Immigration and armed conflicts: Era of globalization

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Motivation

Cultural & economic integration led to surge of immigration worldwide:

- Emergence of globalization.
- Post-cold war (1991 -).
- Schengen Agreement (1985 -).
- US immigration Act 1990 (Annual cap: 500,000 to 700,000).

$\Rightarrow$ Important to understand its impact on the society.

Understanding the impact of immigration is also important in economic perspective

- Local labor market effect; Local amenities; etc.

$\Rightarrow$ What about War?

Food for thought

Will immigration increase/decrease conflicts? Not easy to answer.

- **Increase**: (1) Conflicts between natives (2) Bring immigrants' conflicts into the country.
- **Decrease**: Higher proportion of immigration may increase the opportunity cost for one group to disturb the peace.

Indirect effect could also matter!

- The opportunity cost of starting a war could increase if the opponent has large portion of immigration from other countries.

Prior literature

Economic activity and armed conflicts

- Armed conflicts can be enormously disruptive of economic activity and hamper long-term performance.
- Glick and Taylor (2010).

Trade and war

- Regarding the determinants of war, large literature focused on the impact of trade on war (the results are mixed).
- Barbieri (1996, 2002); Gartzke and Li (2003); martin et al. (2008).

Research question

Does immigration increase or decrease war/armed conflicts?

- Heterogeneous effects depending on the types of conflict.
- Direct and indirect effect of immigration.

Research design

- Use worldwide immigration patterns from 1990-2022.
- Identification strategy: Shift-share IV to causally estimate the impact of immigration.

Preview of results

Some trial and error

- Applied shift-share IV regression to estimate impact of immigration on intrastate conflict.
- Regression specification not robust to the change in specification.
- :(

Data

Immigration

- UN Global migration database (1990-2024, 5 years): Destination-origin pair of immigration stock, at least 190 countries every year.
- World Bank migration data (1960-2000, decennial): Use it for exogenous IV share.

Armed conflicts

- UCDP/PRIO Armed conflict dataset (1946-2022, annually): Incidence of conflicts (at least 25 battle death, interstate, intrastate)

Other data for controls

- CEPII: Trade volume, GDP, WTO, GATT, etc.

Final sample: 1990-2022, destination-origin pair of countries.

Baseline regression

We aggregate the destination-origin pair to destination for now.

$$y_{it} = \alpha + \beta D_{it} + \Gamma' X_{it} + \varepsilon_{it}.$$

- Note that the years are aggregated to every 5 years.
- y_{it} is the cumulative sum of conflicts that country i was involved in during 5 years after year t.
- D_{it} is share of share of total immigration stock (w.r.t. total population) in start of the year T.

Identification strategy: Shift-share IV

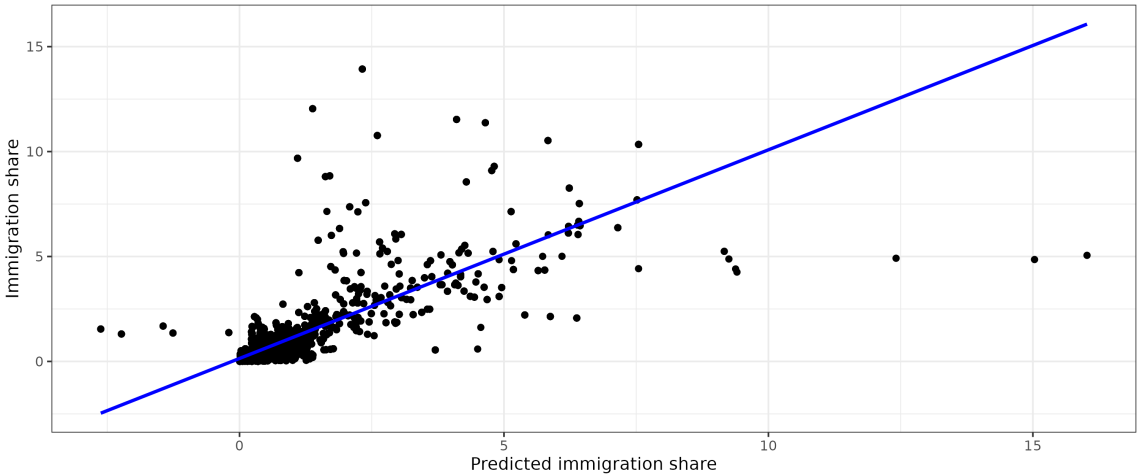
We construct shift-share IV as follows:

$$D_{it} = \text{IMM}_{it}/\text{POP}_{it} \quad \text{where}$$

$$\text{IMM}_{it} = \widehat{\text{IMM}_{i,t-1}} + \sum_j \overbrace{\text{WORLD}_{j,t-1}}^{\text{Shift}} \times \underbrace{\frac{\text{CNTRY}_{ij,1960}}{\text{CNTRY}_{i,1960}}}_{\text{Share}}$$

- IMM_{it} is number of immigration stock in country i in year t.
- $\text{WORLD}_{j,t-1}$ is the number of total immigration flow coming out from country j between year t and $t-1$.
- CNTRY just implies the share of immigration stock in country i that came from country j in year 1960.
- Identification assumption: (1) Some exogenous portion of immigration shift starting from 1990s, (2) Some exogenous portion of immigration share by fixing it to 1960.

First-stage result



IV's predictive power seems to be pretty great but values are kinda weird. . . Perhaps due to some measurement error (or my error).

2SLS results

	# Intrastate conflict					
	(1)	(2)	(3)	(4)	(5)	(6)
Immigration Share	-0.28723432***	-0.28699595*	-0.28723432***	0.03818684	0.03818684	-0.41221111***
	(0.01965546)	(0.13404667)	(0.09467774)	(0.02881842)	(0.11832251)	(0.11310151)
log(flow)				-0.09117770***	-0.09117770**	-0.08886925**
				(0.01208146)	(0.03587297)	(0.03809858)
log(pop)				0.83362658***	0.83362658***	
				(0.05440805)	(0.23977371)	
log(gdp)				-0.42120239***	-0.42120239***	0.23455568**
				(0.03811449)	(0.15883189)	(0.09110345)
gatt				1.068843***	1.068843**	0.33046273
				(0.10712409)	(0.42260551)	(0.36971182)
wto				-1.480862***	-1.480862***	
				(0.12426541)	(0.31666096)	
year FE				Yes	Yes	Yes
region FE				Yes	Yes	Yes
Observations	5,038	5,027	5,038	4,902	4,902	4,902
R^2	0.02175	0.02178	0.02175	0.23837	0.23837	0.16371
F-stage	660.4	38.7	88.7	354.9	56.9	90.3
Cluster	hetero	region (11)	country	hetero	country	country

Notes. ***: 0.01, **: 0.05, *: 0.01

Concerns and thoughts

- Is it an interesting question?
- Cross country analysis?
- IV assumptions? Using different data for share?
- Clustering significantly affects the significance.
- Better data on immigration?