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 1990-2015.
- 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.
- IV first stage not that great.
- 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.
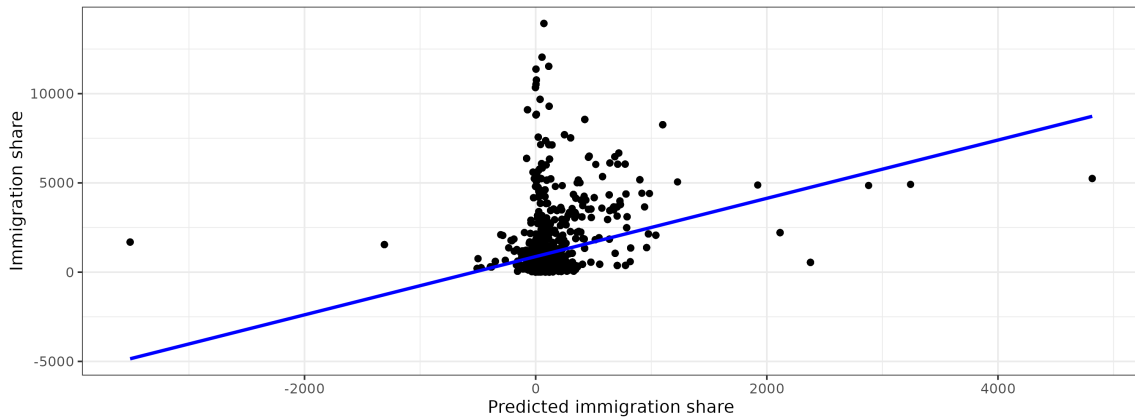
Identification strategy: Shift-share IV

We construct shift-share IV as follows:

$$D_{it} = IMM_{it}/POP_{it} \quad \text{where}$$

$$IMM_{it} = \sum_j \overbrace{WORLD_{j,t-1}}^{\text{Shift}} \times \underbrace{\frac{CNTRY_{ij,1960}}{CNTRY_{i,1960}}}_{\text{Share}}$$

- IMM_{it} is number of immigration stock in country i in year t.
- $WORLD_{j,t-1}$ 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 does not look that great…

2SLS results

	(1)	(2)	# Intrastate conflict (3)	(4)	(5)
Immigration Share	-0.00029163***	-0.00029052	-0.00029163	0.00041893**	0.00041893
	(5.38×10^{-5})	(0.00023524)	(0.00019798)	(0.00016932)	(0.00056018)
log(flow)				-0.06130469***	-0.06130469
				(0.01799096)	(0.05732256)
log(pop)				1.100261***	1.100261**
				(0.12846441)	(0.43693673)
log(gdp)				-0.62370974***	-0.62370974**
				(0.09568586)	(0.31618421)
gatt				1.046485***	1.046485**
				(0.11188113)	(0.44104420)
wto				-1.667242***	-1.667242***
				(0.15164586)	(0.41570825)
year FE				Yes	Yes
region FE				Yes	Yes
Observations	5,038	5,027	5,038	4,902	4,902
R^2	0.02158	0.02164	0.02158	0.19674	0.19674
F-stage	57.2	4.462	8.997	22.1	2.29

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?
- Not great IV. Alternative?
- Clustering significantly affects the significance.
- Better data on immigration?