

Immigration, Crime and Crime (Mis)Perceptions

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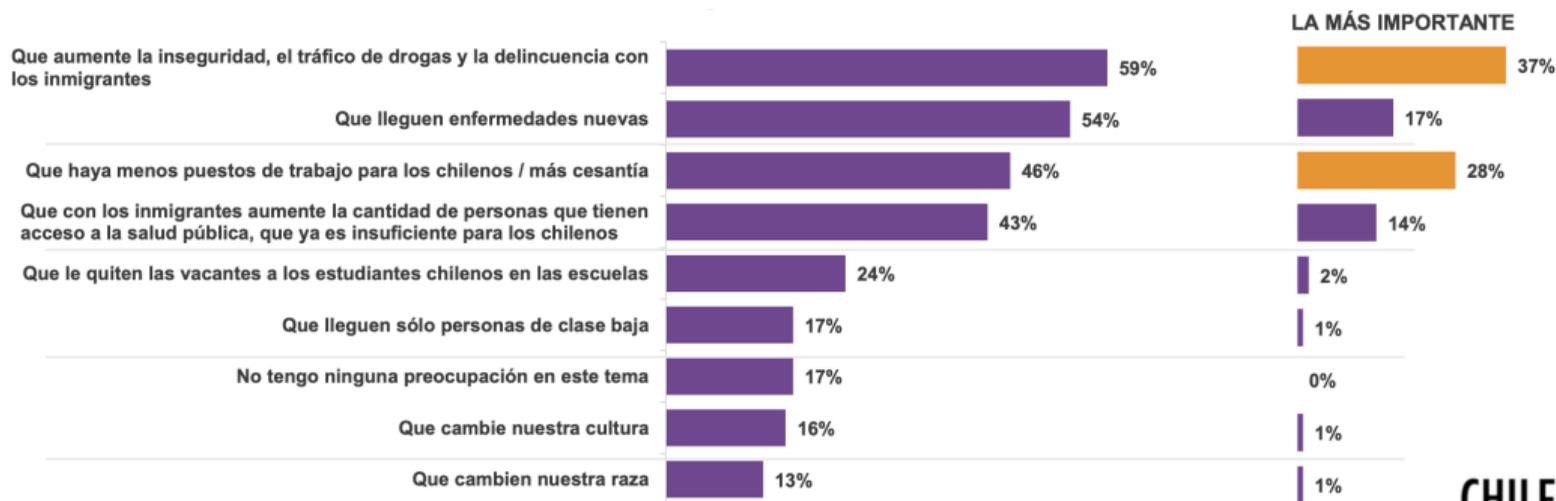
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- One plausible root emphasized in the literature: the (potential) **socioeconomic** impact of immigration employment, crime, fiscal burden (Alesina and Tabellini, 2021).
- Think for instance about crime.

...and people are concerned about immigration and crime!



Base: Total Muestra (1003 casos)



ESPACIO PÚBLICO

ENCUESTA ESPACIO PÚBLICO - IPSOS 2018

CHILENAS
CHILENOS
HOY

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- Alternative: maybe the backlash still has socioeconomic origins, not real but **misperceived**
- **This paper: even when immigration does not affect crime, it triggers the formation of crime-related concerns, mistaken beliefs and misperceptions about crime.**

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Immigration widened the crime-perceptions gap

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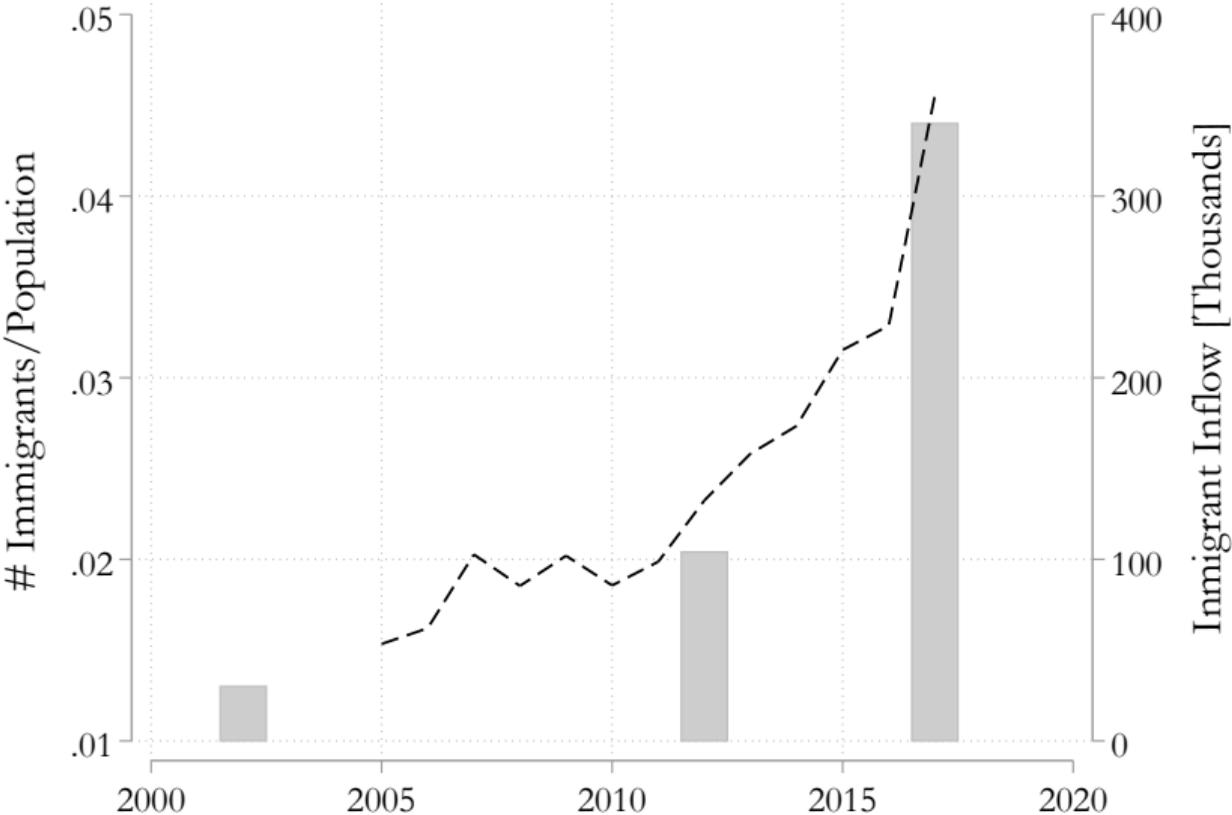
- 1) **Ethnic-related inter-group threat** (Allport, 1954; Cottrell et al, 2005)
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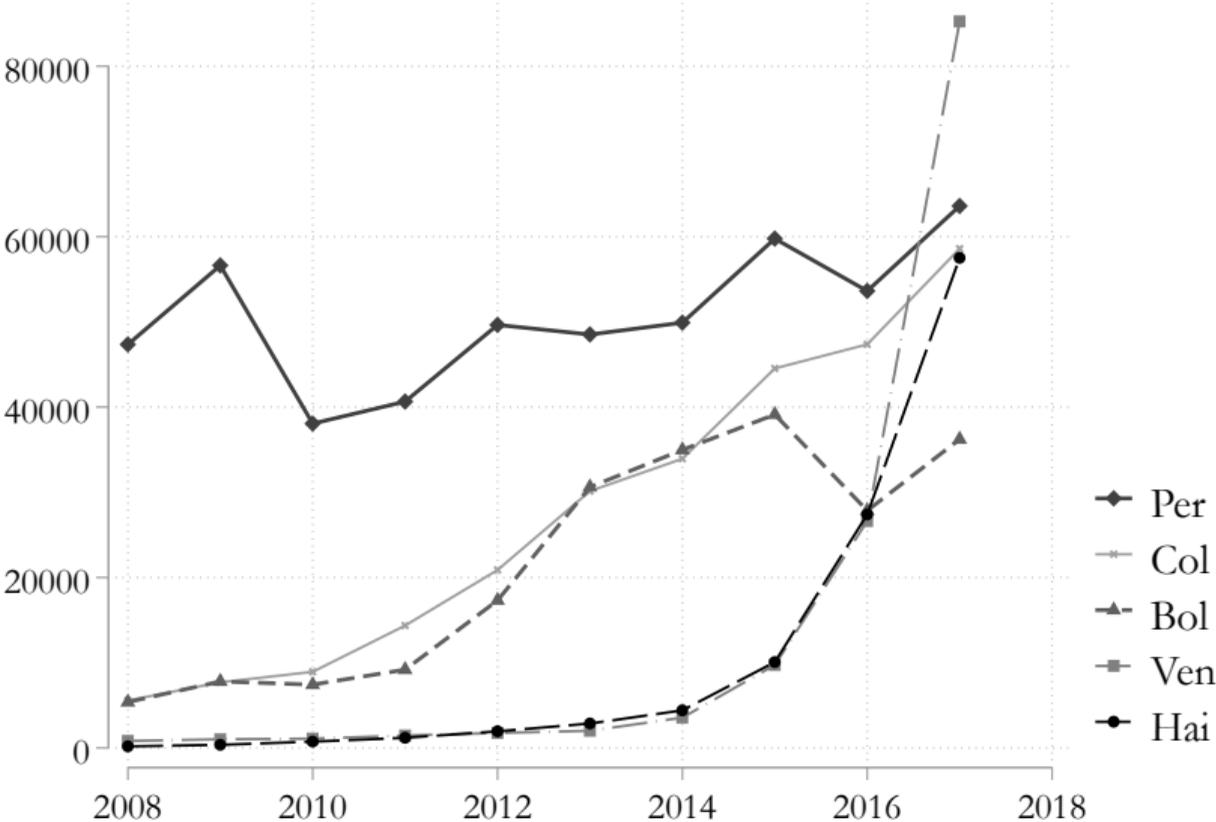
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- 3) **Media** (Couttenier et al, 2019; Mastroiocco and Minale, 2018)
- 4) **Demographic changes** induced by immigration in terms of age-gender

Context: Immigrant inflows and the percentage of immigrants in Chile



Context: Immigrant inflow evolution by country of origin



Data: Immigration

- Individual-level data: VISA + permanent residence permits. We use different measures for robustness (Chilean Department of State)
- Contains demographics: age, nationality, mun. of residence, gender, education
- We use influx to build stocks (departing from the 2002 census)

Data: Immigration

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1) Chilean geography: "The Andes" isolates Chile from every neighboring country. Arrivals are (almost) always by airplane.

2) Until 2018: very permissive regulation. Example: legal to enter with a tourist visa and then change status.

3) Unofficial numbers. 2010/17: 1,700 individuals entered without authorization (versus 355,000 authorized)

Data: Perceptions, Behavioral Reactions and Victimization Data

- ENUSC: Annual HH Survey: 2008-2017
- Individual-level w/demographics (81k indiv/year)
- 101 most populous municipalities (90% of urban population)
- Questions about:

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Perceptions (concerns, beliefs)

Reactions (individual protection)

Data: Homicides

- Police reports: 2008-2017 (Police) at the municipality-year level
- 3.5 homicides per 100k inhabitants. **Fairly constant since 2005.**
- Data on victim nationality (almost always) and on alleged perpetrator nationality (70% of cases)

[Go to descriptive statistics](#)

Methods

- Repeated CS: 2-ways FE model

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$$Y_{imt} = \beta \log(\text{imm})_{mt} + \gamma X_{imt} + \eta_m + \phi_t + \epsilon_{imt} \quad (1)$$

- $Y = \{\text{Crime, Crime-Concerns, Preventive Behavior}\}$
- Controls = {Age, Gender}
- Cluster = municipality
- 2SLS (Bianchi et al., 2012) - Shift share instrument
- Note: for homicides we use data at the municipality (not individual) level

Building the Shift-Share Instrument (ENUSC 2017-2008)

$$\Delta Y_{m,2017-2008} = \beta \Delta migr_{m,2017-2008} + \gamma \epsilon_{mt} \quad (2)$$

We instrument $\Delta migr_{m,2017-2008}$ by:

$$\widehat{\Delta migr_{m,2017-2008}} = \sum_n \theta_{m,2008}^n \times \Delta \ln MIGR_{2017-2008}^n \quad (3)$$

$\theta_{m,2008}^n$ is the share of imm. from origin country n over total imm. in mun. m in 2008

$$\theta_{m,2008}^n = \frac{MIGR_{m,2008}^n}{\sum_{n'} MIGR_{m,2008}^{n'}} \quad (4)$$

$\Delta \ln MIGR_{2008-2017}^n$ is the log change 2017-2008 of stock of imm. of origin country n to other destination countries (ex-Chile).

$\sum_n \theta_{m,2008}^n \times \Delta \ln MIGR_{2008-2017}^n$: For each municipality m , sum the log changes for origin countries, weighted by the share of imm. of each nationality in 2008.

Outcomes

- **Crime-related concerns (5Q + index):** Binary questions related to crime affecting quality of life.

Examples: “do you feel crime is affecting your personal life?”, “mention your two main socioeconomic concerns (crime, unemployment, education, climate crisis, corruption, health, etc...)”, “do you believe you will be a victim of a crime in the following year?”

Summary Index: PCA, rescaled 0-1

Outcomes

- **Behavioral reactions:** Binary questions related to preventive behavior:
 - i) Investing in home security (eg, installing alarms), ii Coordinating actions with neighbors (eg, hiring private security for the block), iii buying a personal weapon.

Summary Index: PCA, rescaled 0-1

Outcomes

- **Victimization (self-reported, 6 crimes):** 0 if the individual did not suffered any crime, 1 otherwise.

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- **Victimization (self-reported, 6 crimes):** 0 if the individual did not suffered any crime, 1 otherwise.

- **Homicides:**

Homicide rate (homicides per 100k inhabitants): Total, Chilean or Foreigner as alleged perpetrators

Homicide intensive-margin: 1 if the Homicide Rate in 2017 was higher than in 2008 in a given municipality and 0 otherwise,

Homicide extensive-margin: 1 if the homicide rate in a given municipality was 0 in 2008 and positive in 2017.

Two-way fixed-effects model: Crime-related concerns

	(1) PCI	(2) Crime as a 1st or 2nd concern	(3) Crime as impacting pers. life	(4) Crime affecting qual. life	(5) Feeling unsafe	(6) Will be victim
Log Imm Rate	3.07** (1.31) [0.021]	2.00 (1.49) [0.180]	3.95*** (1.44) [0.007]	3.59* (1.81) [0.050]	2.67** (1.25) [0.035]	2.02 (3.20) [0.531]
Observ.	180,039	242,539	232,570	243,449	213,203	214,375
Mean DV	39.42	36.08	34.87	63.15	17.39	43.84

Two-way fixed effects model: Crime-preventive behavioral reactions

	(1) PCI	(2) Investment in home security	(3) Neighbors security system	(4) Owns weapon
Log Imm Rate	1.70*** (0.62) [0.008]	1.18 (0.90) [0.192]	2.33*** (0.76) [0.003]	1.04*** (0.37) [0.007]
Observ.	243,096	243,786	243,993	243,408
Mean DV	13.41	22.78	13.16	4.77

Two-way fixed effects model: Victimization disaggregated

	(1) Total	(2) Theft	(3) Larceny	(4) MV Theft	(5) Burglary	(6) Assault	(7) Robbery
Log Imm Rate	1.46	-0.34	0.25	0.05	1.42**	-0.11	0.32
	(1.39)	(0.79)	(0.54)	(0.19)	(0.61)	(0.29)	(0.38)
	[0.296]	[0.672]	[0.645]	[0.797]	[0.021]	[0.713]	[0.407]
Observ.	244,115	244,052	244,079	244,115	244,103	244,095	244,084
Mean DV	21.46	8.45	4.57	0.76	4.74	1.86	4.43

Two-way fixed effects model: Homicides (in logs)

	(1) Log homicide rate	(2) Homicide intensive margin	(3) Homicide extensive margin	(4) Log hom. rate (Chilean perp.)	(5) Log hom. rate (Foreign perp.)
Log Imm Rate	0.07 (0.17) [0.668]	-0.01 (0.09) [0.938]	-0.02 (0.06) [0.727]	0.03 (0.16) [0.858]	0.03 (0.06) [0.646]
Observ.	1,010	909	909	1,010	1,010
Mean DV	3.58	0.41	0.08	2.25	0.05

2017-2008 2SLS: Crime-related concerns

	(1) PCI	(2) Crime as 1st or 2nd concern	(3) Crime impacting pers. life	(4) Crime affecting qual-life	(5) Feeling unsafe	(6) Will be victim
$\Delta migr_{mt}$	13.58** (5.32) [0.011]	18.61*** (6.79) [0.006]	14.94** (7.00) [0.033]	16.07** (6.67) [0.016]	4.79 (6.49) [0.460]	16.91* (8.92) [0.058]
Observ.	101	101	101	101	101	101
Mean DV	39.42	36.08	34.87	63.15	17.39	43.83

2017-2008 2SLS: Crime-preventive behavioral reactions

	(1) PCI	(2) Investment in home security index	(3) Neighbors security system index	(4) Owns a weapon
$\Delta migr_{mt}$	11.44*** (4.04) [0.005]	10.03** (4.70) [0.033]	12.44*** (4.06) [0.002]	0.92 (1.62) [0.571]
F-stat (1 st)	17.35	17.35	17.35	17.35
Observ.	101	101	101	101
Mean DV	13.16	22.78	13.16	22.78

2017-2008 2SLS: Victimization disaggregated

	(1) Total	(2) Theft	(3) Larceny	(4) MV Theft	(5) Burglary	(6) Assault	(7) Robbery
$\Delta migr_{mt}$	3.50	0.32	-0.60	-0.95	1.13	1.87	3.09
	(5.21)	(3.56)	(2.95)	(0.71)	(1.83)	(1.59)	(2.10)
	[0.501]	[0.928]	[0.838]	[0.181]	[0.538]	[0.240]	[0.141]
F-stat (1 st)	17.35	17.35	17.35	17.35	17.35	17.35	17.35
Observ.	101	101	101	101	101	101	101
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	(1) Log homicide rate	(2) Homicide intensive margin	(3) Homicide extensive margin	(4) Log hom. rate (alleged chilean perp.)	(5) Log hom. rate (alleged foreign perp.)
$\Delta migr_{mt}$	0.85 (0.71) [0.233]	0.45 (0.40) [0.262]	-0.23 (0.21) [0.266]	1.06 (0.74) [0.151]	-0.10 (0.24) [0.663]
F-stat (1 st)	17.35	17.35	17.35	17.35	17.35
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Robustness

- Model specifications

Immigration in levels (instead of logs) [See Table](#)

Instrument in levels (instead of logs) [See Table](#)

Weighted and unweighted regressions [See Table](#)

- Homicides

Cost-weighted homicides [See Table](#)

Homicides in levels [See Table](#)

- Instrument

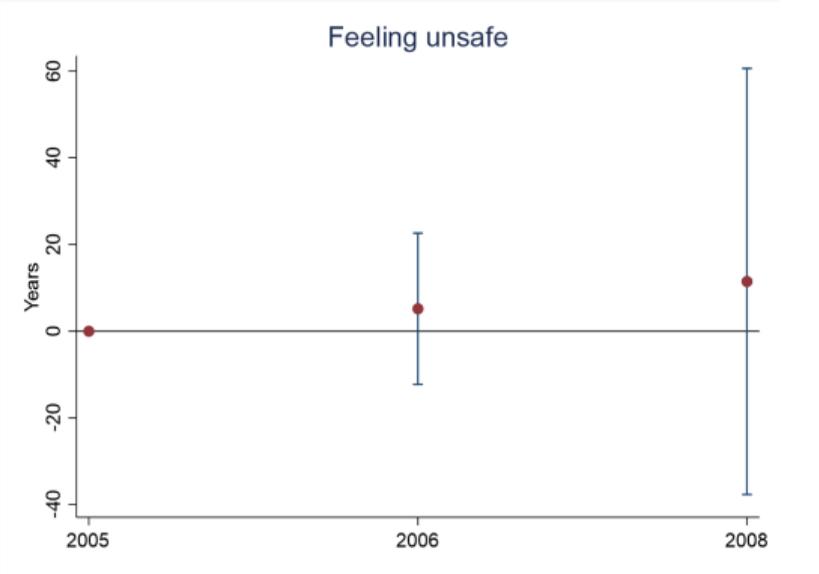
Using 2002 instead of 2008 as baseline [See Table](#)

Anderson-Rubén CI [See Table](#)

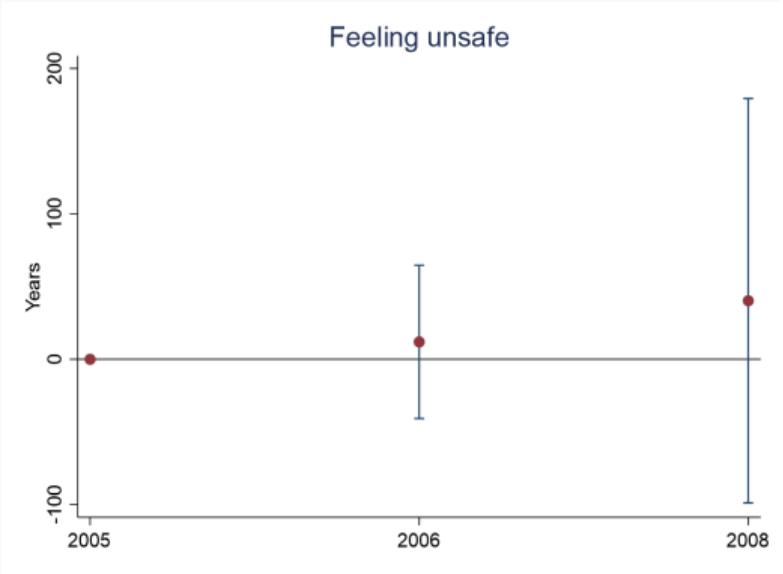
Internal Validity and the GPSS Test

- 2SLS: "exposure" research design. Shares measure the differential exposure to the common shock (int. migration) → **identification comes from 2008 shares**
- Threat: shares predict outcome through channels other than migration. Particularly likely if most of the variability of the instrument is explained by 1/2 countries.
- Test: as in DiD, no pre-trends.
- Goldsmith-Pinkham et al. (2020):
 1. Calculate Rotemberg weights, i.e., country-specific shares that have a large weight in the overall Bartik-2SLS estimate. Identify top.
 2. Test for parallel trends by plotting the effect of each nationality-share on our outcomes for the pre-periods.

Pre-trends for high Rotemberg weight countries and all countries together: feeling unsafe



Peru



Top 5

Go back

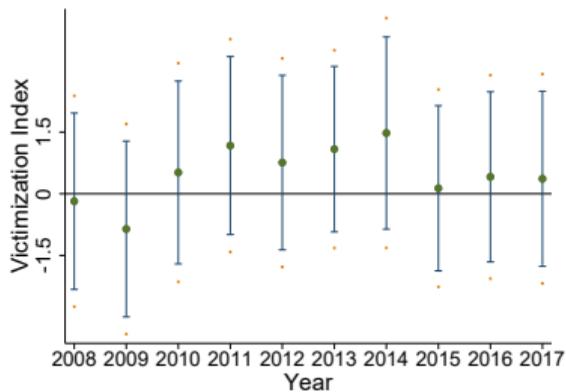
Endogenous Reactions

- Plausible interpretation: behavioral reactions hold up a potential effect on crime.
- We cannot fully rule out this. We identify effects in equilibrium. That said, we explore (suggestively) this possibility.
- If there is an endogenous reaction we would expect an increase at least a mild in crime followed by a reaction.

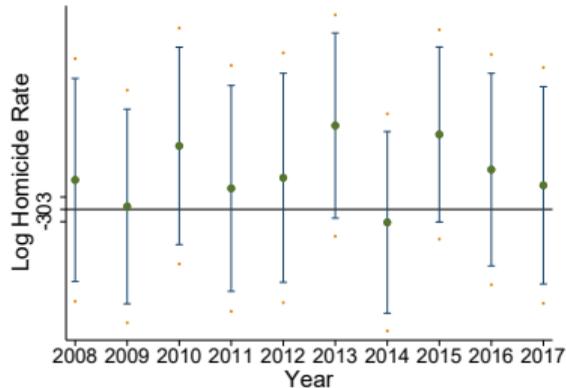
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- Test: 2WFE model interacting the treatment with the time periods.

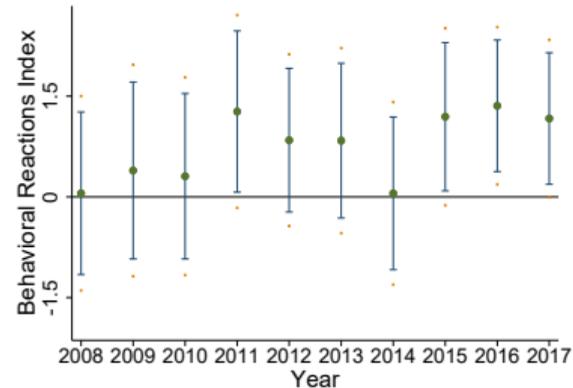
Dynamic effects on crime and reactions



Victimization Index



Log Homicide Rate



Crime-prev. Behav. Reactions Index

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- (iv) Demographic changes (age, gender) in the population due to the massive shock
- Caveat: all suggestive using 2WFE

Potential channels: Intergroup threat

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- E.G.: Chile vs: Bolivia (0.030), Peru (0.033), Colombia (0.035), Venezuela (0.049), Haiti (0.069)
- Using bilateral distance we calculate a weighted average distance by municipality-year

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- Using bilateral distance we calculate a weighted average distance by municipality-year
- **TEST (2WFE): Above/Below median of ethnic distance**

Potential channels: Intergroup threat

Log Imm Rate	(1) Crime-related concerns (PCI)	(2) Crime-prev. behav. reactions (PCI)	(3) Victimization (Total)	(4) Log homicide rate
Low dist.	2.95** (1.27)	1.53*** (0.56)	0.70 (1.19)	0.07 (0.18)
Rate*High dist.	-0.08 (0.32)	0.36 (0.24)	0.59 (0.36)	0.05 (0.05)
High dist.	2.86** (1.19)	1.89*** (0.58)	1.29 (1.17)	0.11 (0.17)
Observ.	180,039	243,096	244,115	1,010

European origins

Log Imm Rate	(1) Crime-related concerns (PCI)	(2) Crime-prev. behav. reactions (PCI)	(3) Victimization (Total)	(4) Log homicide rate
Low dist.	1.17 (1.39)	0.20 (0.80)	-0.51 (1.58)	0.12 (0.19)
Rate*High dist.	1.25* (0.60)	1.11* (0.44)	1.24 (0.63)	0.16 (0.10)
High dist.	2.42 (1.26)	1.31* (0.63)	0.73 (1.37)	0.04 (0.16)
Observ.	180,039	243,096	244,115	1,010

Potential channels: Education

- Measure: calculate migration rate of non-skilled (primary school at most) and migration rate of skilled (more than primary school)
- Official data by municipality-year

Potential channels: Education

- Measure: calculate migration rate of non-skilled (primary school at most) and migration rate of skilled (more than primary school)
- Official data by municipality-year
- **TEST (2WFE): Horse Race Low-Skilled migration vs High-Skilled Migration**

Potential channels: Education

Log Imm Rate	(1) Crime-related concerns (PCI)	(2) Crime-prev. behav. reactions (PCI)	(3) Victimization (Total)	(4) Log homicide rate
Low skilled	5.04*** (1.66)	1.98** (0.83)	1.83 (1.60)	0.26 (0.19)
High skilled	1.28 (1.25)	1.20* (0.69)	0.05 (1.28)	0.04 (0.20)
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 - 1) Are the effects driven by municipalities with high levels of local media penetration? Number of local radio stations per capita, per municipality. Classify municipalities in high versus low presence of local media.

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- **Above vs Below median of local media presence**
 - 2) Is it systematically more likely that a homicide is going to reach the news if it was committed by a foreigner?
- **Frequency of crime-related news (TV+newspaper) after a local/foreigner committed a homicide)**

Potential channels: Media

	(1) Crime-related concerns (PCI)		(2) Crime-prev. behav. reactions (PCI)		(3) Victimization (Total)		(4) Log homicide rate	
	Low Media	High Media	Low Media	High Media	Low Media	High Media	Low Media	High Media
Log Imm Rate	1.37 (1.61)	3.39** (1.52)	0.54 (1.31)	1.76*** (0.65)	-0.88 (1.78)	1.10 (1.41)	0.21 (0.24)	0.03 (0.24)
Observ.	90,528	89,511	122,259	120,837	122,942	121,173	510	500
Mean DV	39.42	39.42	16.41	16.41	21.46	21.46	3.58	3.58

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- We obtained daily news data from virtually all newspapers and TV news channels ("captions"). We kept news where crime-related words were included.

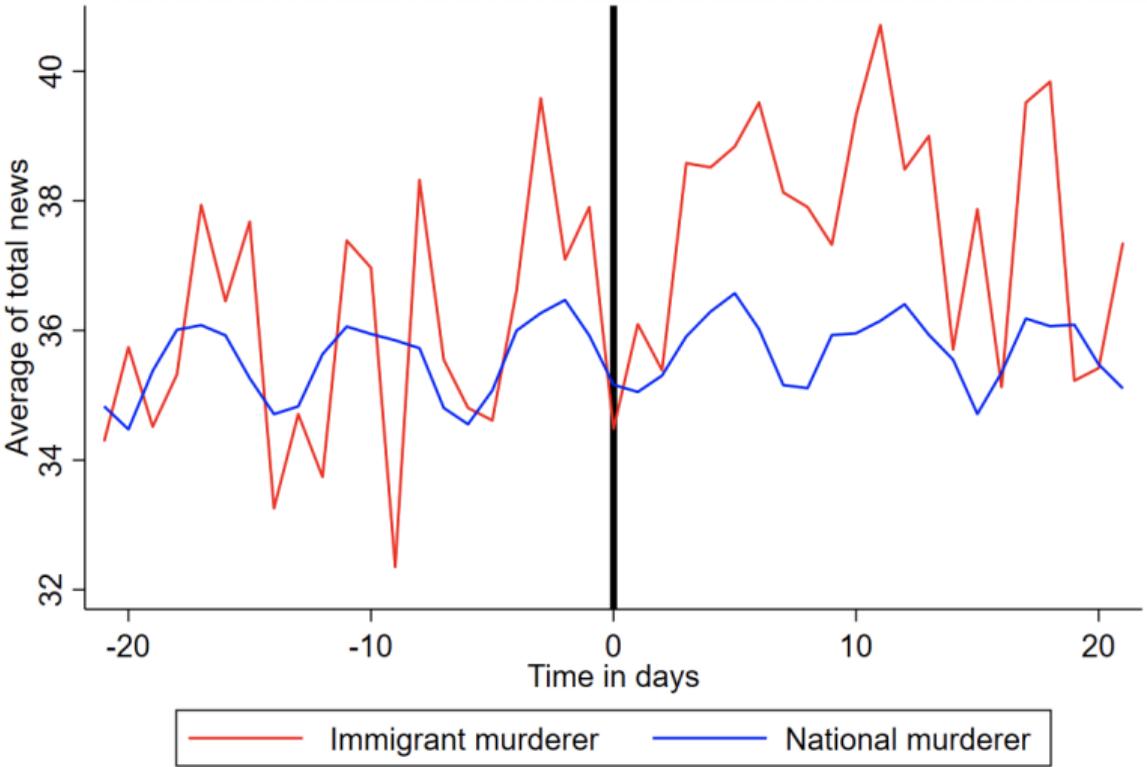
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- We obtained daily news data from virtually all newspapers and TV news channels ("captions"). We kept news where crime-related words were included.
- Match this with daily homicides data (only data with offenders' nationality) by day until 2015.
- First: compare the average frequency of crime-related news before/after an homicide perpetrated by a national versus immigrant.

Average frequency of crime-related news on TV and in newspapers: 2008-2017



Potential channels: Media

- More systematically: a DiD using different windows (after 7 days, after 14 days, after 21 days)

Potential channels: Media

- More systematically: a DiD using different windows (after 7 days, after 14 days, after 21 days)
- Dataset at the incident-time (before/after) level. Contains: number of crime news X days before the incident, number of crime news X days after the incident, dummy of nationality of the alleged perpetrator (local/foreigner).
- We run the following regression:

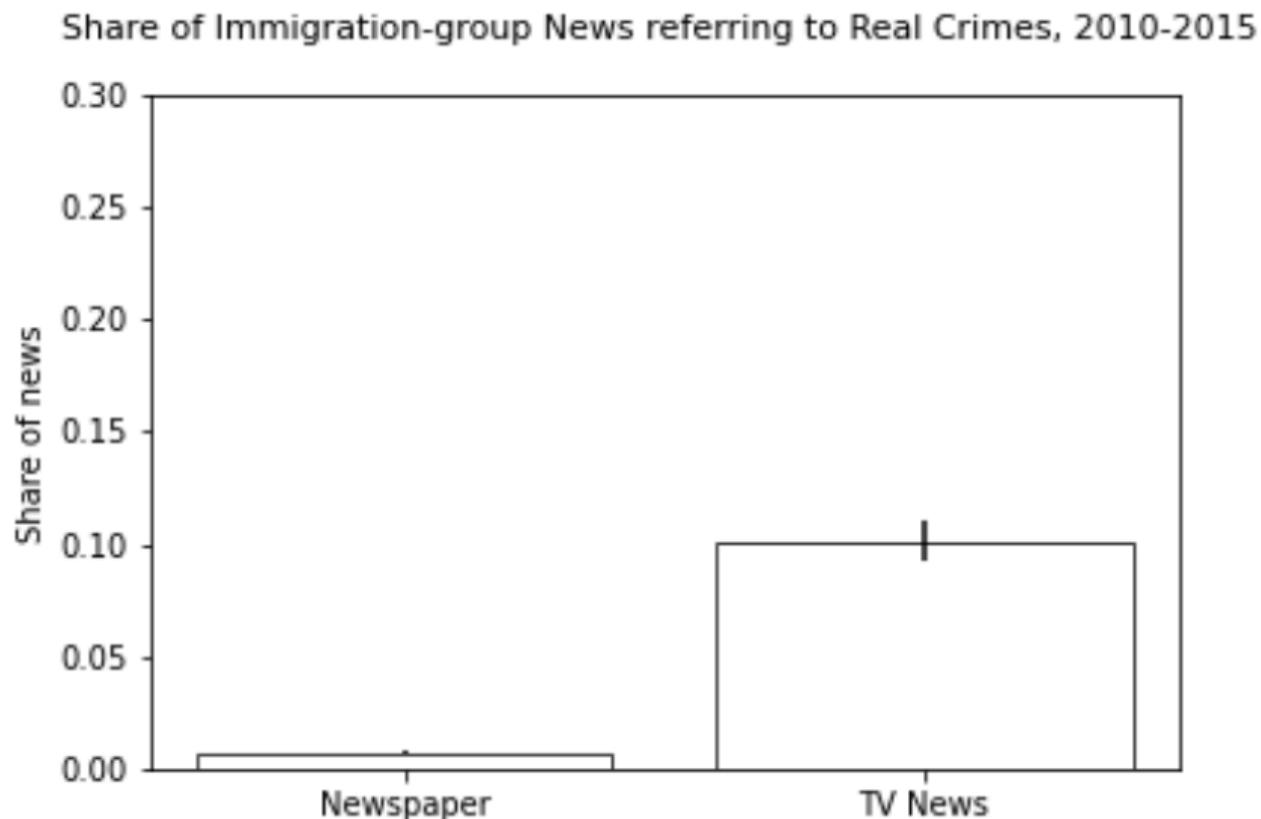
$$Y_{it} = \alpha Imm_i + \beta Post_t + \delta_i Post_t \times Imm_i + \eta_{dow(t)} + \phi_{month(t)} + \psi_{year(t)} + \epsilon_{it} \quad (5)$$

where δ_i measures the increase in crime-related news caused by an immigrant-related murder.

Diff-in-diff: the impact of immigrant-committed murder on news (15 days window)

	(1) Total news	(2) TV News	(3) Newspaper news
Immigrant	-0.65 (0.54)	-0.64 (0.43)	-0.01 (0.26)
Post-murder	0.18 (0.12)	0.03 (0.09)	0.015** (0.06)
Immigrant*Post-murder	1.84** (0.76)	1.40** (0.60)	0.44 (0.33)
Observ.	35,991	35,991	35,991
Mean DV	35.66	15.64	20.02

Share of immigration-related news referring to crime reports, by type of media: 2010-2015



Potential channels: Demographic Composition

- What if people are not scared of immigrants, but they are scared of young men individuals? Plausible if immigration triggered a change in local demography.

Potential channels: Demographic Composition

- What if people are not scared of immigrants, but they are scared of young men individuals? Plausible if immigration triggered a change in local demography.
- Test: Horse race using four "stocks" of immigrants: young men, young women, old men, old women (above/below 30 years old)

Potential channels: Demographic Composition

Log Imm Rate	(1) Crime-related concerns (PCI)	(2) Crime-prev. behav. reactions (PCI)	(3) Victimization (Total)	(4) Log homicide rate
Young women	2.82** (1.30) [0.033]	1.86 *** (0.63) [0.004]	0.71 (1.29) [0.583]	0.14 (0.18) [0.423]
Non-young women	2.37* (1.26) [0.062]	1.32** (0.63) [0.039]	0.04 (1.29) [0.978]	0.07 (0.17) [0.681]
Young men	2.93** (1.29) [0.025]	1.38** (0.61) [0.026]	0.83 (1.25) [0.508]	0.07 (0.17) [0.667]
Non-young men	2.61** (1.26) [0.041]	1.36** (0.62) [0.031]	0.54 (1.22) [0.658]	-0.03 (0.19) [0.855]
Observ. Mean DV	180,039 39.41	243,096 16.41	244,115 21.46	1,010 3.58

Conclusions

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- Hostility against immigrants can have important consequences in terms of policy: present in extremist narratives.
- Typical explanations: socioeconomic or cultural. This paper: in-between.
- Future research avenues:
- **channels, channels, channels:** where does misperception come from?
- If stereotyping: statistical, taste-based? If media plays a role: supply/demand?
- Finally: can misperceptions/beliefs be corrected?

Thank you!

Descriptive statistics by quartile of immigrant growth: 2017-2008 (I)

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Immigrant growth 2017-2008 (in %)	148.942 (38.922)	241.617 (22.356)	345.943 (40.395)	596.970 (261.345)
Population in 2010	127,822.346 (121,282.628)	164,153.800 (112,207.016)	117,207.040 (53,403.301)	127,657.400 (87,578.033)
Age	44.589 (18.259)	44.765 (18.382)	44.836 (18.453)	43.707 (18.015)
Female	0.563 (0.496)	0.562 (0.496)	0.558 (0.497)	0.552 (0.497)

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Descriptive statistics by quartile of immigration growth: 2017-2008 (IV)

	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Larceny	0.041 (0.198)	0.046 (0.209)	0.052 (0.221)	0.045 (0.207)
Burglary	0.047 (0.211)	0.042 (0.201)	0.049 (0.217)	0.052 (0.222)
Theft	0.091 (0.288)	0.084 (0.278)	0.086 (0.281)	0.076 (0.265)
Assault	0.018 (0.134)	0.018 (0.133)	0.019 (0.137)	0.019 (0.138)
Motor Vehicle Theft	0.009 (0.094)	0.008 (0.088)	0.007 (0.086)	0.007 (0.081)
Homicide Rate	2.945 (3.127)	3.431 (3.048)	4.379 (3.586)	3.579 (2.978)

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Two-way fixed effects model: Homicides (in levels)

	(1) Homicide rate	(2) Homicide rate (alleged chilean perp.)	(3) Homicide rate (alleged foreign perp.)
Log Imm Rate	0.55 (0.74) [0.457]	0.43 (0.69) [0.531]	0.04 (0.14) [0.772]
Observ.	1,010	1,010	1,010
Mean DV	3.58	2.25	0.05

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Robustness: 2SLS in differences (I)

	(1) Baseline	(2) No controls	(3) Visas	(4) Permits	(5) Adao
Victimization (Total)					
Log Imm Rate	3.50 (5.21)	3.82 (5.20)	4.29 (5.83)	0.66 (3.11)	3.50 (2.36)
Log homicide rate					
Log Imm Rate	0.85 (0.71)	0.91 (0.74)	0.93 (0.82)	0.48 (0.40)	0.85 (0.57)
F-stat (1 st)	17.35	14.92	11.91	25.59	17.35
Observ.	101	101	101	101	101

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Robustness: 2SLS in differences (II)

	(1) Baseline	(2) No controls	(3) Visas	(4) Permits	(5) Adao
Crime-related concerns (PCI)					
Log Imm Rate	13.58** (5.32)	13.91** (5.65)	15.04** (6.19)	6.87** (3.30)	13.58 (9.13)
Crime-prev. behavioral reactions (PCI)					
Log Imm Rate	11.44*** (4.04)	12.39*** (4.46)	13.14*** (4.93)	6.35*** (2.26)	11.44 (7.69)
F-stat (1 st)	17.35	14.92	11.91	25.59	17.35
Observ.	101	101	101	101	101

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Robustness: 2SLS in levels (I)

	(1) Baseline	(2) No controls	(3) Visas	(4) Permits	(5) Adao
Victimization (Total)					
Log Imm Rate	1.58 (3.00)	2.52 (3.09)	1.91 (2.98)	0.87 (1.30)	1.58 (1.20)
Log homicide rate					
Log Imm Rate	0.62 (0.38)	0.59 (0.38)	0.62* (0.38)	0.59* (0.33)	0.62 (0.45)
F-stat (1 st)	17.54	17.53	15.80	22.77	17.54
Observ.	243,096	243,096	243,096	243,096	243,096

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Robustness: 2SLS in levels (II)

	(1) Baseline	(2) No controls	(3) Visas	(4) Permits	(5) Adao
Crime-related concerns (PCI)					
Log Imm Rate	8.34** (3.43)	8.17** (3.43)	8.48** (3.46)	5.83** (2.76)	8.34** (3.75)
Crime-prev. behavioral reactions (PCI)					
Log Imm Rate	7.62*** (2.50)	7.62*** (2.50)	7.88*** (2.47)	5.20** (2.07)	7.62 (5.07)
F-stat (1 st)	17.54	17.53	15.80	22.77	17.54
Observ.	243,096	243,096	243,096	243,096	243,096

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2017-2008 2SLS Robustness: Homicide

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Log homicide rate	0.85 (0.71) [0.233]	0.97 (0.66) [0.141]	1.45 (1.24) [0.246]	1.40 (0.94) [0.135]
F-stat (1 st)	17.35	11.39	22.59	17.98
Observ.	101	101	101	101

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2017-2008 2SLS Robustness: Total crime

	(1) Cost-weighted crimes index	(2) Cost-weighted crimes index including homicide	(3) Log of crime rate
$\Delta migr_{mt}$	1.54 (1.15) [0.178]	0.44 (0.32) [0.175]	-0.60 (0.51) [0.246]
F-stat (1 st)	17.35	17.35	17.35
Observ.	101	101	101
Mean DV	2.74	0.77	48.83

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2017-2008 2SLS: Homicide Rate (in levels)

	(1) Homicide rate	(2) Homicide rate (alleged chilean perp.)	(3) Homicide rate (alleged foreign perp.)
$\Delta migr_{mt}$	5.69* (3.42) [0.096]	4.18 (2.91) [0.152]	-0.55 (0.60) [0.325]
F-stat (1 st)	17.35	17.35	17.35
Observ.	101	101	101
Mean DV	3.58	2.25	0.05

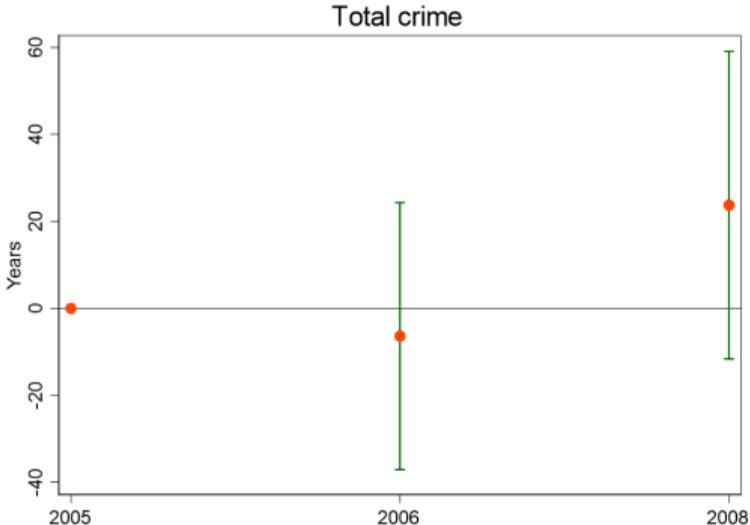
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Robustness: Anderson-Rubin CI

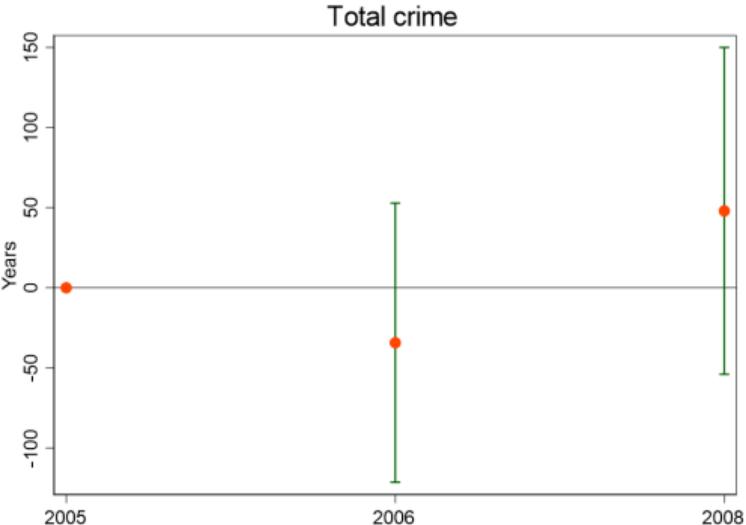
	(1) Log homicide rate	(2) Total Crime	(3) Concerns (PCI)	(4) Reactions (PCI)
$\Delta migr_{mt}$	0.85 (0.71)	3.50 (5.21)	13.58** (5.32)	11.44*** (4.04)
F-stat (1 st)	17.35	17.35	17.35	17.35
Observ.	101	101	101	101
AR CI	[-0.47; 2.79]	[-7.42; 15.66]	[3.68; 27.68]	[5.20; 24.06]
Mean DV	3.58	21.46	39.42	16.41

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Pre-trends for high Rotemberg weight countries and all countries together: total crime



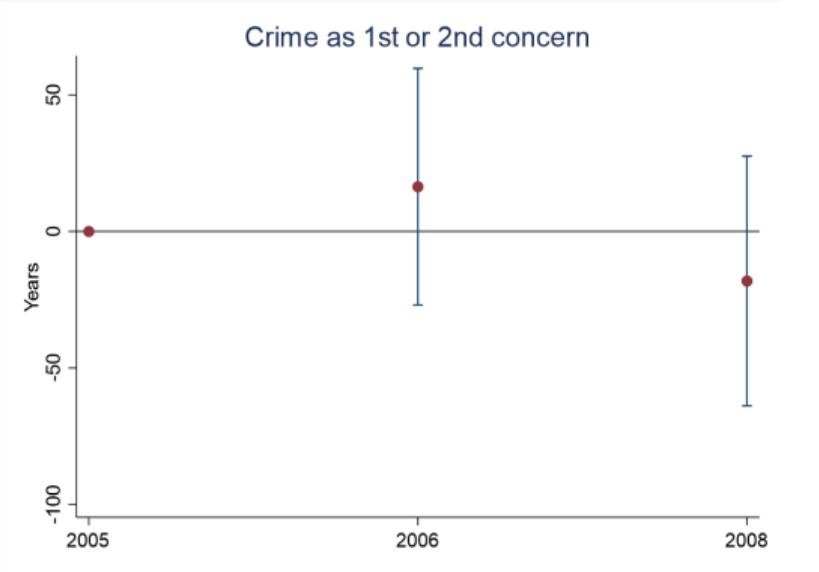
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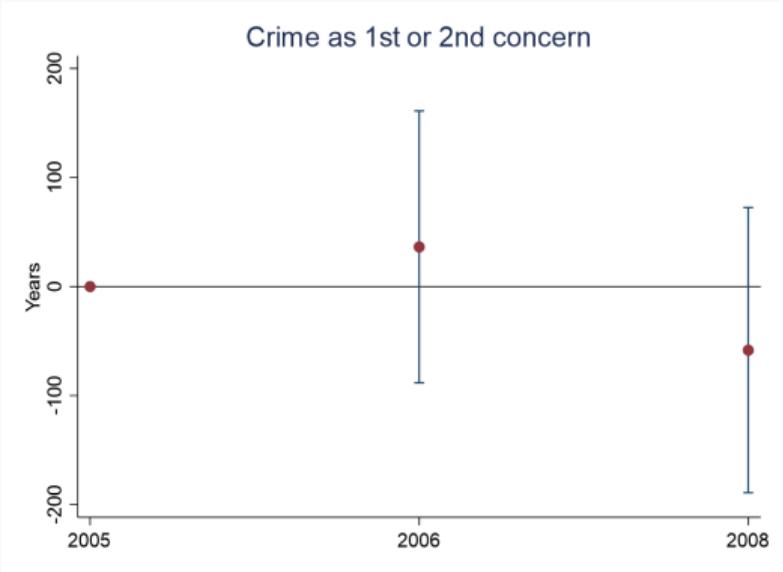
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Pre-trends for high Rotemberg weight countries and all countries together: crime as 1st or 2nd concern



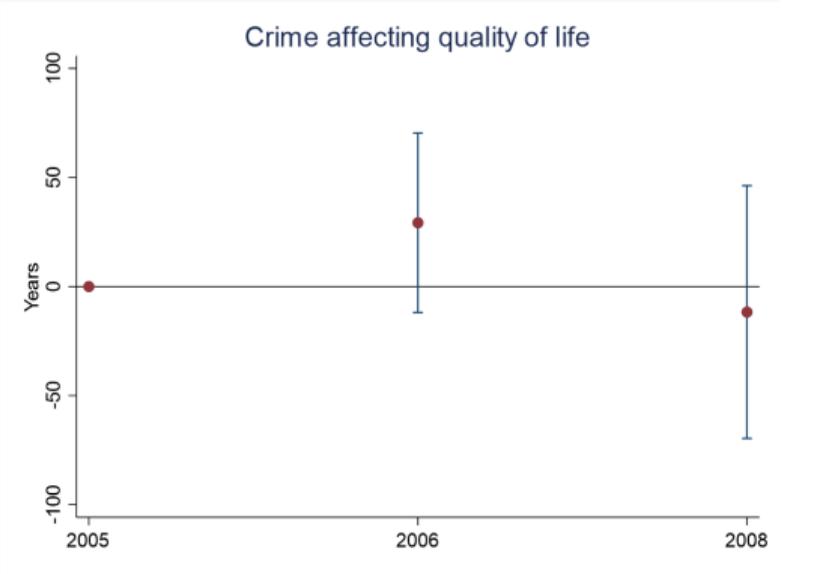
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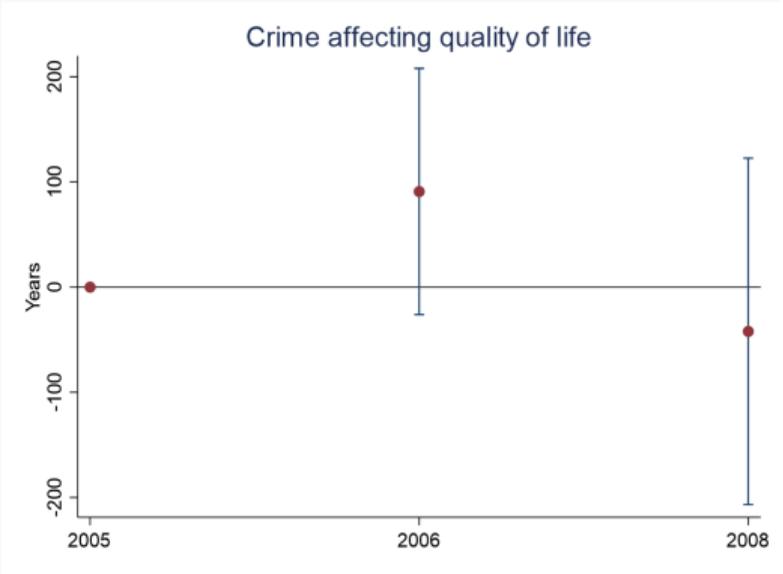
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Pre-trends for high Rotemberg weight countries and all countries together: crime affecting quality of life



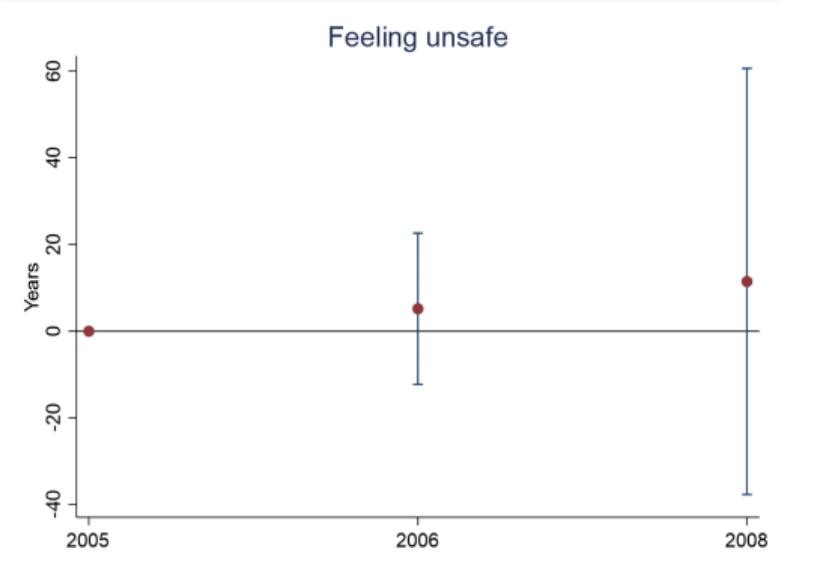
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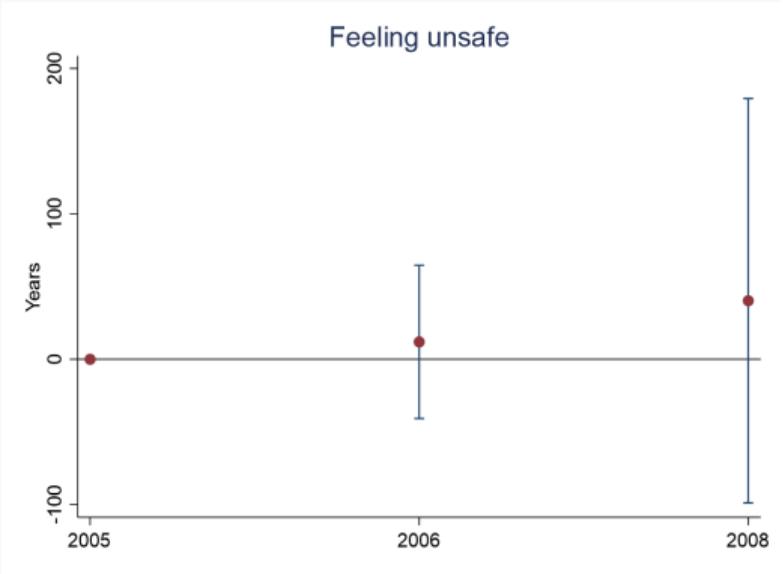
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Pre-trends for high Rotemberg weight countries and all countries together: feeling unsafe



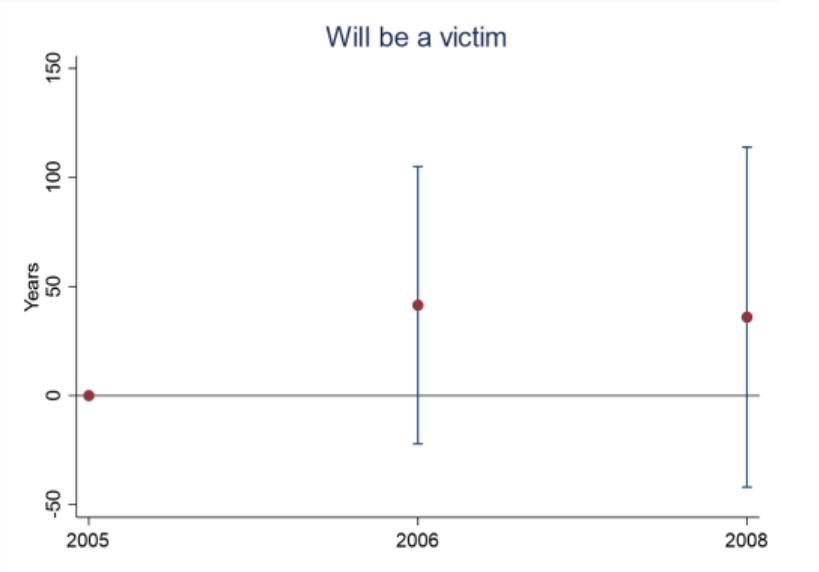
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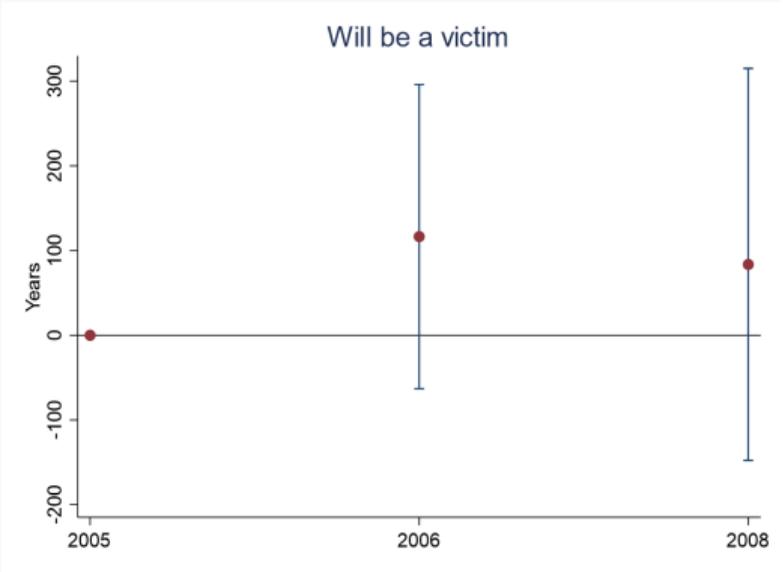
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Pre-trends for high Rotemberg weight countries and all countries together: will be a victim



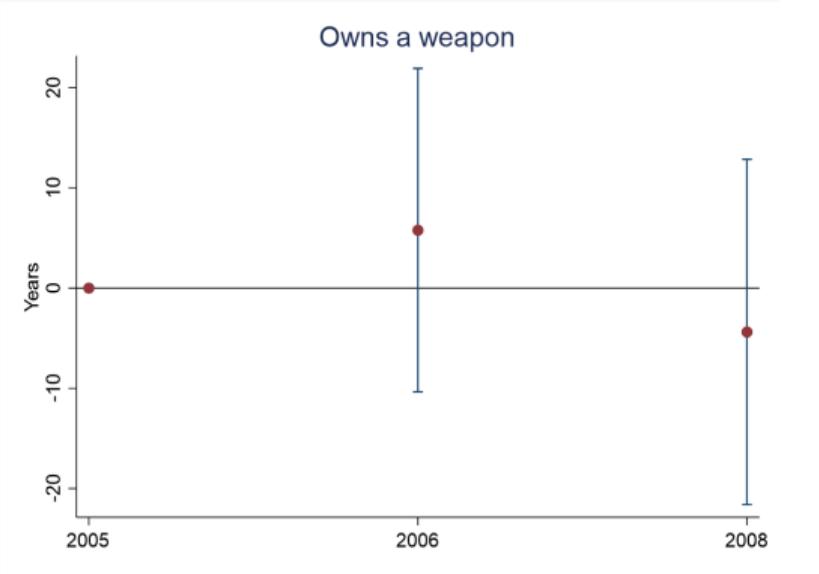
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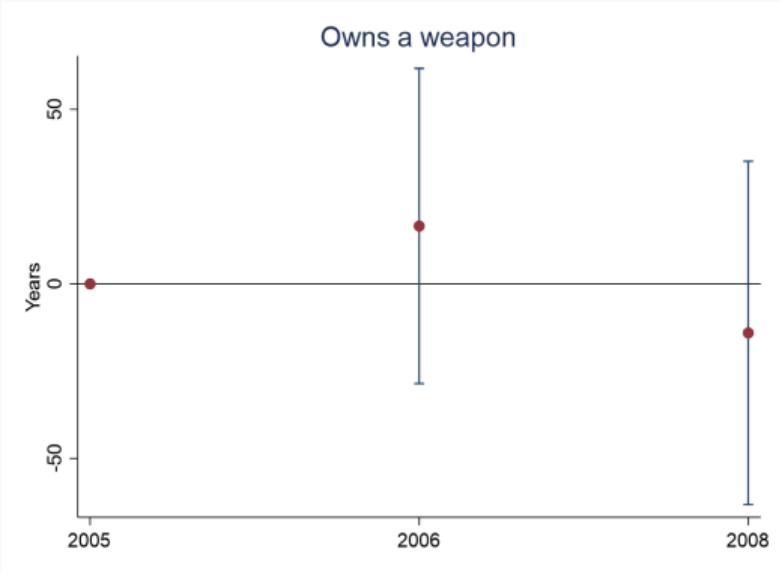
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Pre-trends for high Rotemberg weight countries and all countries together: owns a weapon



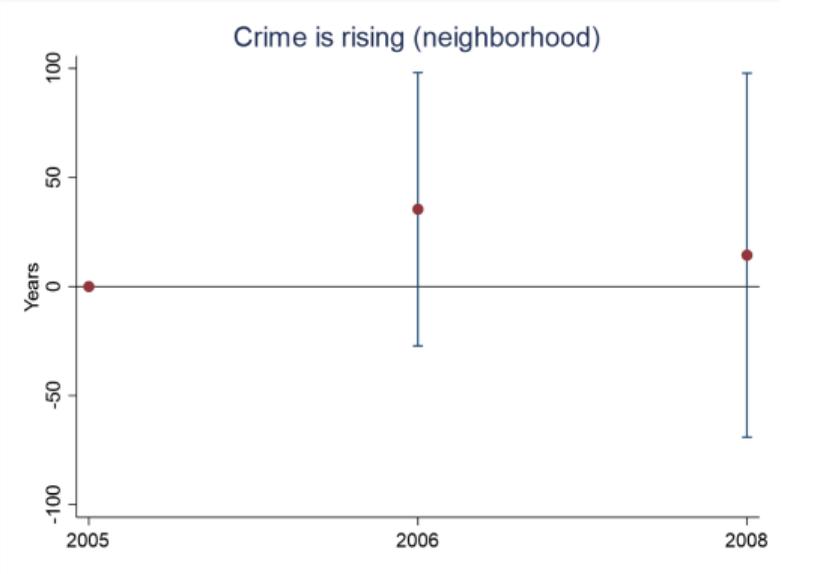
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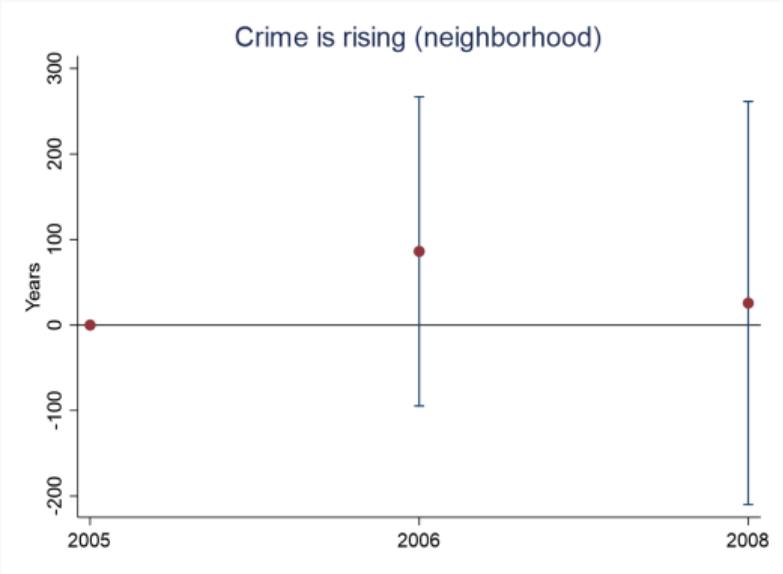
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Pre-trends for high Rotemberg weight countries and all countries together: crime is rising (neighborhood)



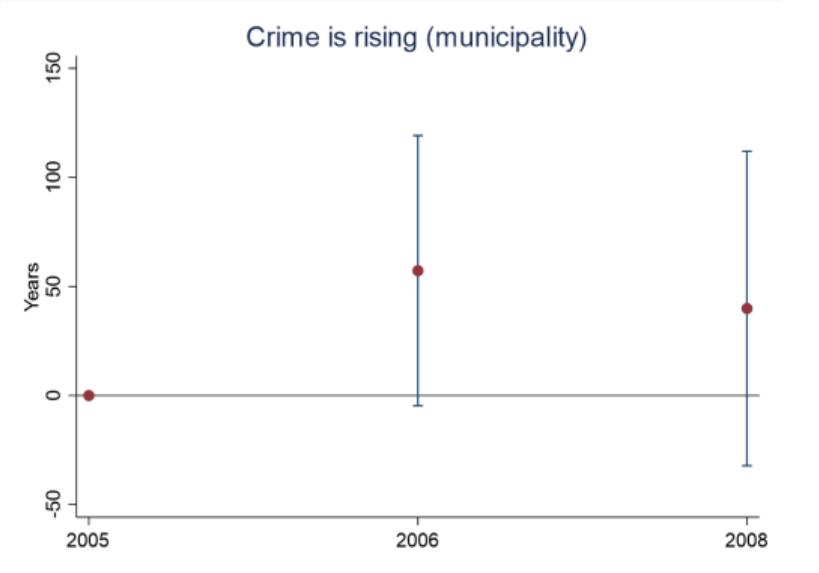
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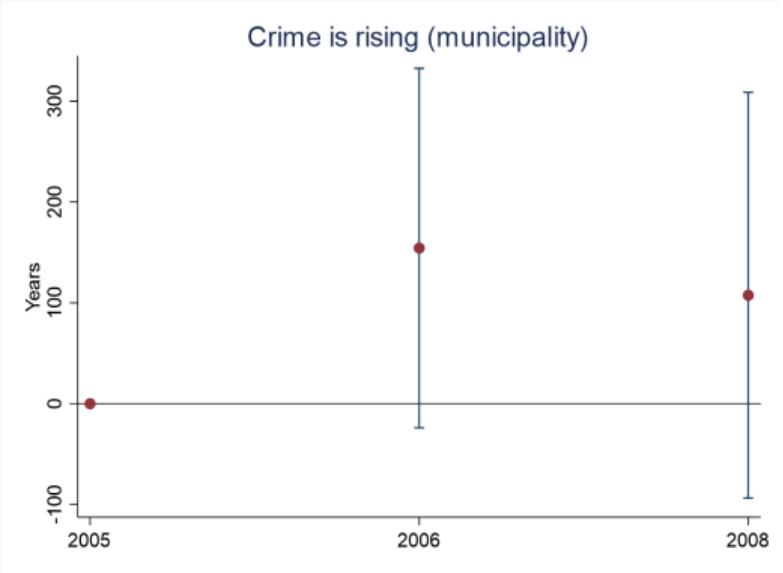


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Pre-trends for high Rotemberg weight countries and all countries together: crime is rising (municipality)



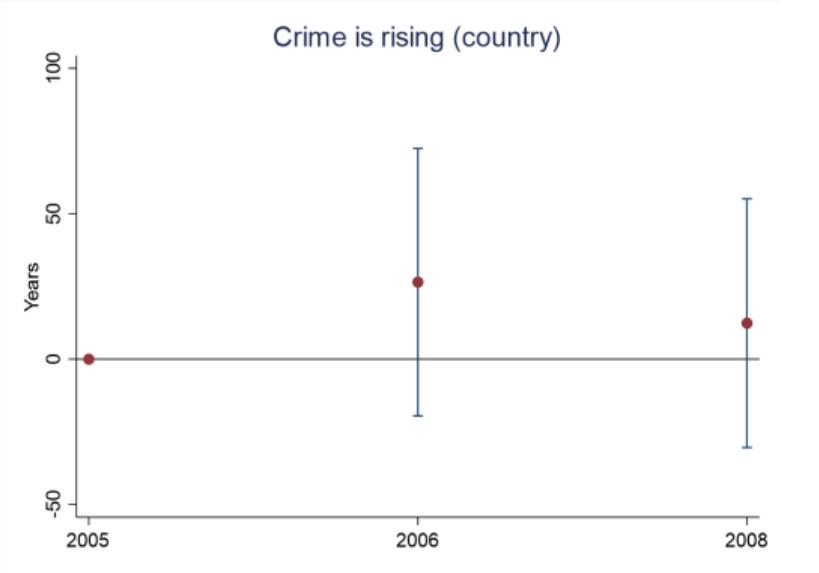
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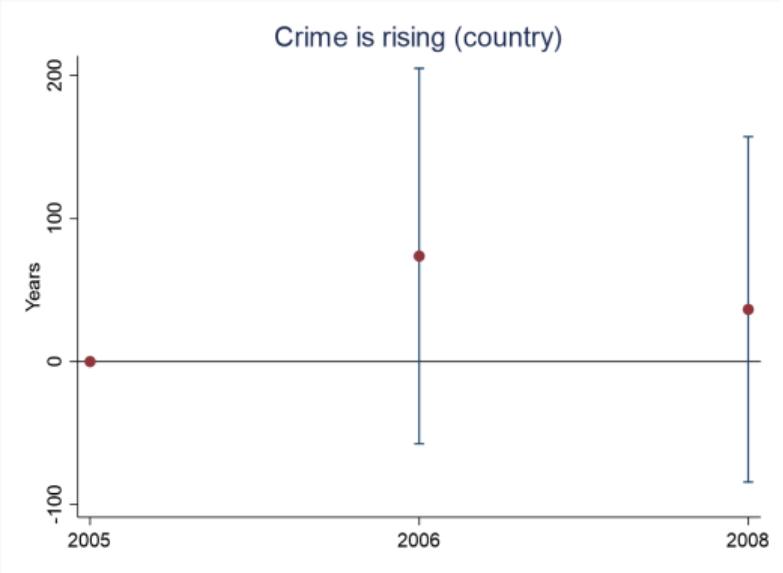
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Pre-trends for high Rotemberg weight countries and all countries together: crime is rising (country)



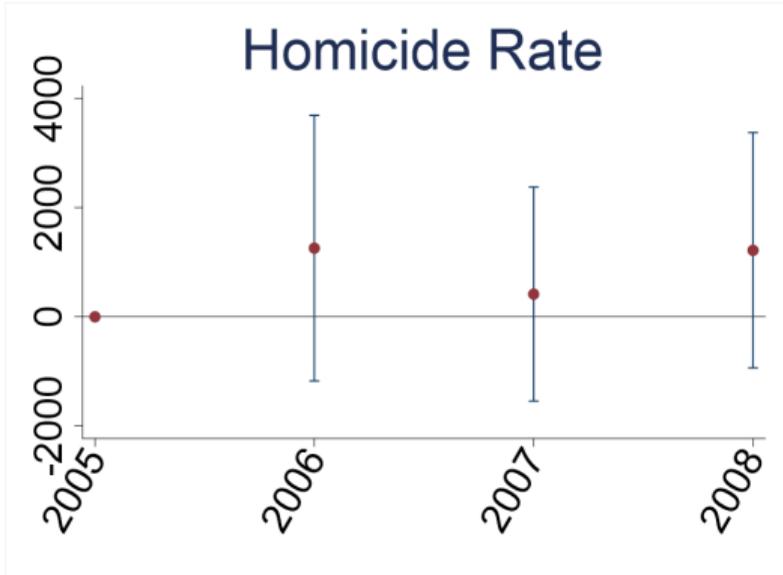
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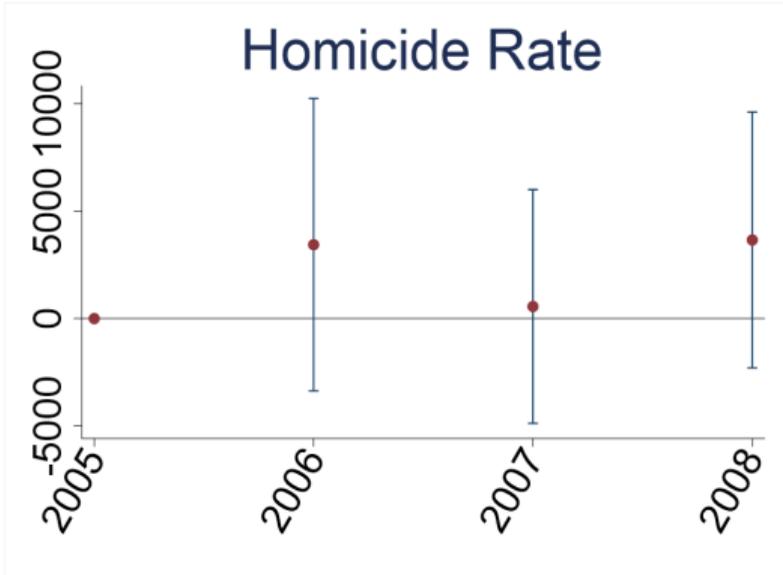
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Pre-trends for high Rotemberg weight countries and all countries together: homicide rate



Peru

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2017-2008 2SLS Robustness: Perceptions outcomes - Crime-related personal concerns (I)

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Crime as a 1st or 2nd concern	18.61*** (6.79) [0.006]	16.82** (7.55) [0.026]	31.81** (13.90) [0.022]	27.34* (14.21) [0.054]
Crime as impacting pers. life	14.94** (7.00) [0.033]	11.27 (6.90) [0.103]	25.53* (14.61) [0.081]	18.31 (12.72) [0.150]
Crime as affecting qual. life	16.07** (6.67) [0.016]	13.14 (9.24) [0.155]	27.47* (14.63) [0.060]	21.36 (16.77) [0.203]
F-stat (1 st)	17.35	13.15	22.59	18.13
Observ.	101	101	101	101

2017-2008 2SLS Robustness: Perceptions outcomes - Crime-related personal concerns (II)

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Feeling unsafe	4.79 (6.49) [0.460]	4.36 (7.89) [0.581]	8.19 (11.66) [0.482]	7.09 (13.10) [0.599]
Will be victim	16.91* (8.92) [0.058]	8.29 (9.93) [0.404]	28.90* (17.22) [0.093]	13.48 (17.53) [0.442]
PCI	13.58** (5.32) [0.011]	9.91* (5.28) [0.060]	23.21** (11.71) [0.048]	16.11 (10.53) [0.126]
F-stat (1 st)	17.35	13.15	22.59	18.13
Observ.	101	101	101	101

2017-2008 2SLS Robustness: Reaction outcomes - Crime-prev. behavioral reactions

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Investment in home security	10.03** (4.70) [0.033]	10.33* (5.72) [0.061]	17.14** (8.21) [0.037]	16.79* (8.58) [0.050]
Neighbors security system	12.44*** (4.06) [0.002]	12.65*** (5.28) [0.003]	21.26*** (7.38) [0.004]	25.44*** (8.26) [0.002]
Owns a weapon	0.92 (1.62) [0.571]	2.09 (2.24) [0.353]	1.56 (2.73) [0.567]	3.39 (3.42) [0.321]
PCI	11.44*** (4.04) [0.005]	13.32*** (5.02) [0.008]	19.54*** (7.21) [0.007]	21.66*** (7.67) [0.005]
F-stat (1 st)	17.35	13.15	22.59	18.13
Observ.	101	101	101	101

2017-2008 2SLS Robustness: Victimization (I)

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Robbery	3.09 (2.10) [0.141]	4.88 (3.60) [0.175]	5.27 (3.71) [0.156]	7.94 (5.88) [0.177]
Larceny	-0.60 (2.95) [0.838]	2.66 (3.49) [0.446]	-1.03 (4.97) [0.836]	4.33 (5.91) [0.464]
Burglary	1.13 (1.83) [0.538]	0.42 (2.76) [0.880]	1.92 (3.28) [0.557]	0.68 (4.50) [0.880]
Theft	0.32 (3.56) [0.928]	0.12 (3.93) [0.976]	0.55 (6.13) [0.928]	0.20 (6.40) [0.976]
F-stat (1 st)	17.35	13.15	22.59	18.13
Observ.	101	101	101	101

2017-2008 2SLS Robustness: Victimization (II)

	(1) Logs unweighted	(2) Logs weighted	(3) Levels unweighted	(4) Levels weighted
Assault	1.87 (1.59) [0.240]	2.54 (2.08) [0.223]	3.19 (2.79) [0.253]	4.12 (3.26) [0.206]
MV Theft	-0.95 (0.71) [0.181]	-0.96 (0.88) [0.277]	-1.63 (1.06) [0.123]	-1.56 (1.30) [0.229]
Total	3.50 (5.21) [0.501]	6.38 (6.44) [0.322]	5.99 (9.48) [0.528]	10.37 (10.92) [0.342]
F-stat (1 st)	17.35	13.15	22.59	18.13
Observ.	101	101	101	101

Robustness Shares 2002 in IV: Crime concerns (I)

	(1) Crime as a 1st or 2nd concern	(2) Crime impacting pers. life	(3) Crime affecting qual-life	(4) Feeling unsafe	(5) Will Be Victim
$\Delta migr_{mt}$	14.68** (5.62) [0.009]	11.97* (6.08) [0.049]	12.15* (5.87) [0.038]	1.71 (6.46) [0.792]	15.82 (8.14) [0.052]
F-stat (1 st)	17.74	17.74	17.74	17.74	17.74
Observ.	101	101	101	101	101
Mean DV	36.08	34.87	63.15	17.39	43.84

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Robustness Shares 2002 in IV: Crime concerns (II)

	(6) Concerns summary index	(7) Crime is rising (neigh.)	(8) Crime is rising (munic.)	(9) Crime is rising (country)
$\Delta migr_{mt}$	10.17* (4.82) [0.035]	12.91 (7.71) [0.094]	6.48 (8.38) [0.439]	-0.34 (4.54) [0.940]
F-stat (1 st)	17.74	17.74	17.74	17.74
Observ.	101	101	101	101
Mean DV	39.42	42.10	64.86	78.91

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Robustness Shares 2002 in IV: Crime reactions

	(1) Investment in home security index	(2) Neighbors security system index	(3) Owns a weapon	(4) Reactions PCI
$\Delta migr_{mt}$	9.28** (4.22) [0.028]	11.56*** (3.42) [0.001]	0.40 (1.48) [0.788]	10.55*** (3.52) [0.003]
F-stat (1 st)	17.74	17.74	17.74	17.74
Observ.	101	101	101	101
Mean DV	22.78	13.16	4.77	16.41

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Robustness Shares 2002 in IV: Victimization and homicides (I)

	(1) Theft	(2) Larceny	(3) MV Theft	(4) Burglary
$\Delta migr_{mt}$	-0.91 (3.05) [0.764]	-0.91 (2.75) [0.740]	-0.75 (0.59) [0.206]	0.62 (1.65) [0.710]
F-stat (1 st)	17.74	17.74	17.74	17.74
Observ.	101	101	101	101
Mean DV	8.45	4.57	0.76	4.74

Go back

Robustness Shares 2002 in IV: Victimization and homicides (II)

	(1) Assault	(2) Robbery	(3) Victimization (Total)	(4) Log homicide rate
$\Delta migr_{mt}$	1.78 (1.44) [0.215]	2.56 (1.84) [0.164]	2.32 (4.53) [0.608]	-0.29 (0.45) [0.514]
F-stat (1 st)	17.74	17.74	17.74	17.74
Observ.	101	101	101	101
Mean DV	1.86	4.43	21.46	3.58

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