

# Dear Brothers and Sisters

## Pope's Speeches and the Dynamics of Conflict in Africa

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## Motivation

*“As we meet today, one quarter of humanity lives in conflict-affected areas. Two billion people. Last year, 84 million were forcibly displaced because of conflict, violence and human rights violations. And this year, we estimate that at least 274 million will need humanitarian assistance.”*

UN Secretary-General António Guterres, 30 March 2022

- Pervasive phenomenon: 35% of the population live in conflict-ridden countries (Korovkin and Makarin, 2021)
- Peace keeping & peace building strategies to break the vicious cycles of violence
- Different doctrines & tools
  - ◇ **Traditional peacekeeping**: deployment of troops to monitor and maintain a ceasefire
  - ◇ **Multidimensional peacekeeping**: Traditional peacekeeping + disarming and demobilizing combatants, rebuilding infrastructure, and promoting human rights
  - ◇ **Peace-building**: long-term process

## International speeches & worldwide leaders

- What for?
  - ◇ Raising **awareness**: public support & pressure on warring parties.
  - ◇ Promoting **dialogue**: trust & space for peace negotiations.
  - ◇ Calling for **action**: resources mobilization & support for peace initiatives.
  - ◇ Setting a **tone** for peace: importance of dialogue, compromise, & reconciliation.
  
- Political leaders:
  - ◇ In 1963, President John F. Kennedy: “peace race” between the US and the Soviet Union.
  - ◇ In 1998, Nelson Mandela: speech for an end to the conflict in Northern Ireland.
  - ◇ In 2009, President Barack Obama: a speech for a new beginning between the US and the Muslim world.

## Religious leaders



Speech to Diplomatic corps,  
Rome January 2020

"[...] it is painful to witness, particularly in Burkina Faso, Mali, Niger and Nigeria, continuing episodes of violence against innocent people [...]"



Pope Francis and Shia religious leader  
Ayatollah Ali al-Sistani



Pope Francis greeting UN peacekeepers

Our aim: assess the impact of Catholic Pope's speeches on peace in Africa  
by quantifying their influence on the dynamics & nature of conflicts

- Why Pope's speeches?

- ◇ Spiritual, moral & political guide
- ◇ Pope's speeches are **frequent** (since mid-1990s, around 200 speeches/year) and **target all countries around the world** (187 countries).
- ◇ The topics covered are very broad but **31,4% of speeches toward African countries are explicitly mentioning conflict** (vs 26% for the RoW).  
(Text analysis technique: CorEx)

- Why Africa?

Statistics: for 19 SSA countries for 2008 [Pew Research Center, 2018]

- ◇ Religion is very important in daily-life: 85% (92% for Muslims)
- ◇ Worship attendance: 75% at least once a week
- ◇ People care: 85% somewhat/very favourable overall opinion of Pope Francis
- ◇ Pro-active in search info  
Religious pamphlets, magazines, newspapers or books: 75%; Radio, TV: 81%; Internet: 18.5%  
⇒ **Religion and religious message matter**

## What do we expect?

- A reduction of violence

- ◇ Fostering understanding and inter-religious dialogue
- ◇ A role of mediator (reducing asymmetry of information)
- ◇ Mobilization of the international community

- A surge of violence

- ◇ Perception matters
  - Provocation/a sign of weakness by the warring parties.
  - Create a sense of injustice among victims of violence
  - Groups feel betrayed by the pope.
- ◇ Speech to justify their actions: violence is necessary to defend peace.
- ◇ Increase grievances: if expectation of peace are not met
- ◇ Increase polarizatón across groups

⇒ Ambiguous effect

## What we do

- Preliminary exercises to corroborate our (identifying) assumptions
  - ◇ DGP of Pope's speeches
  - ◇ Coverage of Pope's speeches by national media
  - ◇ Impact of Pope's speeches on individual behavior
  
- Quantify the impact of Pope's speeches on the dynamics and nature of conflict in Africa
  - ◇ Unit of observation: Weekly grid cell of  $0.5 \times 0.5$  degree longitude and latitude
  - ◇ Data: Fine-grained data on location, date, nature and actors of violent events since 1997
  - ◇ Sample: 534 distinct speeches (over 404 days) in 52 African countries – 160 conflict speeches

## What we find

- When Popes talk about conflict in an African place
  - ◇ Decrease by 20% of the incidence of violence in the weeks after.
  - ◇ Effects persist until 12 weeks after the speech
  - ◇ But does not affect the likelihood of peace agreement
- Effects mainly driven by a reduction in
  - ◇ Battles / Low intensity violence (riots & protests) / activity of state forces and rebel groups
- Three mechanisms:
  - ◇ Local influence of political leader matters
    - ⇒ A stronger drop in violence in the birth region of the political leader
  - ◇ Message perceived differently depending on who the pope is
    - ⇒ Reduction in violence: Francis > John Paul II > Benedict XVI
    - ⇒ Benedict XVI: Increase in violence in areas with Catholics (31.5%, mainly driven by riots & protests)
  - ◇ Pope's local relays matter (bishops)
    - ⇒ The longer the bishops have been appointed to a diocese, the less peacemaking effect the Pope's message has



## Contribution to the literature

- Determinants & aftermath of conflict

[Cederman *et al.*, 2009; Dube and Vargas, 2013; Berman *et al.*, 2017; Harari and La Ferrara, 2018; McGuirk and Burke, 2022]

- More particular, media and conflict :

- ◇ Mass media can affect participation in violence using pro-violence propaganda [Yanagizawa-Drott, 2014]
- ◇ Movie shifting public discourse toward national reunification, and fostered cultural convergence between former enemies [Esposito *et al.*, 2023]

- Peace keeping [Rohner, 2022]

- Communication of religious personalities:

- ◇ Fertility impacted by Papal visit to Brazil [Bassi and Rasul, 2017]
- ◇ Political impact on voting of populist radio personality Father Charles Coughlin [Wang, 2021]

- Closest to our research: travels of John Paul II reduce the risk of conflict (country×year level), particularly when the proportion of Catholics is low [Laville, 2023]

- Our paper: Popes' speeches from Rome (no trips), with high frequency (weekly) and fine-grained (cell) data

## Data on conflict

- Armed Conflict Location & Event Data Project (ACLED): geocalized GPS events, all Africa, 1997-2022, actors involved in each event, type of violence, etc.

- Type of violence

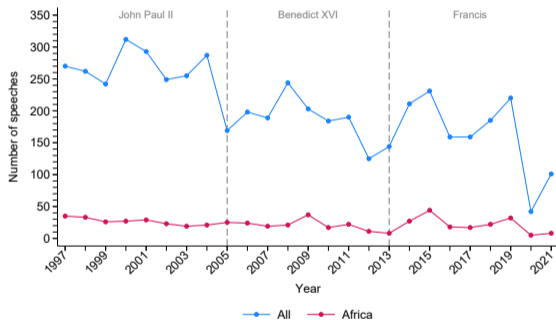
- ◇ Battles 23.2%
- ◇ Violence against civilians 21.4%
- ◇ Riots/protests 42.6%
- ◇ Explosions/Remote violence 7.5%
- ◇ Others 5.4%

- Type of actors

- ◇ State forces: 39.1%
- ◇ Rebels: 22.5%
- ◇ Political militias: 29.9%
- ◇ Rioters/Protesters: 42.7%
- ◇ Civilians (victims): 29.8%
- ◇ Externals: 28.5%
- ◇ Religious: 4.2%

- Specific nature of violence: Peace & target civilians

## Data on Pope's speeches from 1997 to 2021



- ◇ **Frequent:** 5'124 speeches ( $\approx 200/\text{year}$ )
- ◇ **Mention of country names**
  - 187 different countries
  - 11'306 times a country is mentioned
 (Vatican: 44.6%)
  - Only 28 speeches do not mention a country
- ◇ **In 11% of speeches at least one African country is mentioned**
  - Antarctica: 0.02%; Asia: 16.9%; Europe: 37%;
  - North America: 8.4%; Oceania: 1.6%; South America: 7.8%
- ◇ **From where:** Vatican vs trips
  - 4.5% of days are spent away

## Nature of the Speech: Covered Topics

- Using CorEx (Correlation Explanation):
  - ◇ Semi-supervised text analysis technique
  - ◇ Identifies and extracts the most informative and distinctive topics
- Input: 3 anchor words for 7 topics (e.g., religion, diplomacy, environment, conflict, refugee, education, belief)
- Model requested to generate 10 topics ▶ Topics covered
- Outcome:
  - ◇ Model assigns a probability distribution of topics to each text
  - ◇ Indicates the likelihood of each topic's presence in the text ▶ Distribution

## Are violence a driver of pope's speeches?

- Estimates the likelihood of a speech about country  $i$ , in week  $w$  of year  $t$ :

$$\mathbb{P}(\text{Speech}_{i,w,t}) = \sum_{j=-8}^{-1} \alpha_j \text{Conflict}_{i,w+j,t} + FE_{w,t} + FE_{i,t} + \varepsilon_{i,w,t}$$

where,

- ◇  $\mathbb{P}(\text{Speech}_{i,w,t})$ : 1 if Pope is speaking about the country (nature: any or conflict)
  - ◇  $\text{Conflict}_{i,w,t+j}$ : incidence or # events
  - ◇  $FE_{w,t}$ ,  $FE_{i,t}$ : week of the year and country  $\times$  year FE, respectively
- Mean LHS: any speech 1.3%, conflict speech: 0.8%

## Is violence a driver of pope's speeches?

# weeks (number of lags)	1	8	1	8
Dep. var : Speech				
Total effect	0.009*** (0.001)	0.015*** (0.002)	0.000 (0.001)	0.004 (0.004)
Observations	67600	67184	67600	67184
Sample mean	0.013	0.013	0.013	0.013
Week of the year FE	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes
Dep. var : Conflict Speech				
Total effect	0.007*** (0.001)	0.011*** (0.001)	0.001 (0.001)	0.003 (0.003)
Observations	67600	67184	67600	67184
Sample mean	0.008	0.008	0.013	0.013
Week of the year FE	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes

### ◇ Two results

- Violent countries are more likely to be mentioned

→ ×2 the likelihood

- Within country×year, no impact

→ Does not impact the timing of the speech.

### ◇ Similar results considering

- Intensity of conflict [▶ Go](#)

- Incidence of battles [▶ Go](#)

- Countries with Catholics and conflict [▶ Go](#)

- Major events (nat. disasters + terr. attacks) [▶ Go](#)

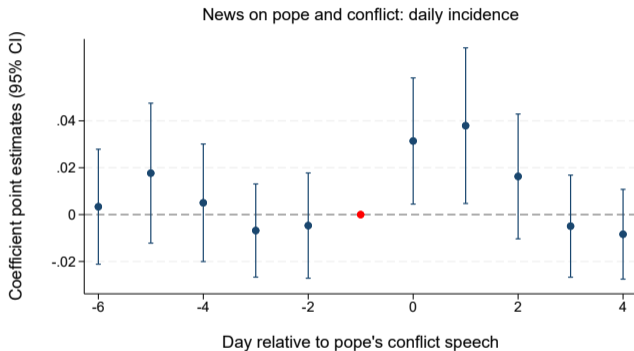
## Discussion on crucial identification assumptions

### A- Are pope's speeches covered by national media?

- Data source: Factiva and Europresse
- Coverage:
  - ◇ Time period: 2001-2022
  - ◇ 56 national newspapers
  - ◇ 28 African countries
  - ◇ Languages: Arabic, English, French, Portuguese, Spanish
- Keyword search: name of pope [John Paul II, Benedict XVI, Pope Francis] → 4,900+ newspaper articles
- Articles with conflict lexicon: 34% of Pope-related news

## Diffusion of speeches by Catholic popes in the printed press: event-study estimates

Specification



- ◇ Event: conflict speech  
→ one event per country mentioned
- ◇ Speech episode:  $\pm 15$  days
- ◇ Unit of observation: newspaper  $\times$  day
- ◇ Controls:
  - Daily news pressure: US, FR
  - Day-of-the-week FEs
  - Outlet  $\times$  speech episode FEs

Likelihood of news with mention of Pope and conflict  $\uparrow$  **in the country mentioned by the pope:**

→ Effect is large: Same day: +3.1 p.p. (25% of a one-sd); Day after: +3.8 p.p. (30% of a one-sd)



## Discussion on crucial identification assumptions

### B- Are individual behavior affected by pope's speeches?

- Data: Afrobarometer
- Unit of observation: individual  $p$  in country  $i$  on the day  $t$
- Sample: individuals around speech episode  $-7/+7$  days
- Different outcomes
  - ◇ Importance of religion
  - ◇ Trust in religious leader
  - ◇ Tolerance of neighbor's religion
  - ◇ Discrimination for religious reasons
- Controls: country $\times$ speech FEs + country  $\times$  survey round FEs + individual controls

## Effect of Pope speech 7 days after the speech - Christian subsample

► Specification

Dummy:	(1) Importance of religion	(2) Trust in religious leader	(3) Tolerance	(4) Personal discrimination
post	0.016** (0.006)	0.018* (0.009)	0.025 (0.016)	-0.019** (0.007)
Mean	0.966	0.853	0.872	0.174
Obs.	9275	7814	6367	8584

Notes: Standard errors clustered at country  $\times$  survey round level in parentheses.

- ◇ Christians report paying more importance to religion, trusting more religious leaders, being more tolerant. ( $\approx 2\%$ , equivalent to the effect of gender)
- ◇ No effect on non-Christian individuals
  - Other religions
- ◇ Results are similar with a continuous variable
  - Continuous variable

## Effect on conflict – Event-study strategy

- Focus on *isolated* speeches: 15 weeks before/after a pope's speech [Robust to alternative time windows]
- Sample (non-overlapping event windows):
  - ◊ 317 speeches since 1997
  - ◊ 160 speeches (45 countries) classified as *conflict speeches* (proba>0.8) ▶ Nb. speeches by country
- We estimate the effect of a pope's speech  $s$  on violence in cell  $k$  in country  $i$  at week  $t$

$$Conflict_{k,i,s,t} = \beta Post_{i,s,t} + \mu_{k,s} + \omega_t + \varepsilon_{k,i,s,t}$$

where

- ◊  $Conflict_{k,i,s,t}$ : incidence of conflict
- ◊  $Post_{i,s,t}$ : dummy whether the speech took place weeks after the speech
- ◊  $\mu_{k,s}$ : cell×speech FE
- ◊  $\omega_t$ : week×year FE
- ◊ Cluster at cell level.

## Nature of violence

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.261*** (0.065)	-0.128*** (0.036)	-0.040 (0.041)	-0.149*** (0.044)	-0.002 (0.005)	-0.025 (0.043)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean	1.21	0.35	0.40	0.49	0.01	0.46

Notes: For a sake of presentation, LHS has been multiplied by 100.

◇ Sizable magnitude:

- Conflict: Decrease by 21.5%
- Battles: Decrease by 36.5%
- Low intensity: Decrease by 30%

## Non conflict speeches

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.034 (0.039)	0.023 (0.020)	-0.022 (0.024)	-0.023 (0.027)	0.002 (0.002)	-0.025 (0.025)
Obs.	898946	898946	898946	898946	898946	898946
R2	0.233	0.075	0.087	0.266	0.051	0.102
Mean	0.44	0.08	0.09	0.28	0.00	0.12

Notes: For a sake of presentation, LHS has been multiplied by 100.

## Nature of actors

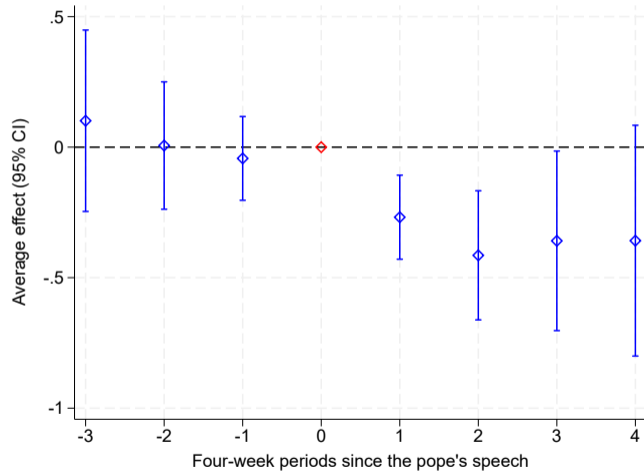
Dep. Var. - Dummy for:	(1) State Forces	(2) Rebels	(3) Pol. Militias	(4) Identity militias	(5) Rioters	(6) Civilians	(7) Externals	(8) Religious
Post	-0.151*** (0.047)	-0.102*** (0.036)	-0.068 (0.044)	-0.026 (0.019)	-0.149*** (0.044)	-0.047 (0.045)	-0.146*** (0.041)	-0.005 (0.014)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.227	0.243	0.240	0.128	0.301	0.222	0.227	0.120
Mean	0.51	0.31	0.45	0.13	0.49	0.50	0.42	0.07

Notes: For a sake of presentation, LHS has been multiplied by 100.

- ◇ Sizable magnitude:
  - State force & rebel groups: Decrease by  $\approx 30\%$
  - Rioters/protesters: Decrease by 30%
- ◇ No effect when non-conflict speech

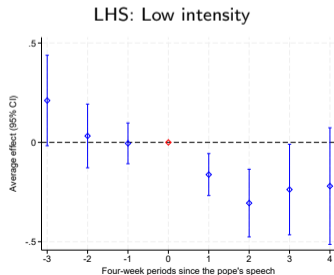
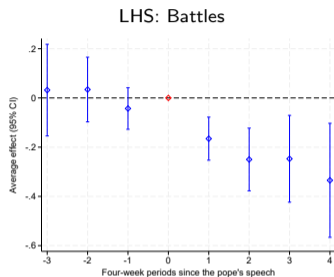
▶ Non conflict Speech - Actors

## Graphical evidence – Conflict incidence



- ◇ Effects over 12 weeks
- ◇ Magnitude: from 22 to 36%

## Graphical evidence



- ◇ Effects driven by a drop in battles and low intensity events.

→ Battles: persistence over 4 four-week periods

→ Low intensity events: no more effect after 2 four-week periods

- ◇ No effects on
  - Violence against civilians
  - Peace events
  - Civilians as target

▶ Graphical evidence



## (Some) Sensitivity analysis

- Different thresholds to define conflict speeches

▶ 60%   ▶ 90%   ▶ 99%

- Alternative time windows

▶ [-4 weeks;+15 weeks]   ▶ [-8 weeks;+15 weeks]   ▶ [-8 weeks;+23 weeks]

- Leave one year out

▶ Conflict   ▶ Battles   ▶ VAC   ▶ Low int.   ▶ Peace   ▶ Target civilians

- Leave one country out

▶ Conflict   ▶ Battles   ▶ VAC   ▶ Low int.   ▶ Peace   ▶ Target civilians

- Clustering, spatial correlation

▶ Conley

## Mechanism: Political leadership

As the World is watching, does the Pope's message matter for national political leaders?

- Religion of the political leader: Catholic vs non-catholic

▸ Estimates

⇒ No significant differences

- Differential effect in areas controlled by the political leader (or with a larger influence)

- ◇ Proxy: birth region of the political leader

## Place of birth of the leader: Nature of violence

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post × Region of birth	-0.580*** (0.116)	-0.214*** (0.067)	-0.195*** (0.072)	-0.237*** (0.072)	-0.003 (0.016)	-0.199** (0.078)
Post × No Region of birth	-0.239*** (0.066)	-0.122*** (0.036)	-0.029 (0.041)	-0.143*** (0.044)	-0.002 (0.005)	-0.013 (0.043)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean	1.21	0.35	0.40	0.49	0.01	0.46
Post: Region of birth ≠ No Region of birth	0.00	0.12	0.01	0.13	0.95	0.01
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

◇ Sizable magnitude:

- In region of birth: Decrease by 48% **conflict**, 61% **battles**, 49% **violence against civilians**, 48% **low intensity** and by 43% **civilians as targets**.
- In no region of birth: Decrease by 20% **conflict**, 34% **battles** and 30% **violence against civilians**

## Place of birth of the leaders: Nature of actors

Dep. Var. - Dummy for:	(1) State Forces	(2) Rebels	(3) Pol. Militias	(4) Identity militias	(5) Rioters	(6) Civilians	(7) Externals	(8) Religious
Post × Region of birth	-0.317*** (0.085)	-0.266*** (0.069)	-0.217*** (0.071)	-0.021 (0.032)	-0.238*** (0.072)	-0.224*** (0.082)	-0.354*** (0.071)	-0.022 (0.024)
Post × No Region of birth	-0.140*** (0.047)	-0.091** (0.036)	-0.058 (0.044)	-0.026 (0.019)	-0.143*** (0.044)	-0.034 (0.045)	-0.131*** (0.041)	-0.004 (0.014)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.227	0.243	0.240	0.128	0.301	0.223	0.227	0.120
Mean	0.51	0.31	0.45	0.13	0.49	0.50	0.42	0.07
Post: Region of birth ≠ No Region of birth	0.02	0.01	0.01	0.86	0.13	0.01	0.00	0.40

Notes: For a sake of presentation, LHS has been multiplied by 100.

◇ Sizable magnitude:

- In region of birth: Decrease by 62% **state forces**, 85% **rebel groups**, 48% **political militias** and 48% **rioters/civilians**.
- In no region of birth: Decrease by 27% **state forces**, 29% **rebel groups** and 29% **rioters/civilians**.

## Mechanism: Identity of the Catholic Pope

### ● John Paul II

- ◇ Africa at the center of his global geopolitical agenda  
*"Defensor Africae: Starting from Africa and its misery"* [Riccardi, 2014]
- ◇ General mindset: Trade and not aid. Church against leaving African countries "alone" in this transition  
 → actor in political crises  
 → bishops asked to accompany (lead) transitions

### ● Benedict XVI

- ◇ Theological conservatism  
 e.g. Cameroon (first African visit) opposition to the use of condoms to fight AIDS  
 up to 2009, 25M killed by HIV, 2/3 in Africa
- ◇ Only 2 visits – 3 African countries visited (8 years of pontificate)  
 John Paul II: 16 visits (26 years of pontificate), 42 of the 54 African countries

### ● Francis

- ◇ Decentralization: Peripheral Churches become centers
- ◇ Dialogue with independent Churches  
 e.g. Sierra Leone, Interreligious Council (Muslims, Anglicans, Catholics) *"played a decisive role in the peace process"* [Albanese, 2018]

- Can the message be perceived differently (and therefore impact conflicts differently) depending on who the pope is?

## Results by Pope: Nature of violence

- Identifying variations: Speeches on conflict: John Paul II: 57    Benedict XVI: 34    Francis: 77

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post: John Paul II	-0.150* (0.081)	-0.156*** (0.056)	-0.015 (0.053)	0.004 (0.029)	-0.013 (0.009)	-0.027 (0.057)
Post: Benedict XVI	0.049 (0.139)	-0.182* (0.096)	0.013 (0.090)	0.158** (0.079)	0.016 (0.014)	0.121 (0.096)
Post: Francis	-0.466*** (0.119)	-0.083 (0.051)	-0.082 (0.074)	-0.399*** (0.098)	0.004 (0.006)	-0.063 (0.076)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean: John Paul II	0.35	0.17	0.14	0.05	0.00	0.15
Mean: Benedict XVI	0.58	0.28	0.18	0.11	0.00	0.22
Mean: Francis	0.21	0.82	0.80	0.07	0.08	0.19
Post: John Paul II $\neq$ Benedict XVI	0.03	0.34	0.46	0.00	0.10	0.71
Post: John Paul II $\neq$ Francis	0.00	0.36	0.42	0.00	0.45	0.14
Cell $\times$ Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: For a sake of presentation, LHS has been multiplied by 100.

- No effects with non-conflict speeches

[▶ Table](#)

## Results by Pope: Nature of actors

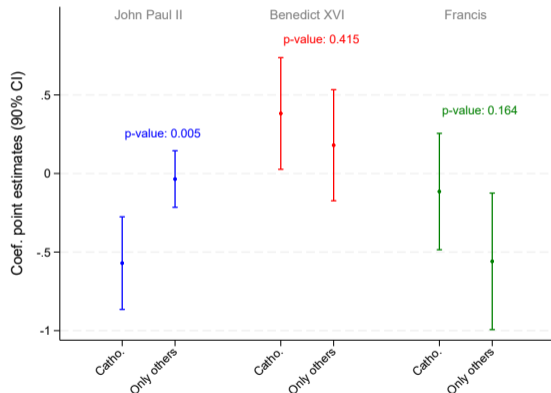
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Post: John Paul II	-0.075 (0.062)	-0.187*** (0.060)	-0.023 (0.055)	-0.033** (0.016)	0.004 (0.029)	-0.018 (0.058)	-0.139** (0.059)	-0.006 (0.007)
Post: Benedict XVI	0.084 (0.103)	-0.087 (0.077)	-0.013 (0.072)	0.006 (0.061)	0.158** (0.079)	0.096 (0.091)	0.099 (0.096)	-0.004 (0.005)
Post: Francis	-0.298*** (0.081)	-0.013 (0.046)	-0.132* (0.078)	-0.027 (0.036)	-0.400*** (0.098)	-0.116 (0.080)	-0.219*** (0.068)	-0.004 (0.031)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.227	0.243	0.240	0.128	0.301	0.222	0.227	0.120
Mean	0.51	0.31	0.45	0.13	0.49	0.50	0.42	0.07
Post: John Paul II $\neq$ Benedict XVI	0.18	0.29	0.91	0.54	0.07	0.30	0.03	0.80
Post: John Paul II $\neq$ Francis	0.03	0.02	0.23	0.88	0.00	0.32	0.38	0.94
Post: Benedict XVI $\neq$ Francis	0.00	0.40	0.26	0.65	0.00	0.08	0.01	0.99

Notes: For a sake of presentation, LHS has been multiplied by 100.

- No effects with non-conflict speeches

[▶ Table](#)

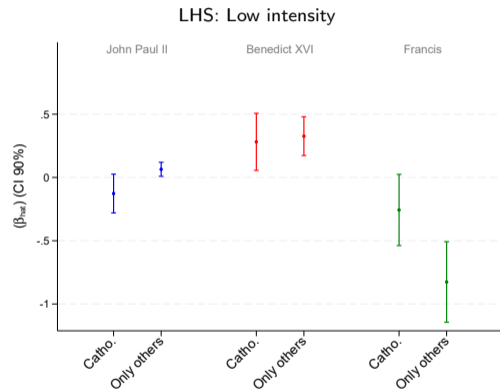
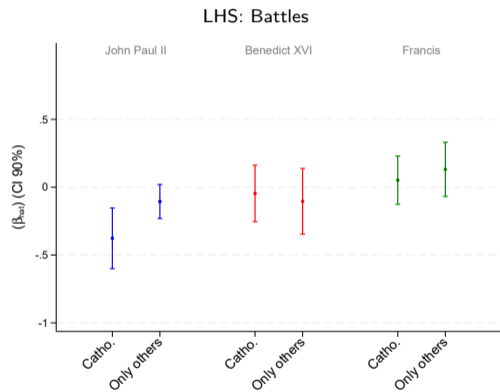
## Religious worships – Conflict incidence



- ◇ Magnitude.
  - John Paul II: decrease of 47%
  - Benedict XVI: increase of 31.5%
- ◇ No differential effects ▶ Fig.
  - Violence against civilians
  - Peace events
- ◇ Civilians as target, in catholic places: ▶ Fig.
  - Less violence with John Paul II
  - More violence with Benedict XVI
- ◇ Cells with only Catholics, only other and multi. rel. groups ▶ Fig.
- ◇ Without distinction in the identity of Catholic Pope: no effects
  - OSM data on worships ▶ Estimates
  - Historical missions ▶ Estimates
  - % Catholics (admin-1) ▶ Estimates



## Religious worships



## Mechanisms: Important of pope's local relays

How much can the pope's local relays (bishops) affect the transmission of the message of peace?

- Role of bishops: Supervision of the clergy within their diocese/group of local churches
- Why did they matter?
  - ◇ Religious alignment with the pope's message
  - ◇ Experience/duration in a diocese
- Ambiguous effect of bishop's new appointment/years spend in a diocese:
  - ◇ More "aligned" with the current Pope
  - ◇ No network and no trust which is then built with time
  - ◇ Appointed by previous Popes (with very different ideological leaning)
- Scrap info on bishops (names + date arrival/departure in diocese) and dioceses location in Africa

## Results by Pope: Nature of actors

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.634*** (0.153)	-0.307*** (0.097)	-0.122 (0.096)	-0.317*** (0.086)	-0.000 (0.013)	-0.137 (0.103)
Post × (log) duration bishop position	0.072*** (0.027)	0.038** (0.017)	0.025 (0.017)	0.023 (0.014)	-0.001 (0.003)	0.028 (0.018)
Obs.	991303	991303	991303	991303	991303	991303
R2	0.313	0.181	0.204	0.314	0.093	0.210
Mean	1.17	0.29	0.39	0.53	0.01	0.45
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: For a sake of presentation, LHS has been multiplied by 100.

- The longer the bishops have been appointed, the less peacemaking effect the Pope's message has.

## Ongoing

- Role of bishops

- ◇ Personal info (age, birth place...)
- ◇ Political/religious proximity with the Pope

- Role of media diffusion

- ◇ Twitter Pope's account & Youtube channel of Vatican
- ◇ Fine-grained data on Google trend

- Improve our understanding of the presence of religious group (local level)

- ◇ Open street map, catholic mission

- Role of pope's trips

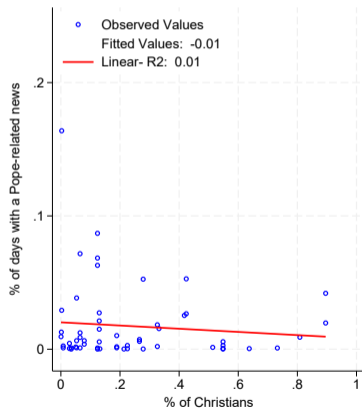
- ◇ Meeting with different national/local (political or religious) leaders
- ◇ Endogeniety concerns

## Conclusion

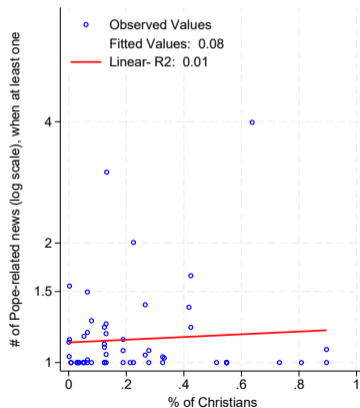
- Pope's speeches matter to understand the dynamic and the nature of conflict in Africa
- Take home messages: **Pope's message matters!**
  - ◇ Nature of the speech matters
  - ◇ All types of violence are not affected in the same magnitude
  - ◇ Interplay between influence of the political leaders, pope, nature of violence and the nature of armed groups
- Call for a better understanding of the channels of transmission linking peace-building speeches and localized violence
- **But still a lot on our agenda!**

## Catholic popes appear in African printed press, in countries w/ large and small Christian communities

A. Daily incidence of Pope-related news



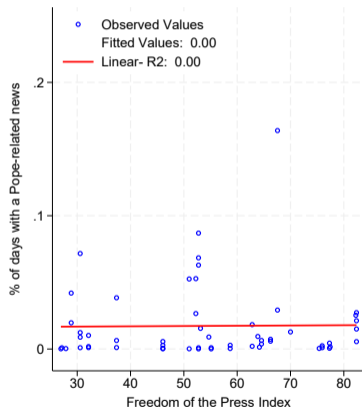
B. Number of news, cond. on coverage



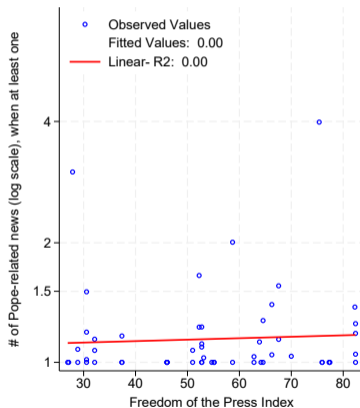
→ On average, Catholic pope appears in a newspaper over 6 days / year; and at least 20 days / year in the top-10%.

## Catholic popes appear in African printed press, independently of state control or ownership

### A. Daily incidence of Pope-related news



### B. Number of news, cond. on coverage



→ Similar patterns with alternative measures: state-ownership (only 22% of the outlets), freedom of the press (RSF), media censorship (V-DEM), media being critical of the government (V-DEM).

## Discussion on crucial identification assumptions

- Unit of observation: individual  $p$  in country  $i$  on the day  $t$
- Sample: individuals around speech episode  $-7/+7$  days

$$Religion_{p,i,t} = \beta PostSpeech_{p,i,t} + \mathbf{D}'_{p,i,t} \delta + \mu_i + \varepsilon_{p,i,t}$$

where

- $Religion_{p,i,t}$ : dummy/continuous measure
  - ◇ Importance of religion
  - ◇ Trust in religious leader
  - ◇ Tolerance of neighbor's religion
  - ◇ Discrimination for religious reasons
- $PostSpeech_{p,i,t} = 1$  if individual answered (within 7) days following a Pope speech in day  $t$
- $\mathbf{D}'_{p,i,t}$ : country  $\times$  survey round FEs + individual controls
- $\mu_i$ : country  $\times$  speech FEs
- Standard errors clustered at country  $\times$  survey round level

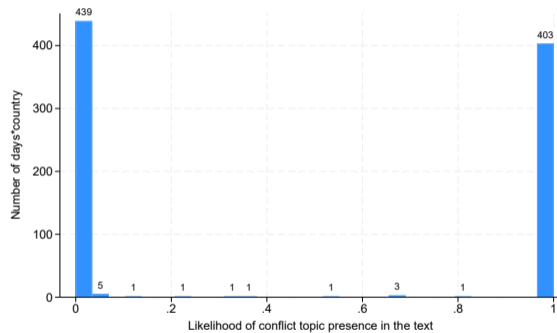


## Results of Text analysis - CorEx model

<b>Topics</b>	<b>Anchor words</b>	<b>Model</b>
Religion	pilgrimage, sacrament, celebration	<i>sacrament, priest, celebration, pilgrimage, bishop, ministry...</i>
Diplomacy	excellency, ambassador, state	<i>state, ambassador, excellency, right, development, society...</i>
Environment	climate, environment, nature	<i>nature, environment, question, fact, research, science...</i>
Conflict/Peace	war, conflict, reconciliation	<i>reconciliation, conflict, war, violence, peace, hatred...</i>
Refugee	refugee, border, migrant	<i>migrant, refugee, multimedia, home, child, border...</i>
Education	evangelization, school, missionary	<i>evangelization, missionary, school, vocation, gospel, charism...</i>
Belief	religion, believer, conviction	<i>religion, conviction, believer, belief, follower...</i>
		<i>culture, dialogue, history, challenge, future, tradition...</i>
		<i>need, problem, situation, order, care, form...</i>
		<i>thing, hand, sin, eye, mother, mercy...</i>

► Nature of the speech – Topics covered

## Distribution

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## C- Correlation between religious place & presence of Christians

- Unit of observation: cell  $k$  in country  $i$  (no time variation), covering all Africa, 10200 obs (cells)
- We estimate

$$RelBuilding_{k,i} = \gamma_1 Cath. Presence_{k,i} + \varepsilon_{k,i}$$

where

- $RelBuilding_{k,i}$ : dummy or # of Catholic religious places
- $Cath. Presence_{k,i}$ : alternative fine-grained information on Catholic presence
  - Christians, first or second religion
  - Missions: Catholics or protestants

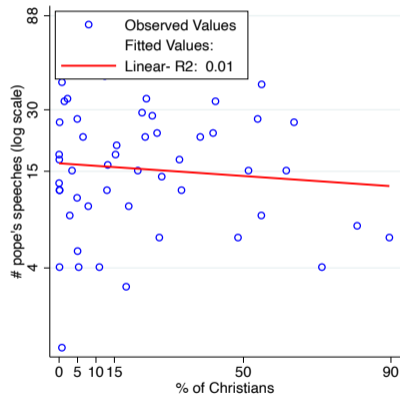
## Correlation between religious place &amp; presence of Christians

Dep. var: Catholic rel. place	(1) Dummy	(2) #	(3) Dummy	(4) #	(5) Dummy	(6) #
Christ. first rel.	0.185*** (0.006)	3.200*** (0.435)				
Christ. secondary rel.	0.114*** (0.007)	1.140*** (0.231)				
All missions			0.215*** (0.010)	11.608*** (2.953)		
Catho. missions					0.223*** (0.024)	17.489*** (4.993)
Prot. missions					0.216*** (0.012)	8.720*** (2.459)
Sample mean	0.12	1.69	0.13	1.72	0.13	1.72
Robust standard errors.						

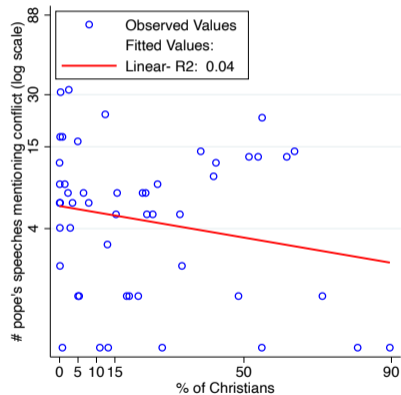
[▶ Back](#)

## Correlation % of christians and number of pope's speeches

A. Any speeches

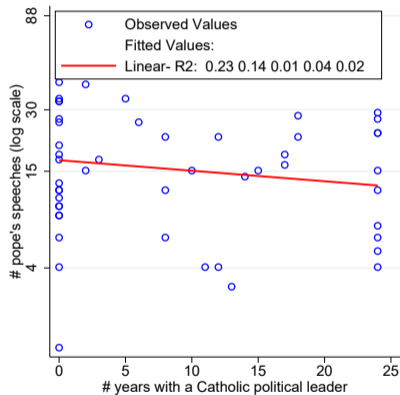


B. Conflict speeches

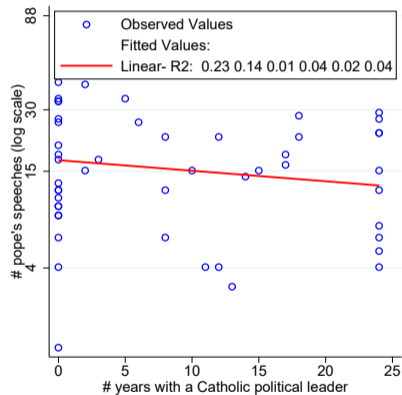


## Correlation # years with a Catholic political leader and number of pope's speeches

A. Any speeches

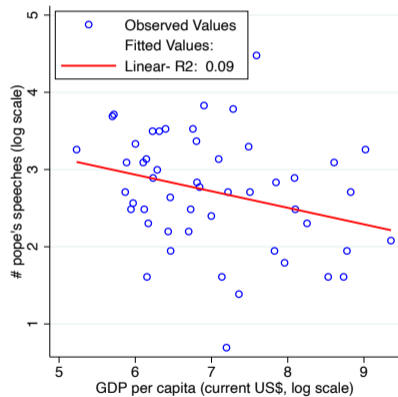


B. Conflict speeches

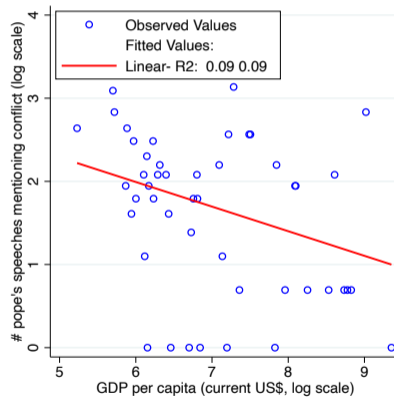


## Correlation GDP per capita and number of pope's speeches

A. Any speeches

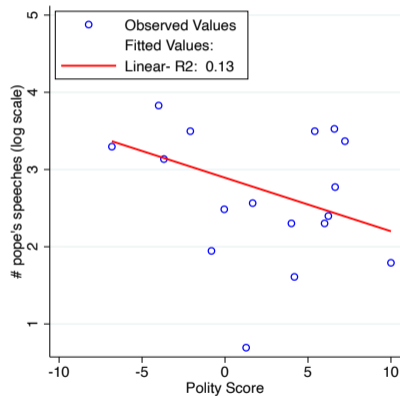


B. Conflict speeches

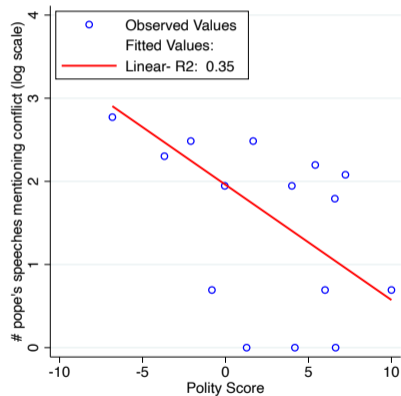


## Correlation Political System number of pope's speeches

A. Any speeches



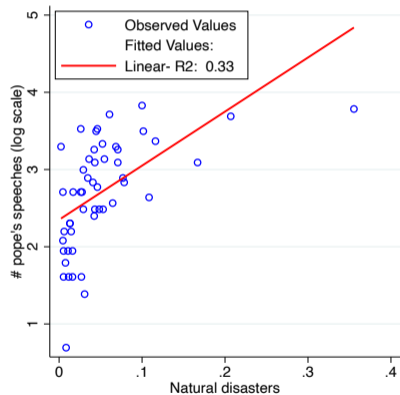
B. Conflict speeches



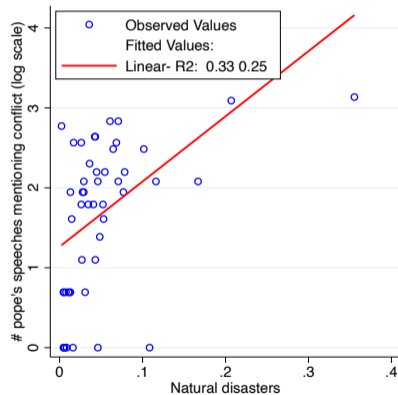


## Correlation Natural Disasters number of pope's speeches

A. Any speeches

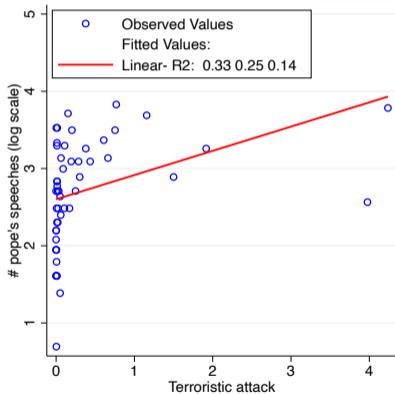


B. Conflict speeches

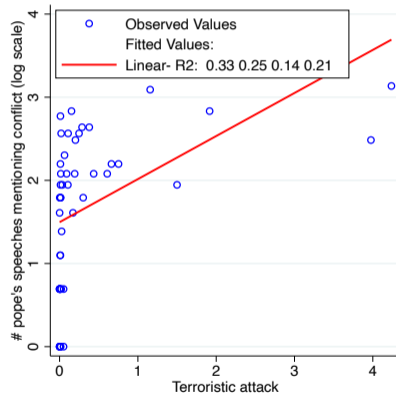


## Correlation Terrorist Attacks number of pope's speeches

A. Any speeches

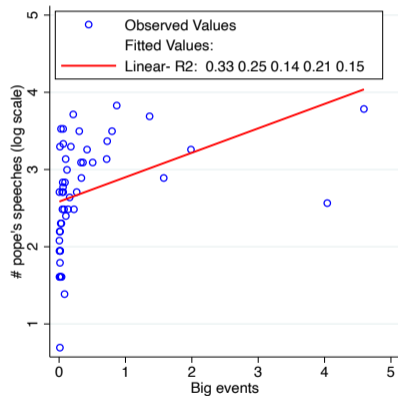


B. Conflict speeches

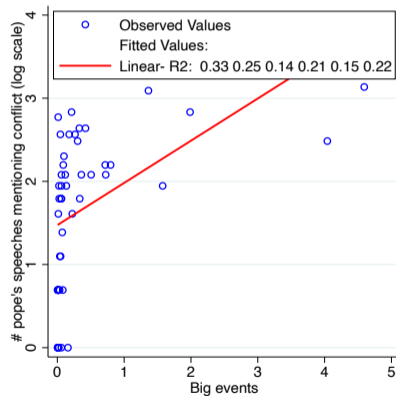


## Correlation Big Events (Natural Disasters &amp; Terrorist Attacks) number of pope's speeches

A. Any speeches



B. Conflict speeches



## Results: Intensity of conflict

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var. : Speech # weeks	1	— Any — 8	1	8	1	— Conflict — 8	1	8
Total effect	0.0004*** (0.000)	0.0005*** (0.000)	0.0001 (0.000)	0.0003 (0.000)	0.0004*** (0.000)	0.0004*** (0.000)	0.0001 (0.000)	0.0003 (0.000)
Observations	67600	67184	67600	67184	67600	67184	67600	67184
Sample mean	0.013	0.013	0.013	0.013	0.008	0.008	0.008	0.008
Week of the year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes	-	-	Yes	Yes

► DGP – Conflict

## Results: Incidence of battles

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var. : Speech		— Any —				— Conflict —		
# weeks	1	8	1	8	1	8	1	8
Total effect	0.013*** (0.002)	0.020*** (0.002)	0.002 (0.002)	0.004 (0.005)	0.011*** (0.001)	0.016*** (0.002)	0.002 (0.002)	0.001 (0.004)
Observations	67600	67184	67600	67184	67600	67184	67600	67184
Sample mean	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Week of the year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes	-	-	Yes	Yes

► DGP – Conflict

Results: Incidence of conflict  $\times$  Nb of Catholics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Var. : Speech		— Any —				— Conflict —		
# weeks	1	8	1	8	1	8	1	8
Total effect	-0.007 (0.004)	-0.002 (0.005)	0.002 (0.007)	-0.002 (0.021)	-0.000 (0.004)	0.005 (0.004)	-0.005 (0.006)	-0.012 (0.016)
Tot effect interact	0.001*** (0.000)	0.001*** (0.000)	-0.000 (0.000)	0.000 (0.001)	0.000* (0.000)	0.000 (0.000)	0.000 (0.000)	0.001 (0.001)
Observations	67600	67184	67600	67184	67600	67184	67600	67184
Sample mean	0.013	0.013	0.013	0.013	0.008	0.008	0.008	0.008
Week of the year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country $\times$ year FE	-	-	Yes	Yes	-	-	Yes	Yes

► DGP – Conflict

## Results: Major Events (Natural Disasters + Terrorist Attacks)

# weeks (number of lags)	1	8	1	8
Dep. var : Speech				
Total effect Conflict	0.006*** (0.001)	0.008*** (0.002)	0.000 (0.001)	0.003 (0.004)
Total effect Natural Disasters	0.004* (0.002)	0.013** (0.006)	-0.000 (0.002)	-0.011 (0.007)
Total effect Terroristic Attacks	0.011*** (0.002)	0.018*** (0.004)	0.000 (0.002)	0.016** (0.008)
Observations	67600	67184	67600	67184
Sample mean	0.013	0.013	0.013	0.013
Week of the year FE	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes
Dep. var : Conflict Speech				
Total effect Conflict	0.005*** (0.001)	0.006*** (0.001)	0.001 (0.001)	0.002 (0.003)
Total effect Natural Disasters	0.002 (0.002)	0.008* (0.004)	-0.000 (0.002)	-0.004 (0.006)
Total effect Terroristic Attacks	0.010*** (0.002)	0.015*** (0.003)	0.002 (0.002)	0.012* (0.007)
Observations	67600	67184	67600	67184
Sample mean	0.008	0.008	0.008	0.008
Week of the year FE	Yes	Yes	Yes	Yes
Country×year FE	-	-	Yes	Yes

$$PopeNews_{j,t} = \sum_{k=-7}^5 \beta_k \cdot PopeSpeech_{j,t+k} + \mathbf{X}'_t \gamma + \omega_{j,e} + \epsilon_{j,t}$$

$j$  = newspaper;  $t$  = time (day)

- $PopeNews_{j,t}$  indicates at least one news on Catholic pope with presence of conflict lexicon.
- $PopeSpeech_{j,t+k} = 1$  if there is a speech in day  $t+k$  mentioning the country in which newspaper  $j$  circulates.
- $\mathbf{X}'_t$  includes daily news pressure in the US and France, and day-of-the-week FEs
- $\omega_{j,e}$  = newspaper  $\times$  speech episode FEs
- Sample: for each speech by the pope mentioning an African country  $c$ , we include a newspaper  $\times$  day if:
  - ◊ newspaper  $j$  is a national newspaper of country  $c$
  - ◊ day  $t$  is included in the speech episode, defined as the time period: 15 days before/after the speech

► [Event study graph – Main](#)



Table: Effect of Pope speech 7 days after the speech - Christian subsample

Dep. Var. - Var for:	(1) Importance of religion	(2) Trust in religious leader	(3) Tolerance	(4) Personal discrimination
post	0.038** (0.017)	0.027 (0.033)	0.092** (0.037)	-0.034* (0.019)
Mean	3.845	2.014	3.810	0.300
Obs.	9275	9882	10068	8584
Country $\times$ Speech FE	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at country  $\times$  survey round level in parentheses. \* Significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%.

Table: Effect of Pope speech 7 days after the speech - Other religions subsample

Dep. Var. - Var for:	(1) Importance of religion	(2) Trust in religious leader	(3) Tolerance	(4) Personal discrimination
post	0.003 (0.009)	0.020 (0.016)	0.007 (0.013)	0.005 (0.014)
Mean	0.948	0.848	0.817	0.107
Obs.	5043	7355	4496	6375
Country $\times$ Speech FE	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at country  $\times$  survey round level in parentheses. \* Significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%.

## Number of speeches by country

Country	Number of Speech
Djibouti	2
Côte d'Ivoire	4
Equatorial Guinea , Botswana , Mauritania , Guinea-Bissau	5
Swaziland	6
Cabo Verde , Gabon , Togo	7
Seychelles	8
Lesotho , Gambia	9
Namibia , Liberia	10
Senegal	11
Zimbabwe , Tunisia , Morocco , Malawi , Niger	12
Somalia	13
Tanzania , Mauritius	14
South Sudan , Republic of the Congo , Sierra Leone	15
Ghana , Central African Republic	16
Zambia	17
Burkina Faso , Cameroon , Algeria , Mozambique	18
Chad	20
Angola	21
Kenya , South Africa	22
Rwanda , Madagascar	23
Burundi , Libya , Benin	26
Eritrea	27
Uganda	28
Mali	33
Guinea	34
Nigeria	39
Democratic Republic of the Congo	40
Ethiopia	41
Sudan	46
Egypt	81

## Non conflict Speech - Actors

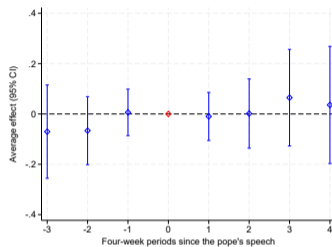
Dep. Var. - Dummy for:	(1) State Forces	(2) Rebels	(3) Pol. Militias	(4) Identity militias	(5) Rioters	(6) Protesters	(7) Civilians	(8) Externals	(9) Religious
Post	0.001 (0.028)	-0.016 (0.021)	0.007 (0.022)	-0.003 (0.008)	-0.004 (0.020)	-0.022 (0.020)	-0.022 (0.025)	0.031 (0.023)	-0.000 (0.007)
Obs.	898946	898946	898946	898946	898946	898946	898946	898946	898946
R2	0.137	0.093	0.093	0.057	0.118	0.272	0.107	0.128	0.049
Mean	0.18	0.06	0.10	0.03	0.10	0.20	0.12	0.13	0.01
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

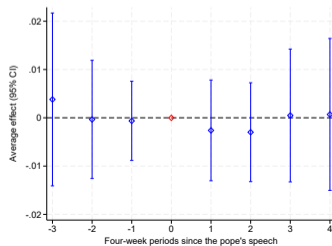
▶ Actors results – Main

## Graphical evidence: nature of violence

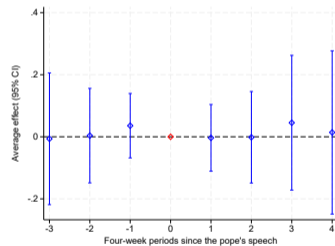
LHS: Violence against civilians



LHS: Peace



LHS: Civilians as target


[▶ Back](#)

## Conflict speech 60%

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.261*** (0.064)	-0.126*** (0.035)	-0.042 (0.040)	-0.149*** (0.043)	-0.002 (0.005)	-0.027 (0.042)
Obs.	1179214	1179214	1179214	1179214	1179214	1179214
R2						
Mean	1.20	0.34	0.40	0.49	0.01	0.46

Notes: For a sake of presentation, LHS has been multiplied by 100.

▶ Back

## Conflict speech 90%

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.262*** (0.065)	-0.128*** (0.036)	-0.041 (0.041)	-0.150*** (0.044)	-0.002 (0.005)	-0.026 (0.043)
Obs.	1161321	1161321	1161321	1161321	1161321	1161321
R2						
Mean	1.21	0.35	0.40	0.49	0.01	0.46

Notes: For a sake of presentation, LHS has been multiplied by 100.

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## Conflict speech 99%

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.194** (0.080)	-0.136*** (0.046)	-0.010 (0.049)	-0.112** (0.050)	-0.004 (0.007)	0.024 (0.054)
Obs.	1108009	1108009	1108009	1108009	1108009	1108009
R2						
Mean	1.24	0.36	0.41	0.50	0.01	0.48

Notes: For a sake of presentation, LHS has been multiplied by 100.

▶ Back



## Time window around Pope's speech: 4 weeks before and 15 weeks after

Number of speeches: 188

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.197** (0.077)	-0.085* (0.044)	-0.034 (0.047)	-0.102** (0.050)	-0.006 (0.005)	-0.011 (0.051)
Obs.	876233	876233	876233	876233	876233	876233
R2	0.321	0.217	0.212	0.306	0.102	0.226
Mean	1.28	0.38	0.41	0.51	0.01	0.48

Notes: For a sake of presentation, LHS has been multiplied by 100.

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## Time window around Pope's speech: 8 weeks before and 15 weeks after

Number of speeches: 175

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.265*** (0.073)	-0.092** (0.041)	-0.073* (0.043)	-0.191*** (0.048)	-0.005 (0.005)	-0.049 (0.047)
Obs.	971613	971613	971613	971613	971613	971613
R2	0.313	0.208	0.211	0.302	0.092	0.223
Mean	1.22	0.37	0.40	0.48	0.01	0.46

Notes: For a sake of presentation, LHS has been multiplied by 100.

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## Time window around Pope's speech: 8 weeks before and 23 weeks after

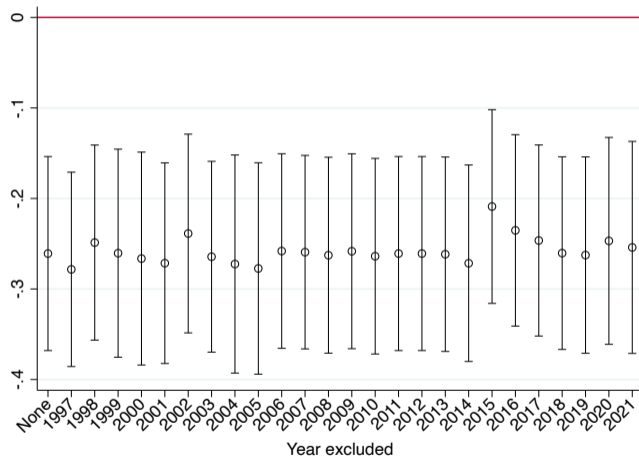
Number of speeches: 160

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.095* (0.056)	-0.019 (0.029)	-0.053 (0.034)	-0.125*** (0.033)	0.001 (0.007)	-0.020 (0.036)
Obs.	1152112	1152112	1152112	1152112	1152112	1152112
R2	0.301	0.192	0.195	0.291	0.070	0.205
Mean	1.24	0.37	0.41	0.48	0.01	0.47

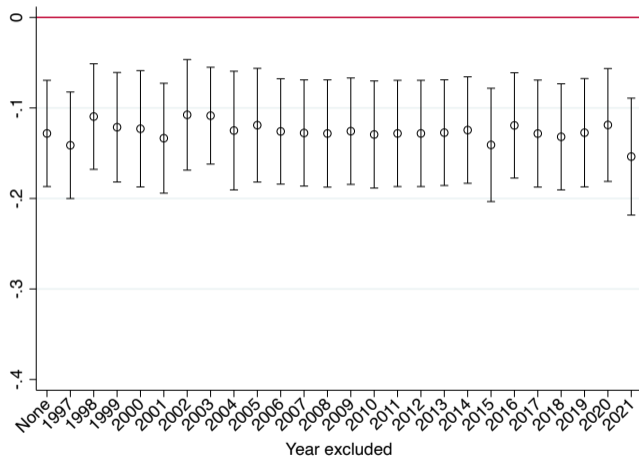
Notes: For a sake of presentation, LHS has been multiplied by 100.

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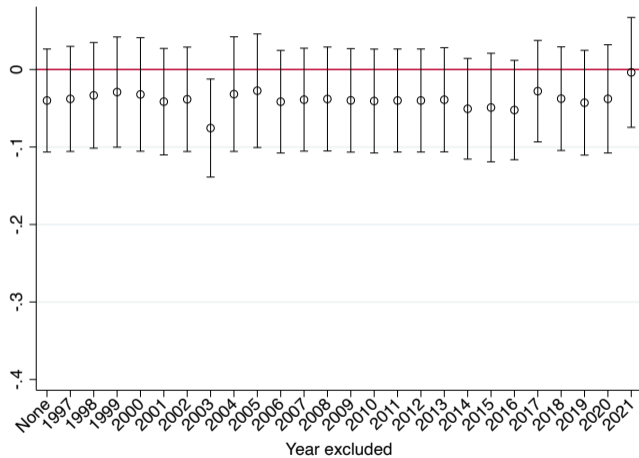
## Leave one year out - Conflict



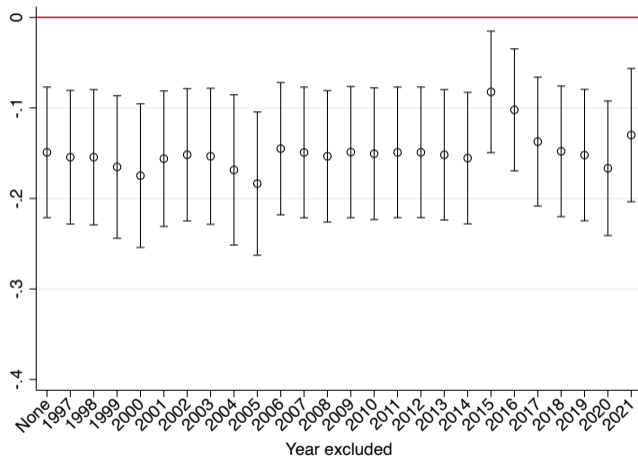
## Leave one year out - Battles



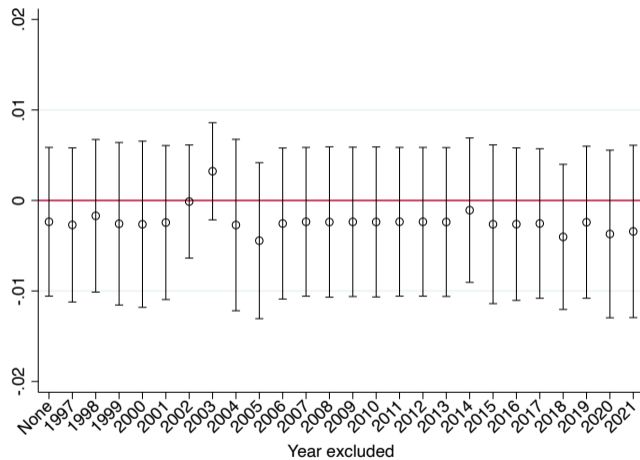
## Leave one year out - VAC



## Leave one year out - Low int.

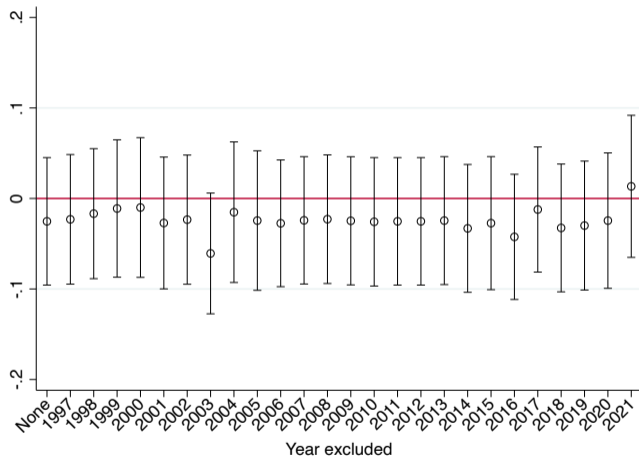


## Leave one year out - Peace

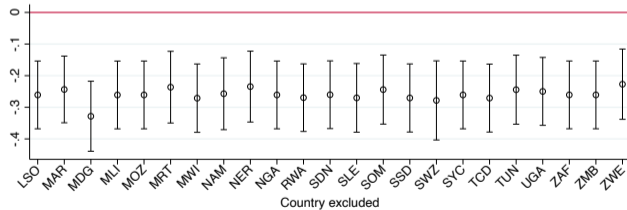
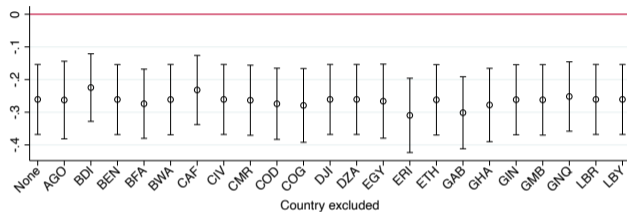




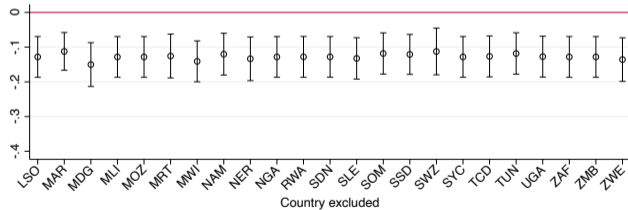
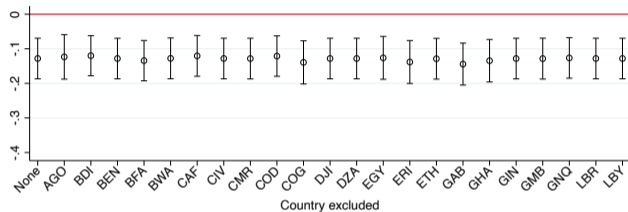
## Leave one year out - Target civilians



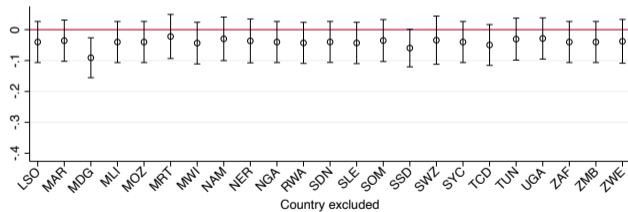
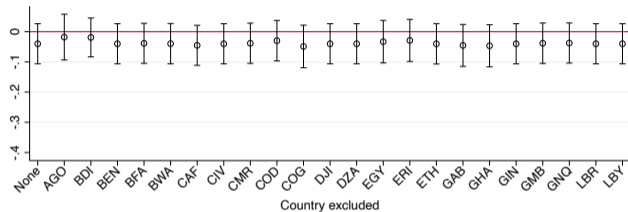
## Leave one country out - Conflict



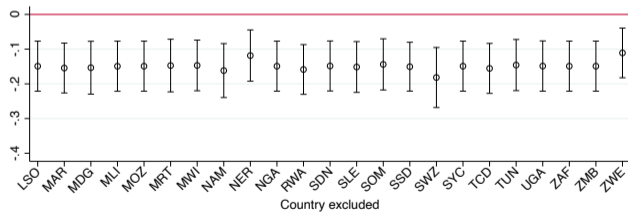
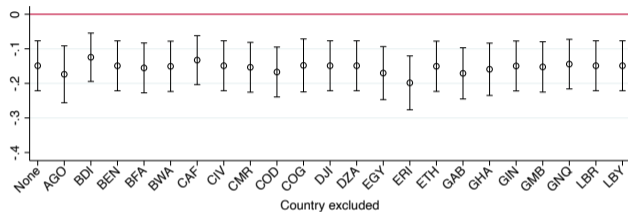
## Leave one country out - Battles



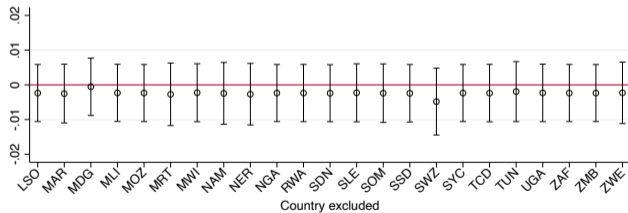
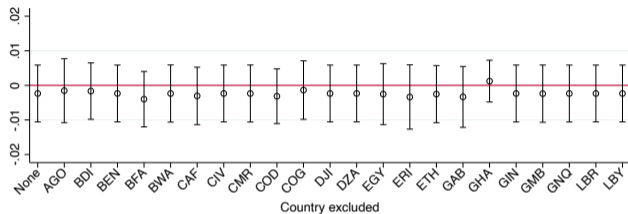
## Leave one country out - VAC



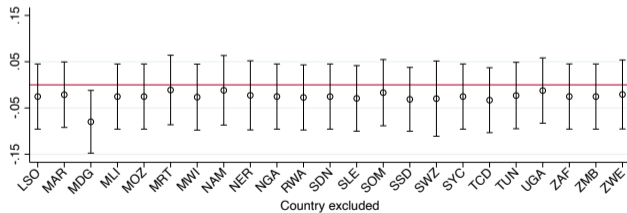
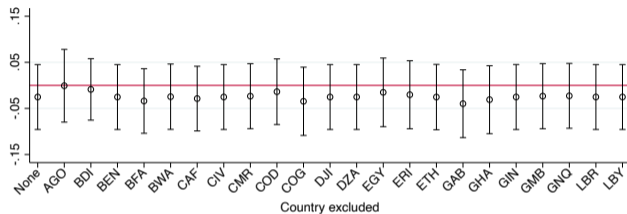
## Leave one country out - Low int.



## Leave one country out - Peace



## Leave one country out - Target civilians



## Spatial correlation - Conley (1999)

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.262*** (0.081)	-0.129*** (0.044)	-0.040 (0.044)	-0.150*** (0.052)	-0.002 (0.005)	-0.025 (0.046)
Obs.	1165780	1165780	1165780	1165780	1165780	1165780
Mean	1.21	0.35	0.40	0.49	0.01	0.46

Notes: For a sake of presentation, LHS has been multiplied by 100. The number of observations differ slightly from the main table as cells with unknown latitude and longitude had been dropped. Conley (1999) standard errors in parenthesis, allowing for spatial correlation within a 500km radius and for infinite serial correlation (1000 years).

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## Catholic leader

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post × Catholic leader	-0.259*** (0.076)	-0.126*** (0.044)	-0.031 (0.049)	-0.138*** (0.049)	-0.006 (0.007)	-0.025 (0.052)
Post × Non Catholic leader	-0.272*** (0.071)	-0.145*** (0.038)	-0.049 (0.043)	-0.152*** (0.047)	-0.001 (0.005)	-0.026 (0.046)
Obs.	1136673	1136673	1136673	1136673	1136673	1136673
R2	0.315	0.202	0.209	0.306	0.084	0.218
Mean	1.19	0.34	0.39	0.49	0.01	0.45
Post: Catholic leader ≠ Non Catholic leader	0.84	0.58	0.66	0.70	0.36	0.99
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

## Share of Christians: Country-level

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.218*** (0.068)	-0.101*** (0.037)	-0.051 (0.042)	-0.131*** (0.046)	-0.001 (0.005)	-0.033 (0.044)
Post × Sh. Christian (country)	-0.236** (0.117)	-0.153** (0.067)	0.058 (0.068)	-0.102 (0.070)	-0.006 (0.010)	0.045 (0.071)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean	1.21	0.35	0.40	0.49	0.01	0.46
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

## Share of Christians: Admin-1

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.243*** (0.073)	-0.112*** (0.040)	-0.043 (0.045)	-0.159*** (0.049)	-0.003 (0.006)	-0.042 (0.047)
Post × Sh. Christian (admin-1)	-0.026 (0.067)	-0.055 (0.041)	0.059 (0.041)	0.010 (0.041)	-0.004 (0.006)	0.049 (0.043)
Obs.	1122109	1122109	1122109	1122109	1122109	1122109
R2	0.314	0.202	0.208	0.307	0.084	0.218
Mean	1.17	0.34	0.38	0.48	0.01	0.44
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

## Place of worship

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post × No PoW	-0.282*** (0.065)	-0.147*** (0.035)	-0.044 (0.041)	-0.144*** (0.045)	-0.003 (0.005)	-0.035 (0.043)
Post × Christian PoW	-0.321** (0.139)	-0.131 (0.083)	-0.052 (0.087)	-0.207** (0.091)	-0.003 (0.008)	-0.026 (0.090)
Post × Non-Christian PoW	-0.230* (0.134)	0.008 (0.070)	-0.011 (0.082)	-0.284*** (0.089)	-0.004 (0.009)	0.021 (0.085)
Post × Multi-religious PoW	0.006 (0.212)	-0.074 (0.118)	-0.017 (0.116)	0.008 (0.150)	0.004 (0.028)	0.032 (0.128)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean	1.21	0.35	0.40	0.49	0.01	0.46
sd	10.92	5.86	6.30	6.98	0.92	6.78
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Country × Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

## Historical missions

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post	-0.265*** (0.068)	-0.127*** (0.036)	-0.043 (0.042)	-0.151*** (0.045)	-0.001 (0.005)	-0.030 (0.044)
Post × Hist. Missions	0.032 (0.129)	-0.007 (0.052)	0.022 (0.071)	0.016 (0.075)	-0.013 (0.021)	0.036 (0.072)
Obs.	1169289	1169289	1169289	1169289	1169289	1169289
R2	0.309	0.196	0.204	0.301	0.084	0.213
Mean	1.21	0.35	0.40	0.49	0.01	0.46
sd	10.92	5.86	6.30	6.98	0.92	6.78
Cell × Speech FE	Yes	Yes	Yes	Yes	Yes	Yes
Country × Week × Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors clustered at Cell and week × year level in parentheses.

## Results by Pope: Nature of events – Non conflict speeches

Dep. Var. - Dummy for:	(1) Conflict	(2) Battles	(3) VAC	(4) Low int.	(5) Peace	(6) Target civilians
Post: John Paul II	-0.001 (0.068)	0.038 (0.039)	-0.027 (0.047)	-0.007 (0.037)	0.000 (0.000)	-0.037 (0.047)
Post: Benedict XVI	-0.035 (0.043)	0.019 (0.024)	-0.012 (0.027)	-0.027 (0.030)	0.000 (0.000)	-0.019 (0.026)
Post: Francis	-0.067 (0.081)	0.011 (0.035)	-0.026 (0.039)	-0.035 (0.062)	0.005 (0.007)	-0.017 (0.048)
Obs.	898946	898946	898946	898946	898946	898946
R2	0.233	0.075	0.087	0.266	0.051	0.102
Mean	0.44	0.08	0.09	0.28	0.00	0.12
Post: John Paul II $\neq$ Benedict XVI	0.64	0.66	0.77	0.63	0.33	0.73
Post: John Paul II $\neq$ Francis	0.55	0.61	0.99	0.71	0.42	0.77
Post: Benedict XVI $\neq$ Francis	0.73	0.85	0.75	0.91	0.43	0.97

Notes: For a sake of presentation, LHS has been multiplied by 100.

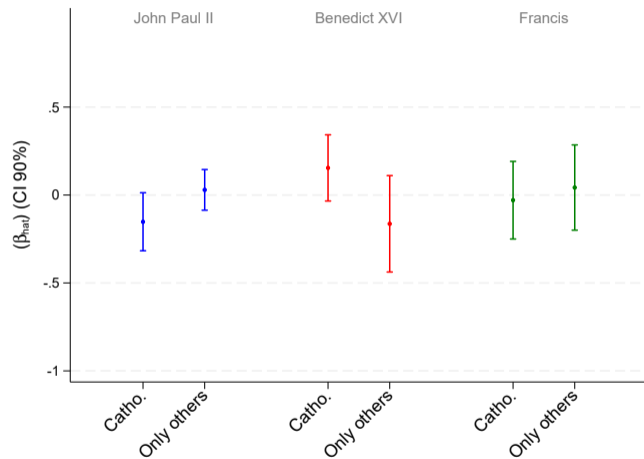
## Results by Pope: Nature of actors – Non conflict speeches

Dep. Var. - Dummy for:	(1) State Forces	(2) Rebels	(3) Pol. Militias	(4) Identity militias	(5) Rioters	(6) Civilians	(7) Externals	(8) Religious
Post: John Paul II	0.005 (0.048)	-0.029 (0.048)	-0.005 (0.032)	0.018* (0.011)	-0.007 (0.037)	-0.032 (0.047)	0.035 (0.042)	0.002 (0.002)
Post: Benedict XVI	0.046 (0.036)	0.003 (0.018)	-0.045 (0.028)	0.006 (0.007)	-0.027 (0.030)	-0.018 (0.027)	0.043 (0.027)	0.003 (0.009)
Post: Francis	-0.044 (0.056)	-0.020 (0.030)	0.068 (0.049)	-0.033* (0.019)	-0.035 (0.062)	-0.016 (0.048)	0.015 (0.050)	-0.006 (0.019)
Obs.	898946	898946	898946	898946	898946	898946	898946	898946
R2	0.137	0.093	0.093	0.057	0.266	0.107	0.128	0.049
Mean	0.18	0.06	0.10	0.03	0.28	0.12	0.13	0.01
Post: John Paul II $\neq$ Benedict XVI	0.46	0.50	0.33	0.31	0.63	0.78	0.86	0.94
Post: John Paul II $\neq$ Francis	0.52	0.88	0.23	0.02	0.71	0.81	0.78	0.67
Post: Benedict XVI $\neq$ Francis	0.17	0.49	0.04	0.06	0.91	0.97	0.63	0.68

Notes: For a sake of presentation, LHS has been multiplied by 100.

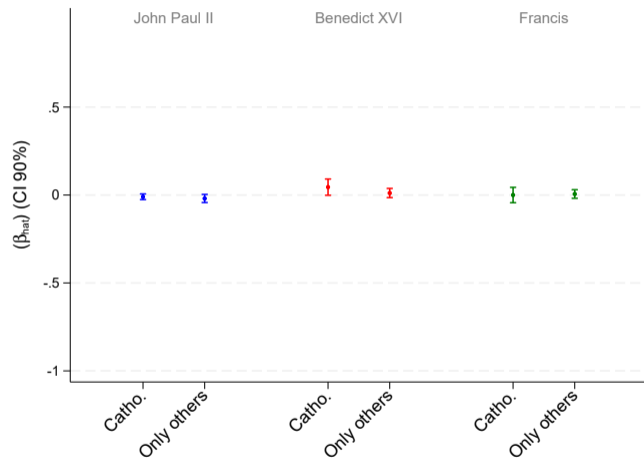
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## Religious worships – Violence against civilians

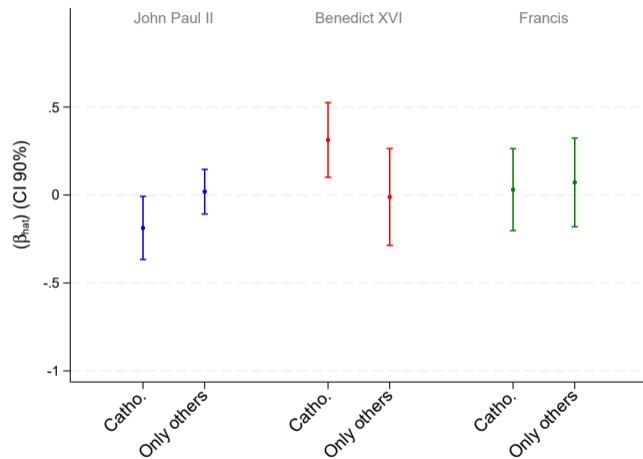




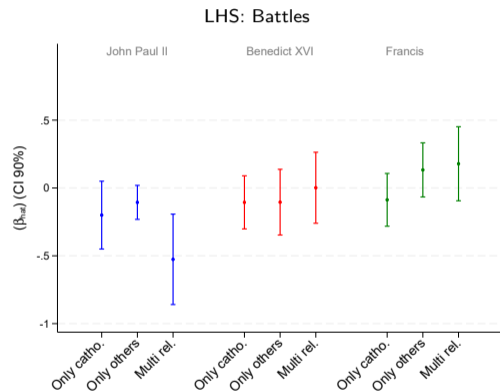
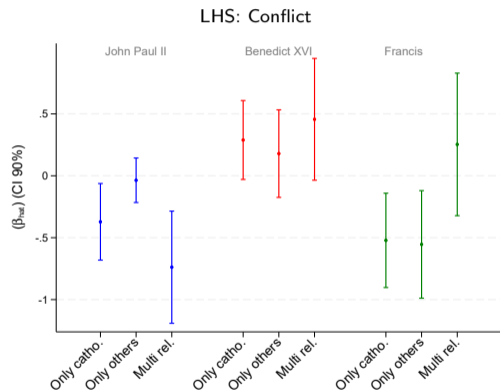
## Religious worships – Peace events



## Religious worships – Civilians as targets

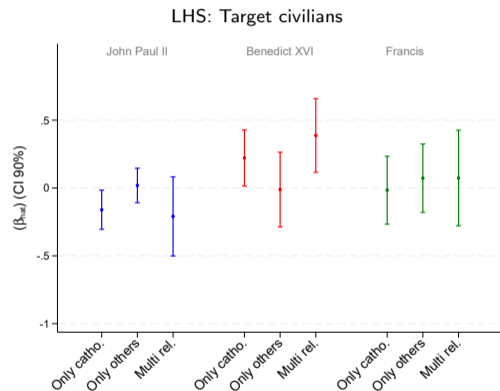
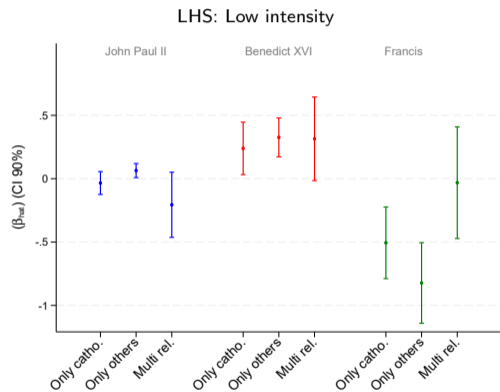


## Religious worships – Conflict & Battles



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## Religious worships – Low intensity & Target civilians



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