International Donors and Local Armed Groups: Understanding the Subnational Effect of Aid on Conflict

- Main points:
- Analysis the relationship between international aid and conflict on a subnational level (ADM1)
- Analysis of the effect that donor/location characteristics have on the relationship between aid and conflict

Donor and location characteristics

- Adaptability of donors
 - How are adaptable the donors?
 - The degree to which the projects of the donors allow alterations in location, time frame, thematic focus of aid
- Local receptivity
 - How receptive is the environment in which a project takes place?
 - Operationalized by attacks on aid workers

Main hypotheses

 Aid/conflict relationship is expected to be conditioned by the interaction of adaptability/receptivity score as follows:

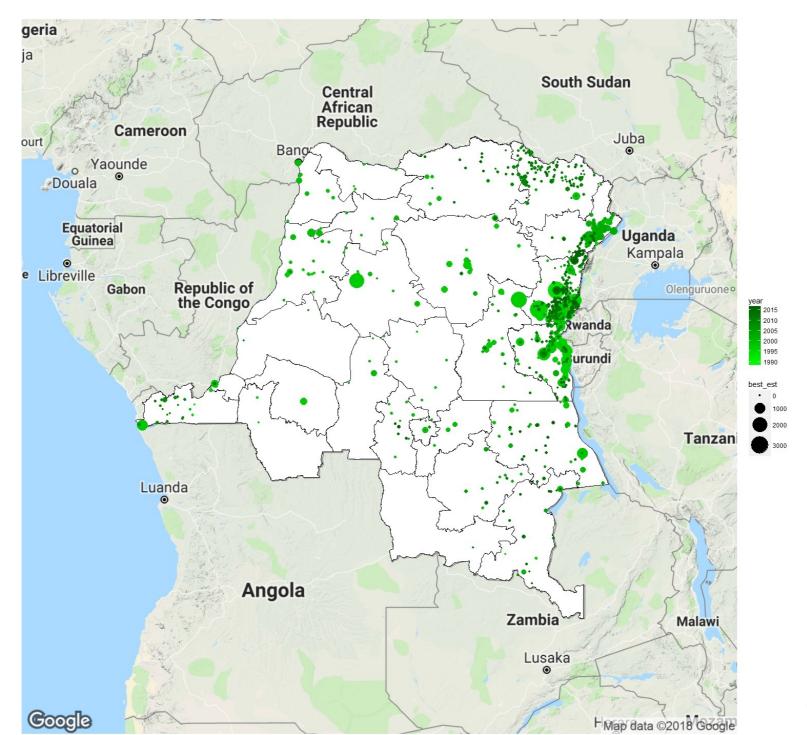
	Local environment			
DONORS		High receptivity	Low receptivity	
	High adaptability	(Strong) decrease in the level of conflict	(Moderate) increase in the level of conflict	
	Low adaptability	(Moderate) decrease in the level of conflict	(Strong) increase in the level of conflict	

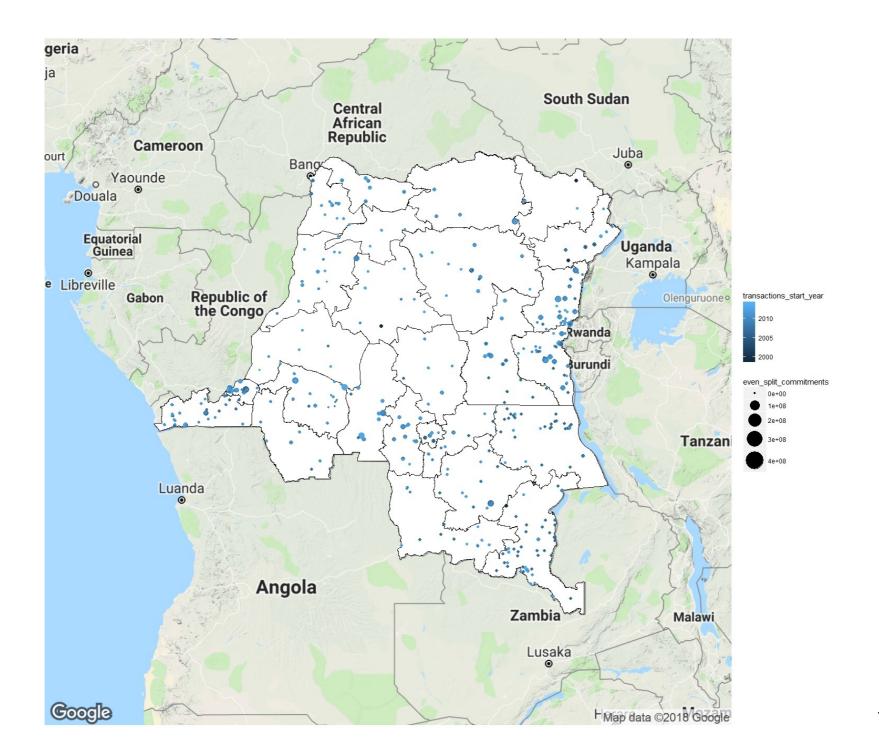
Data sources

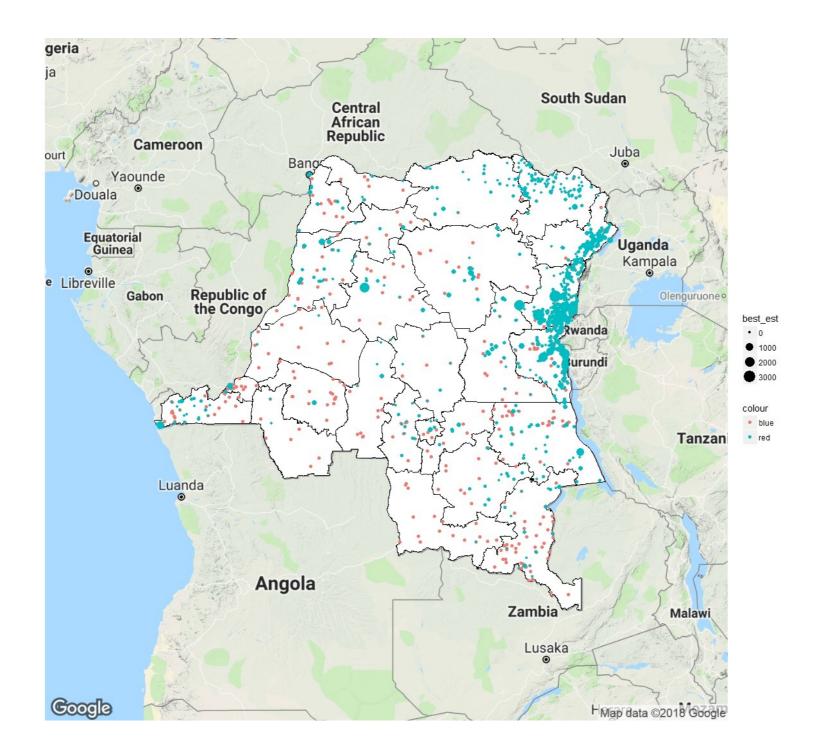
- AidData provides geocoded information on the international aid projects, with info on \$ amount, thematic focus, timeframe of the project.
- Uppsala Conflict Data Program (UCDP) maintains geocoded datasets with information on individual conflict events (location, time, parties, amount of casulaties).
- Aid Worker Security Database provides geocoded info on attacks and casualties of aid workers

Descriptive aspects of the data

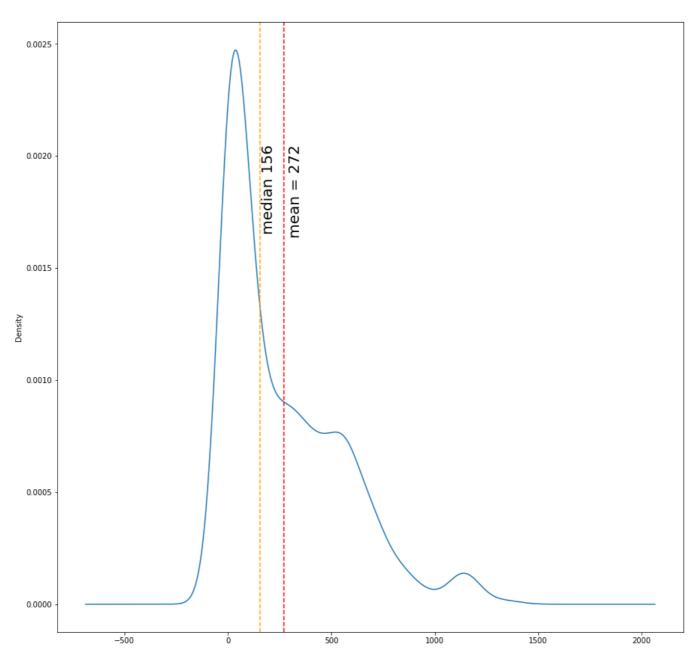
- First focus on one country DRC
- Data aggregated to (year, ADM1) level
- Aid data:
 - **-** 1999 2013
 - 2050 projects
- Conflict data:
 - 2819 conflict events







Distance to the nearest event (aid ←-→ conflict)

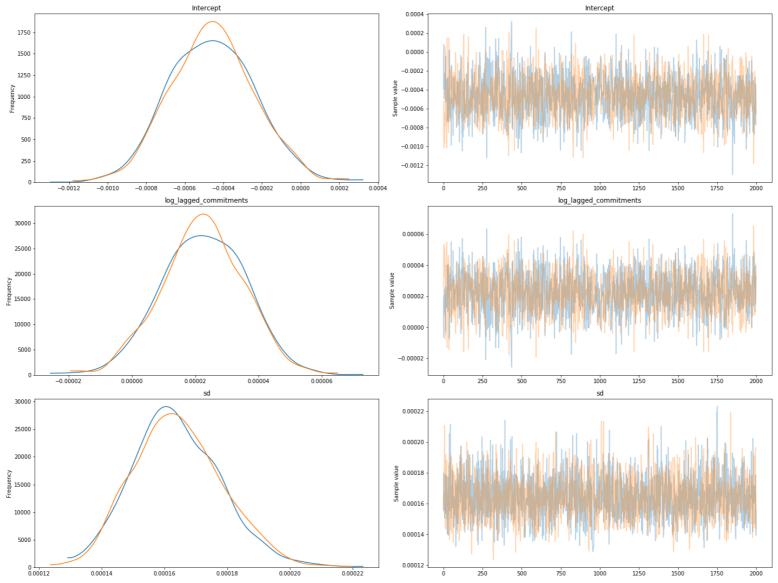


ADM1	Year	Commitments	Casualties
Nord-Kivu	2007	1.749720e+08	682
Nord-Kivu	2008	4.451359e+07	749
Nord-Kivu	2009	2.610037e+07	2694
Nord-Kivu	2010	3.252858e+07	304

Model: first-differences estimator

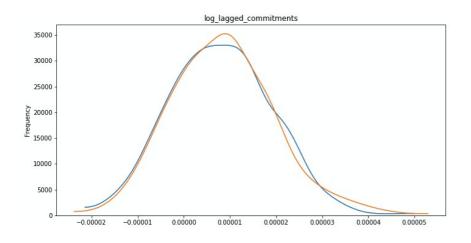
- Regression of changes in conflict levels on changes in lagged aid allocations
- Why FD? Controls for omitted variable bias in panel data
- Why lagged? Aid data refers to commitments, not actual disbursements. A delay between commitment and disbursement (and impact) is expected.
- I opted for Bayesian regression (uninformative prior) in order to inspect and assess the uncertainty (e.g. look at the distribution vs point estimate)

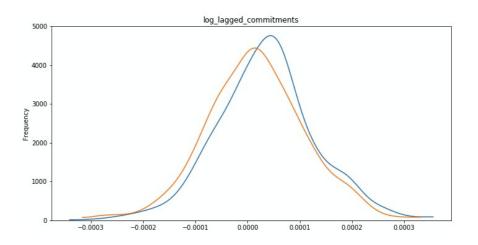
Result of regression (normalized values)

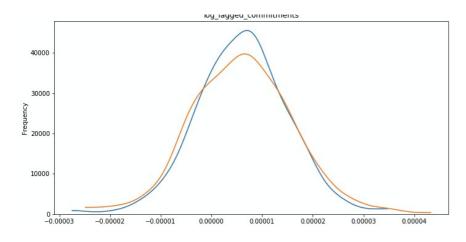


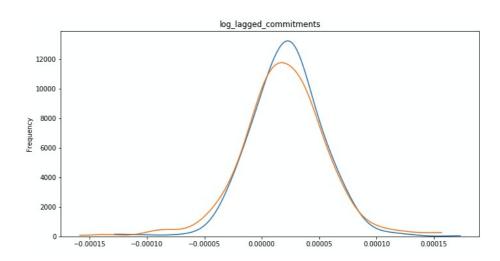
Relationship in 4 Groups

- 4 groups were derived based on donor/location specifics
- Unfortunately, there is not enough data in each group to have a significant relationship between aid and conflict
- Thus, at this point no significant difference between the groups can be established









Further steps

- Collect data on other countries
- Collect data on covariates:
 - Population density, ethnic composition
 - Economic activity (night lights)
 - Terrain, natural resources
- Match units of analysis from 4 groups based on covariates to hopefully establish differences in aid/conflict relationship between the groups