroit	6	26	9	15
Houston	9	27	26	25
Dallas	5	25	20	22
Washington DC	10	17	21	13
Boston	10	18	18	11
San Francisco	17	17	36	14
Miami	41	30	61	28
Atlanta	3	25	12	16
Pittsburgh	3	22	3	10
Cleveland	6	25	6	15

**- immigrant inflows do not lead to large offsetting outflows of natives (or earlier immigrants)**

**- as a result, immigrant inflow rates lead to big changes in local skill shares**





# **How do local labor markets adjust?**

## **Four channels:**

- 1. capital inflows. These can fully offset the effect of a 'balanced' inflow**
- 2. changes in relative wages, causing firms to move along their demand curves**
- 3. changes in composition of local firms, leading to local specialization**
- 4. adoption of alternative technologies**

# **What do we know about these four channels?**

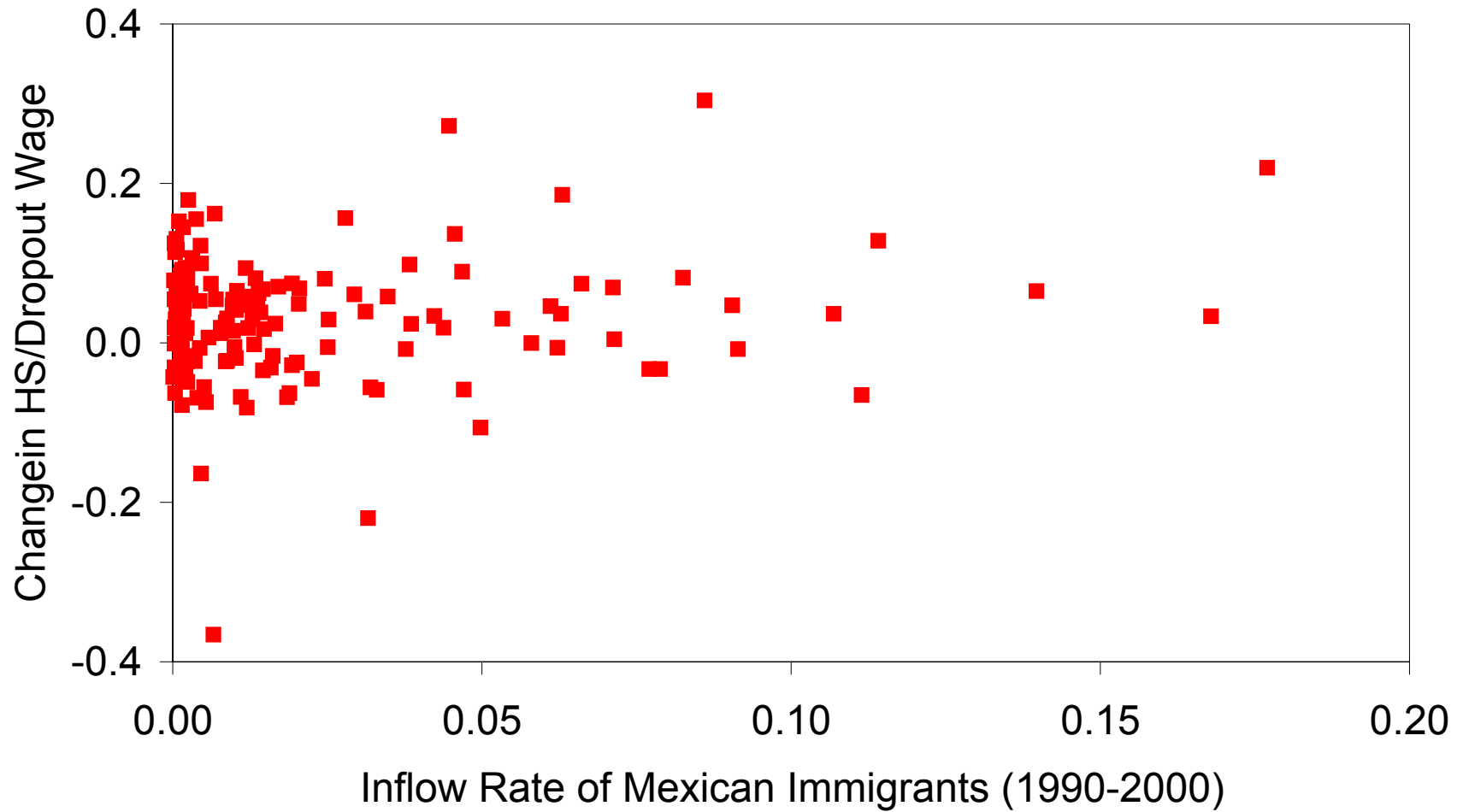
**1. capital flows. Presumption is that within the US, capital adjusts quickly. Wages in places with more workers are not systematically lower.**

**2. relative wage effects. Many studies: uniformly small effects.**

- Mariel Boatlift**

- Mexican inflows in the 1990s**

# Inflow of Mexican Immigrants and Change in Relative Wage of Native Male Dropouts



### **3. changes in local specialization.**

**Detailed study of manufacturing sector (E. Lewis): surprisingly small effects (near 0).**

**Card-Lewis study of Mexican inflows, 1990-2000. Again, small effects. At most 10-15% of “extra dropouts” absorbed by shifts in local industry structure.**

## **4. technology adaption.**

- theoretical work: -Acemoglu**
  - Beaudry-Green**
- evidence: - Lewis (computerization)**
  - Doms-Lewis (new tech)**
- anecdotal: - mechanical harvesting**
  - international comparisons**
- tech choice model “looks like” a neoclassical model in which small changes in rel. wages induce big changes in rel. demand**

## **Conclusions on local impacts:**

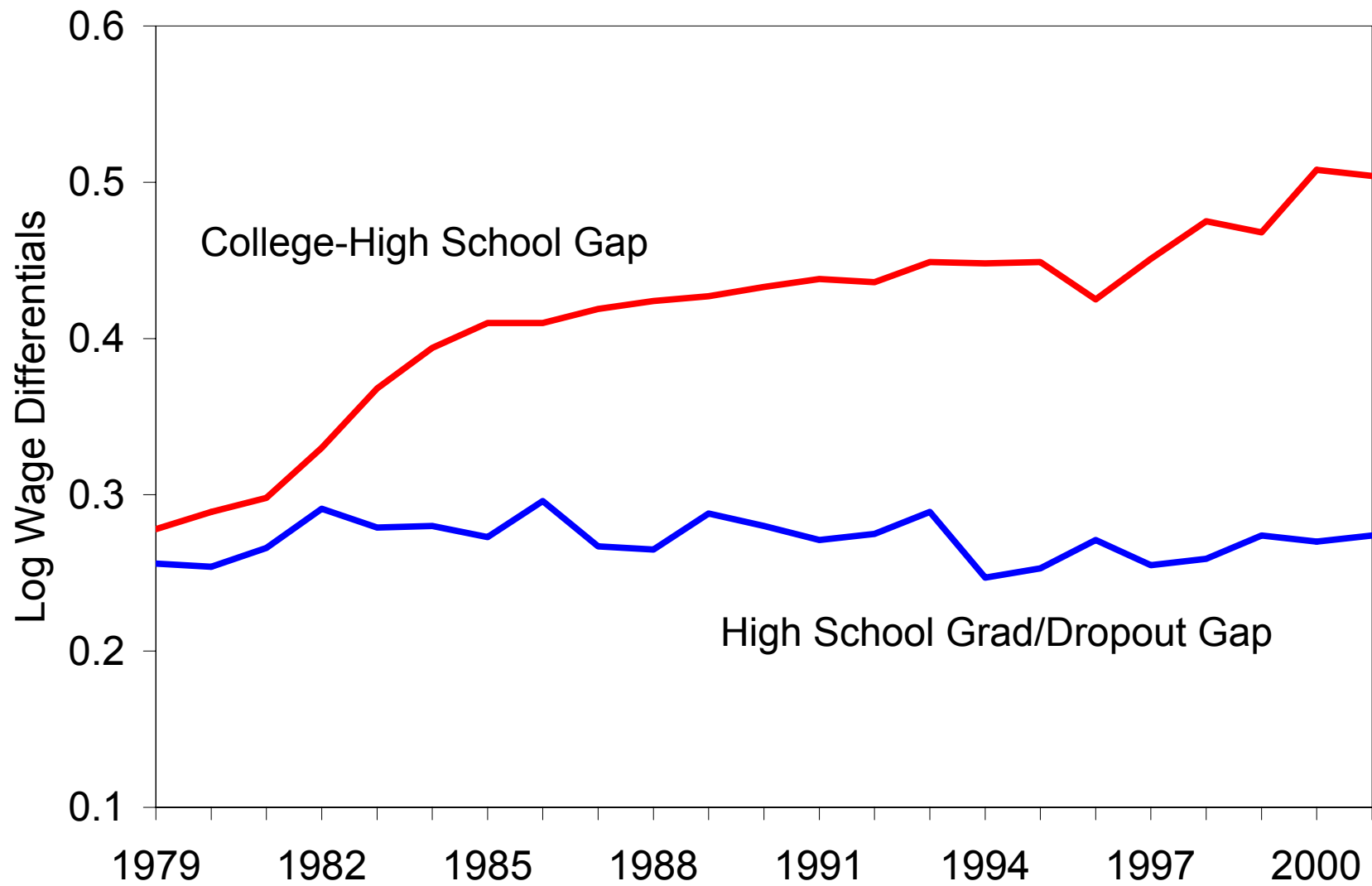
- 1. immigrant inflows are on average associated with growth in share of least-educated workers in local markets (LA vs. Cleveland)**
- 2. higher fraction of immigrants is not associated with lower relative wage for native dropouts (Mariel, Mexicans)**
- 3. extra dropouts absorbed in a broad range of industries, some specialization**
- 4. leading explanation: flexible technology**

## **National impacts**

- national studies use year-to-year changes in relative wages and relative supplies of immigrants in different groups**
- key assumption: confounding changes like “SBTC” are factored out with trends (e.g., Borjas-Katz study assumes a trend, plus a post-1990 trend shift)**



Trends in Education-Related Wage Gaps



**- even with these assumptions, critical parameter – giving effect of relative supply on relative wages – is hard to pin down:**

**e.g., Borjas (2003) study ( $t=1.15$ )**

**Borjas-Katz (2006): precision of estimate not reported (but below usual criteria for ‘significance’)**

**- BK estimate Mexican immigration lowered wages of native dropouts 4-8% over 25 years. (8% assumes no capital)**

**- national studies sensitive to 2 other issues:**

**- are immigrants and natives with same age/education 'perfect substitutes'?**

**- how many separate skill groups are modeled? 4 vs. 2 education groups.**

## **Question 2: other economic outcomes?**

### **a. Other wages**

**Theoretical analysis: if capital adjusts, arrival of immigrants raises total wage bill of natives.**

**Complementary skill groups gain, substitutable groups lose.**

**Similar to international trade**

# **Ottaviano-Peri (2006)**

## **simulated effects of 1990-2004 inflows**

**group**

**wage gain/loss**

---

**all workers**

**gain 1-2%**

**native dropouts**

**lose 0-2%**

**native HS grads**

**gain 2-4%**

**natives 1-3 yrs college**

**gain 3-4%**

**native college grads**

**gain 0-1%**

## **b. profits of employers**

- indirect evidence from lobbying**
- value of ag. land**

## **c. prices**

- Cortes study (CPI, local level)**
- 10% inflow of low skilled immigrants=> 1% fall in prices of “low skill” services**

## **c. housing market**

- if land is fixed (NYC, CA) value of housing captures the value of living in a city (“capitalizes” the sum of labor market opportunities, cost of living, amenities, local taxes)**
- if land is freely available (Los Vegas): less informative**

**- immigration raises housing prices (Saiz):  
positive effect for 'average' resident**

**- work in progress: how do effects vary  
across the housing market? Do housing  
price effects for high/low value houses  
match the predicted wage effects for  
higher/lower income workers?**



## **d. government finances**

- with a progressive tax/benefit system, workers with income below  $w^*$  receive more in government benefits that they pay in taxes. How high is  $w^*$ ?**
- lower skill immigrants use less services than equivalent natives**
  - arrive with education paid**
  - less likely to use welfare**
  - less likely to commit crime**

**- existing studies suggest positive effects of immigration on federal gov't:**

- payroll (SS) tax**
- income tax**

**- offset by negative effect on state+local government costs:**

- hospitals - Medicaid/indigent care**
- schools (imm. children)**
- jails**
- but: counterfactual?**

**- immigrants who arrive illegally create a lower fiscal burden:**

- work “above ground” pay taxes.**
- ineligible for many services**
- no credit for SS pension**

**- long run fiscal impacts depend on:**

- average lifespan**
- fertility**
- rate of earnings assimilation**
- likelihood of ‘regularization’**

### **Question 3: Adaption/assimilation.**

- studies of 1890-1920 immigrants found remarkable long run success**
- in 1970, immigrants earned MORE**
- post-1960 immigrants earn less and have not “converged” to natives**

## **What do we know (quick synthesis)?**

**a. immigrants wages grow somewhat faster than natives, for first 5-10 yrs in US**

**b. earnings assimilation channels:**

- US experience**
- education**
- language gains**

**c. some variation across groups**

- refugee groups grow faster (Cortes)**

**d. even among natives, earnings growth is slower for lower-education groups.**

**e. available studies have 2 big problems:**

- can't date 'first arrival'**
- can't adjust for leavers**

**Overall conclusions:**

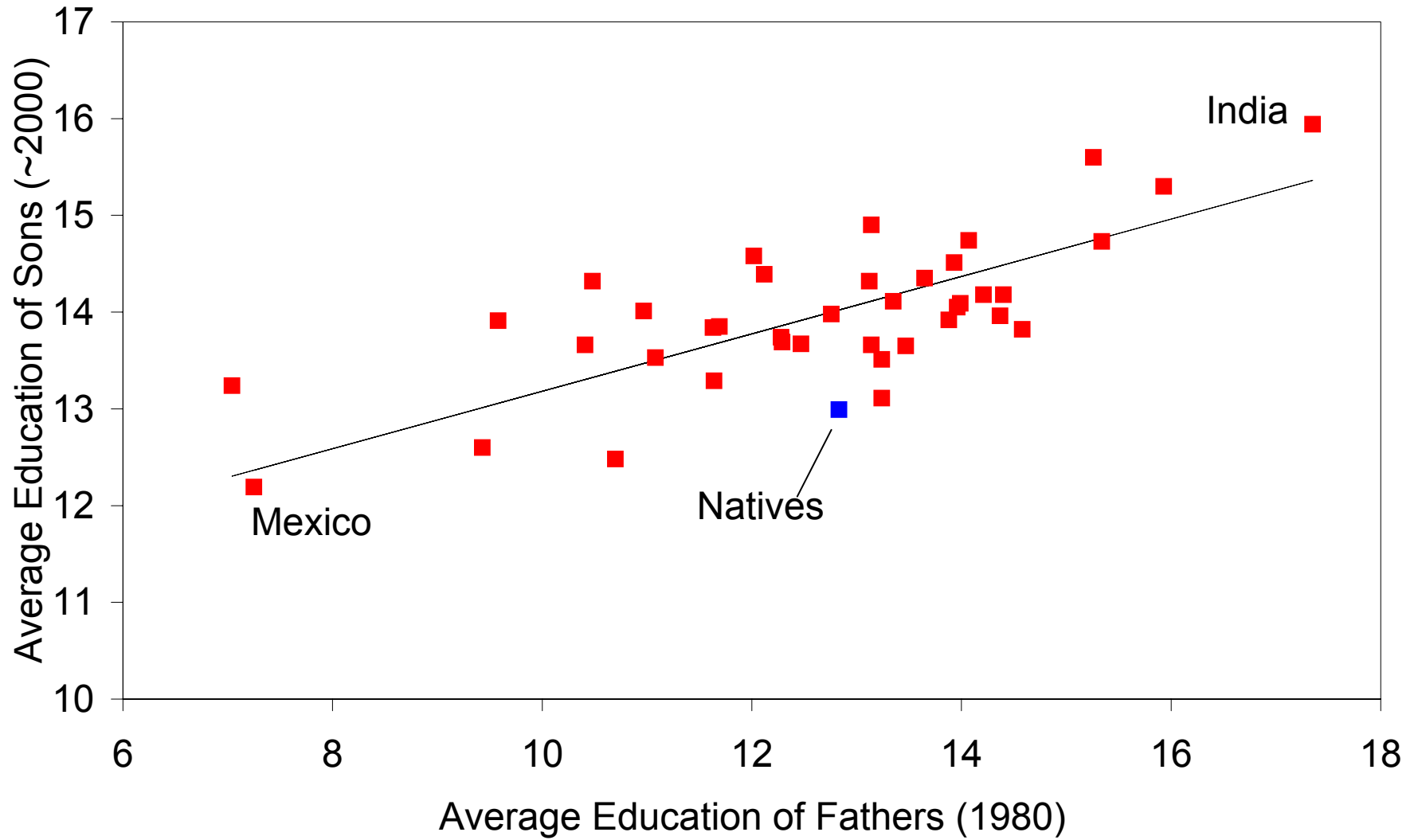
- Lowest educated immigrants will not catch up**
- highly educated immigrants 'overtake'**

## **Question 4: Second (3+) generation?**

### **What do we know?**

- a. 2nd gen. on average have higher education, higher earnings than 3<sup>rd</sup>+
  - 0.8 years extra education (M+F)**
  - 3-4% higher earnings (M+F)****
  
- b. 2<sup>nd</sup> gen children “inherit” about 40% of the earnings and educational advantage/disadvantage of their parents**

# Father-Son Intergenerational Correlation in Education





**Ed. (2nd gen) = .4 Ed. (1st gen)  
+ .6 Ed. (contemporaries)  
+ additional boost**

**The 0.4 factor is about the same as among  
3<sup>rd</sup>+ generations. (Also about the same as  
for height and weight).**

## **Observations:**

**1. children of immigrants present in 1980 have progressed.**

- Mexican parents had ~7 years of ed.**
- their children have ~12**

**2. US (Can/Australia) seen as 'success stories relative to Europe.**

**3. causal factors in successful intergen. assimilation?**

## **Open questions for immigration policy**

**1. Does the welfare of immigrants themselves matter? How much?**

**2. Would the country be better off “closing down” low-skill sectors?**

**3. Are impacts of immigration and rates of assimilation different if there is “too much” immigration, or concentration of immigrants in a local area?**