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Hoover Institution Conference on the Economics of Immigration

**Remarks on “Immigration and
Inequality in the Next Generation” by
Borgschulte, Cho, Lubotsky & Rothbaum**

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Fabulous Data!

Data for individuals born between 1977 and 1985 linked to data on their parents, drawing on:

- 1. Tax records** (1040s and W-2s): income, earnings, marital status, dependents, location
- 2. Other Administrative Records** (SSA Numident file): County and Commuting Zone (CZ) of Birth
- 3. Survey Data** (Decennial household survey in 2000 and 2010 + ACS from 2000 to 2019): race, ethnicity, education,

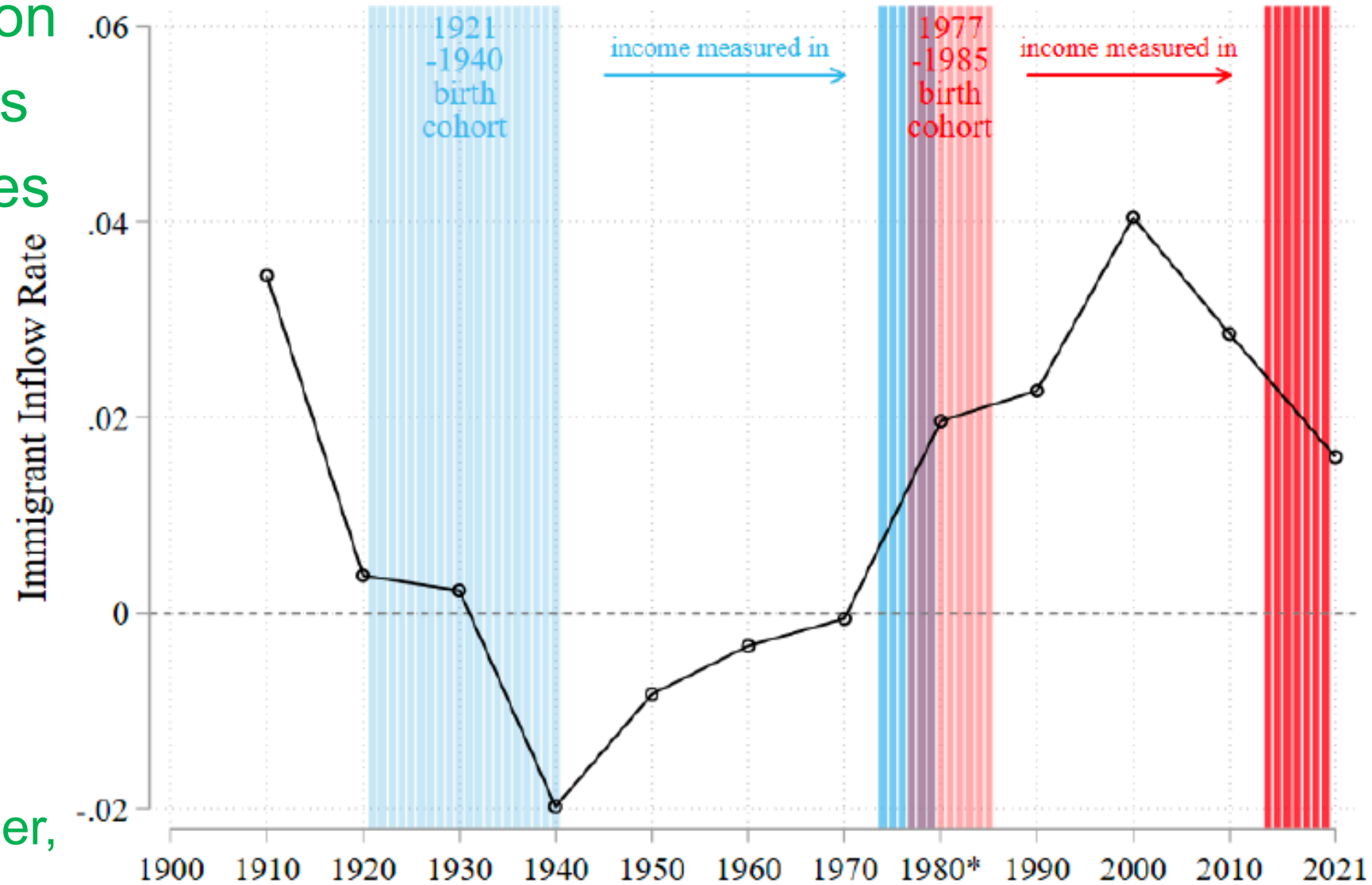
Combine with CZ-level statistics on immigrant inflows and stocks by country of origin.

A Welcome Focus on Longer-Term Effects

How did U.S. immigration inflows during the 1980s affect the adult outcomes of U.S. natives who were born from 1977 to 1985?

- Labor earnings (rank)
- Education
- Internal migration

All as a function of parental income (decile), race, gender, parental education



Source: Migration Policy Institute (1900-2000 Decennial Census and 2010, 2021 ACS)

Unpersuaded

- I am unpersuaded by the interpretations that the authors place on their results.
- My most important concerns pertain to:
 1. Cost-of-living differences across CZs – and across persons and groups within CZs.
 2. Changes over time in the cost of living that vary greatly across CZs – and across persons and groups within CZs and between CZ-pairs.
 3. Unmeasured variation in the “treatment” that makes it very hard to confidently interpret the estimated treatment effects.

The Estimating Equation

Immigrant inflows and outcomes of children of natives:

$$y_{ic} = \alpha + \beta \frac{M_{c,90} - M_{c,80}}{Pop_{c,80}} + X'_{c,80}\gamma + W'_{c,40}\delta + e_{ic}$$

- ▶ y_{ic} : adult income, education, migration of individuals born between 1977 and 1985 in commuting zone c
- ▶ $(M_{c,90} - M_{c,80}) / (Pop_{c,80})$: immigrant inflow rate between 1980-90
 - M_{ct} : foreign born population in CZ c at time t
 - Pop_{ct} : total population in CZ c at time t

The authors instrument the immigrant inflow rate using

Concern 1: Cost-of-Living Differences

1. The cost of living (COL) differs greatly across CZs.
2. Even if these COL differences partly or entirely reflect amenities, it does not follow that amenity valuations are the same across income and demographic groups.
3. Unmeasured amenity-value differences across CZs and across groups within CZs ...
 - A. Scramble the sorting of parents into income deciles
 - B. Scramble the (real) earnings ranks of their adult children.
4. I strongly suspect that unmeasured COL differences are correlated across CZs with immigration inflow rates, the instrument for these inflow rates, and the measured earnings outcomes.

Cost-of-Living Example: SF vs. Philly Today

Forbes Advisor

Nerdwallet

Calculate Cost Of Living

My pre-tax household income

\$ 70,000

My starting city

Philadelphia, PA

I want to live in

San Francisco, CA

Calculate



To maintain your standard of living in **San Francisco, CA**, you'll need a household income of:

\$116,189

The cost of living is **40% higher** in San Francisco, CA

Cost of living calculator

Compare the cost of living in 2 cities.

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Compare cities

Current city

Philadelphia, PA

New city

San Francisco, CA

Pre-tax household income

\$70,000

Standard of living comparison

In San Francisco, CA you'll need a household income of:
\$115,530.67

The cost of living is **65% higher**.

[See San Francisco's Complete City Life page.](#)

Housing Costs	189% higher
Transportation Costs	24% higher
Food Costs	21% higher
Entertainment Costs	14% higher
Healthcare Costs	35% higher
School Comparison	



The total income needed is **\$46,189 more** than your current household income.



Transportation tends to cost **32% higher**.



Homes tend to cost **186% higher**.



The cost of living in San Francisco, CA is **40% higher** than your current city.



Utilities tend to cost **37% higher**.

Concern 2: Differences in COL Growth Over Time

1. COL changes over time differ enormously across CZs (and perhaps across groups within CZs).
2. Example: From 1982-84 to December 2019, BLS CPI data say that the dollar cost of living rose by a factor of ...
 1. 2.97 in San Francisco/Oakland/Hayward
 2. 2.47 in Philadelphia/Camden/Wilmington

A 50 ppt difference!
3. I doubt these differences are well controlled by CZ-level fixed effects and trends.
4. It seems highly likely that they affect migration outcomes of native families and their children.

Concern 3: Unmeasured Treatment Variation

The mix of immigrants differs across CZs with respect to:

1. Education and educational aspirations for their children
2. English-language proficiency
3. Other skills, entrepreneurial propensity,...
4. Cultural distance from native Americans (in the CZ) with respect to religion, fertility, gender norms,...
5. Economic migrants vs. political refugees

The issue here is not simply heterogeneity in treatment effects CZs (and persons within CZs), although that may also be important. Instead, the issue is unmeasured heterogeneity in the treatment itself.

An Analogy

Consider an analogy to clinical drug trials:

1. Differences across CZs in the inflow rate of (homogeneous) immigrants correspond to drug dosage differences.
2. Immigration effects that differ between the children of high-income and low-income parents correspond to drug treatment effects that differ by race or sex.
3. No drug trial aims to estimate the differential effects associated with unmeasured differences in the molecule(s) under study.
 - A. But that's what's happening here with respect to unmeasured differences across CZs in the mix of immigrant inflows.
 - B. It seems likely that the unmeasured treatment differences across CZs are correlated with parental characteristics (natives) and the outcomes of their children.

A Few Specific Questions in this Regard

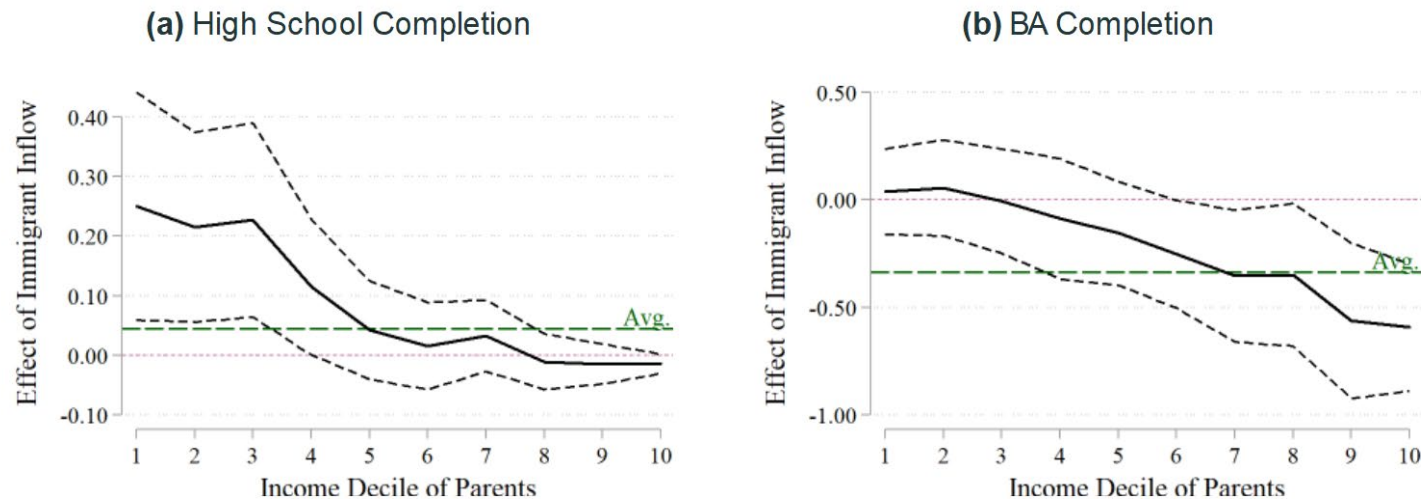
Are the instrument-based predictions of immigration inflow rates correlated (across CZs) with ...

1. Parental aspirations for the education of their immigrant children?
2. The entrepreneurial propensity of immigrant families?
3. The cultural and linguistic distance of immigrants from (local) native-born Americans.
4. The response of local schools to an influx of immigrant students.

A “yes” answer means that the instrument embeds unmeasured treatment variation. That makes it hard to interpret the estimated “treatment” effects, because we don’t know the precise character of the treatment and because the unmeasured aspects may drive the estimates.

Constructive Suggestions

1. Sidestep measurement of CZ-level COLs and changes. The following charts are halfway there. Go the rest of the way by sorting on father's education (or occupational rank). **Does this require linking to earlier decennial Census?**



2. Condition on CZ-level variation in the character of the “treatment” by, for example, constructing controls for items 1 to 4 on the previous slide.
3. Consider other outcomes that don't involve income measurement. How, for example, do fertility rates among immigrants (country of origin) affect the adult fertility rates of native-born children?

Constructive Suggestions

4. If you stick to income measures as conditioning variables and outcomes:
 - Instead of raw family income, sort on family income conditional on CZ fixed effects, CZ FEs interacted with family size, and with other observables that help capture the heterogeneity in amenity valuations and COLs.
 - Similarly, instead of raw earnings of adult children, condition on CZ FEs and CZ FEs interacted with marital status and family size
5. It would be quite interesting to document how the characteristics of immigrant stocks and inflows vary across CZs.