

Aid and Conflict at the Local Level

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The Role of Traditional and Emerging Donors

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Motivation

The Aid Conflict Nexus:

- USD 143 billion spent in 2016 on development aid
- China as a potentially "rogue donor" (Naím, 2007) is intensifying its donations to Africa
- Global prevalence of conflict: Syria, Afghanistan, Yemen, Philippines, Lybia...
- About 40% of global aid go to fragile and conflict affected states
- Recent research leaning towards a conflict enhancing effect of aid (Nunn and Qian, 2014; Crost et al., 2014)

Contribution

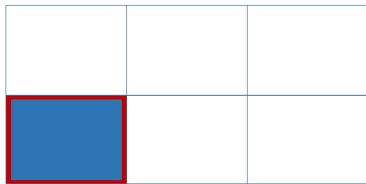
Research so far:

- Focus on US food aid (Nunn and Qian, 2014).
- Focus on few selected countries (Sexton, 2016; Child, 2016).
- Micro theories are examined with aggregated macro data (Collier and Hoeffler, 2004).

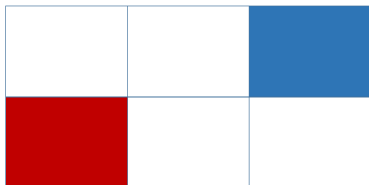
Our contribution is:

- ...analyzing the relationship between development aid and conflict at the local level.
- ...distinguishing between traditional and emerging donors.
- ...examining different mechanisms linking aid and conflict.

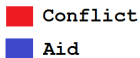
The spatial dimension



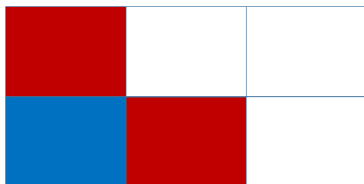
(a) Same Region



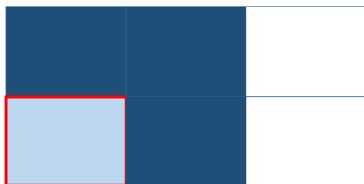
(b) Distant Region



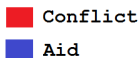
The spatial dimension



(a) Neighboring Region 1

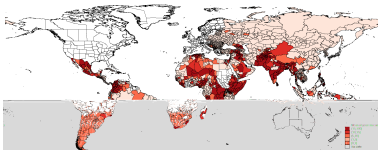


(b) Neighboring Region 2

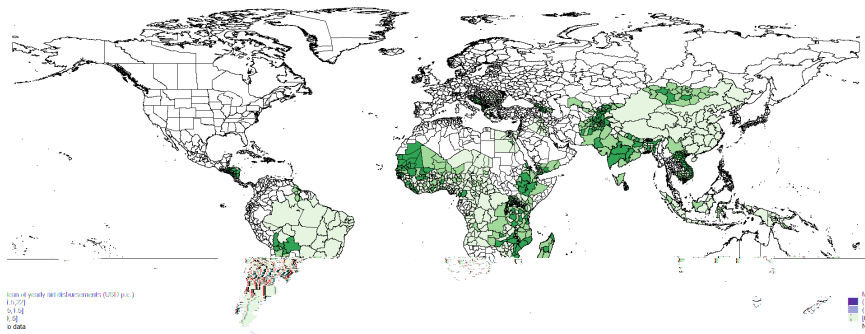


Main Geospatial Datasets

- AidData:
 - World Bank IBRD-IDA, Version 1.4.2 (Strandow et al., 2011)
 - Chinese Official Finance to Africa (Strange et al., 2017)
- UCDP Global Event Database (GED) on organized violence from Sundberg and Melander (2013)
 - Used to construct low scale (more than 5 BRD) & medium scale (more than 25 BRD) binary conflict indicator
- Control variables from PRIO Grid (Tollefsen, Strand & Buhaug, 2012)

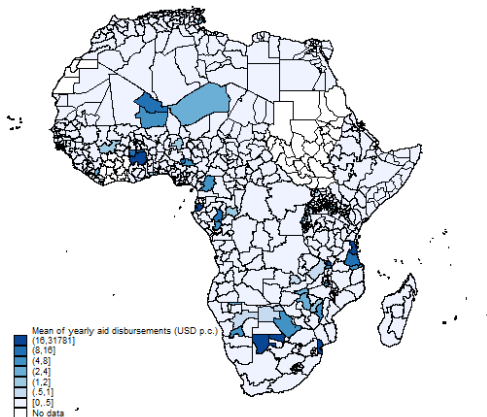


World Bank's IDA disbursements globally



Note: Yearly means of gross IDA disbursements to ADM1 regions 1995-2012.

Chinese ODA-like flows to Africa



Note: Yearly means of gross Chinese ODA-like flows to ADM1 regions 2000-12.

Empirical Approach

$$C_{ir,t} = \beta_1 A_{ir,t-1} + X_{ir,t-1} \beta_2 + \beta_3 \gamma_t + \beta_4 \lambda_r + \epsilon_{ir,t},$$

where:

- $C_{ir,t}$ is a binary conflict indicator,
- $A_{ir,t-1}$ is the log of aid disbursements,
- $X_{ir,t-1}$ is a vector of lagged control variables,
- γ_{it} refers to time and λ_r to regional fixed effects,
- further fixed effects & trends are added for robustness.
- Geo-localized data allows to control for several omitted variables via fixed effects and trends.

Results OLS - Aid & Conflict (ADM1 level)

	β/se	β/se	β/se	β/se	β/se	β/se
Panel A: World Bank						
$\ln(WBAid_{t-1})$	-0.1201*** (0.0440)	-0.1191** (0.0497)	-0.0801 (0.0498)	-0.0873 (0.0535)	-0.0476 (0.0437)	-0.0467 (0.4656)
N:	40,432	40,432	40,432	40,432	40,432	40,432
Panel B: China						
$\ln(ChineseAid_{t-2})$	-0.1027 (0.0818)	-0.0783 (0.0995)	-0.0928 (0.1146)	-0.0966 (0.1119)	-0.0444 (0.1303)	-0.0468 (0.1302)
N:	5,698	5,698	5,698	5,698	5,698	5,698
Exogeneous Controls	No	Yes	Yes	Yes	Yes	Yes
Exogeneous Controls*Time	No	Yes	Yes	Yes	Yes	Yes
Linear Regional Trends	No	No	Yes	Yes	Yes	Yes
Lagged Endogeneous Controls	No	No	No	Yes	No	Yes
Country-Year FE	No	No	No	No	Yes	Yes

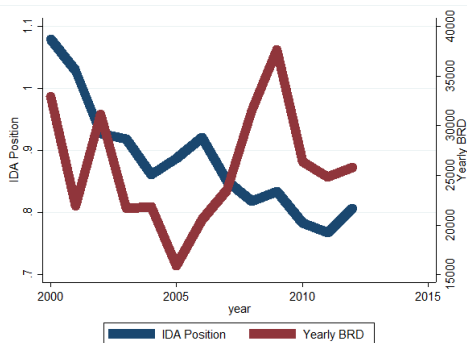
All regressions include Year & Region FE & country level time trends. Multi-way clustered standard errors by country-year and region in columns.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

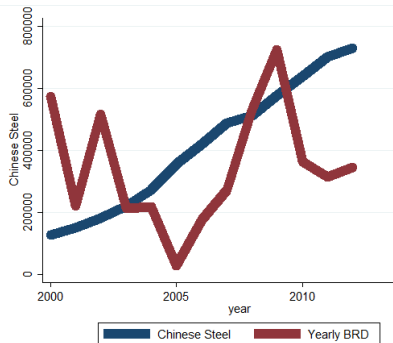
Instrumental Variable

- Difference-in-difference idea:
Subnational regions are differentially affected by exogenous changes in donor's overall budget (▶ 1st stage)
- Main identifying assumption:
Change in overall funding position is not driven by conflict in one specific subnational recipient region
- IDA's funding position:
 - Financial position over Bank's undisbursed commitments (Dreher et al., 2017)
- Chinese steel production:
 - Chinese aid as a tool to distribute oversupply in steel production (Dreher et al., 2016)

Funding Positions and Battle Related Deaths



(a) World Bank



(b) China

IV - 2nd stage - Aid & Conflict (ADM1 level)

Panel A: World Bank	β /se	β /se	β /se	β /se	β /se
$\ln(WBAid_{t-1})$	0.0948 (0.2027)	0.0343 (0.2021)	-0.1257 (0.2017)	-0.1396 (0.2014)	0.0461 (0.2009)
N	40,404	40,432	40,432	40,432	40,432
Kleibergen-Paap underidentification test p-value	0.000	0.000	0.000	0.000	0.000
Kleibergen-Paap weak identification F-statistic	233.945	250.901	174.536	178.490	412.581
Panel B: China	β /se	β /se	β /se	β /se	β /se
$\ln(ChineseAid_{t-2})$	-1.2676 (1.4386)	-0.5080 (1.3308)	-0.5348 (1.4206)	-0.3717 (1.3679)	0.3306 (0.3202)
N	5,190	5,180	5,180	5,180	5,180
Kleibergen-Paap underidentification test p-value	0.001	0.000	0.000	0.000	0.000
Kleibergen-Paap weak identification F-statistic	10.494	12.787	11.157	10.707	57.850
Exogeneous Controls	No	Yes	Yes	Yes	Yes
Exogeneous Controls*Time	No	Yes	Yes	Yes	Yes
Lagged Endogeneous Controls	No	No	No	Yes	Yes
Country-Year FE	No	No	Yes	Yes	Yes
Linear Regional Trends	No	No	No	No	Yes

All regressions include Year & Region FE & country level time trends. Multi-way clustered standard errors by country-year and region in columns.

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Conclusion & Outlook

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- Baseline results suggest no relationship between average aid and overall conflict in the same region
- Robust to: standard error adjustment, choice of administrative units, choice of conflict threshold

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Outlook

- Spatial inequality in disbursements
- Consider ethnic grievances (Alesina et al., 2016)
- Different types of aid
- Consider conflict actors more specifically

Outlook: Aid Inequality (ADM1 level)

Panel A: World Bank	β/se	β/se	β/se	β/se	β/se	β/se
$\ln(WBAid_{t-1})$	0.0123 (0.0554)	0.0422 (0.0621)	0.0547 (0.0768)	0.0558 (0.0808)	-0.0266 (0.0909)	-0.0443 (0.0875)
$\ln(WBAid_{t-1})_{adj}$	-1.0201** (0.4258)	-0.9009* (0.4784)	-0.8432 (0.6060)	-0.8452 (0.6133)	-1.0808* (0.6305)	-1.1185* (0.6386)
$\ln(WBAid_{t-1})_{ratio}$	0.0096 (0.0243)	0.0165 (0.0237)	0.0122 (0.0264)	0.0071 (0.0267)	0.0015 (0.0184)	-0.0010 (0.0203)
Exogeneous Controls	No	Yes	Yes	Yes	Yes	Yes
Exogeneous*Time Controls	No	Yes	Yes	Yes	Yes	Yes
Linear Regional Trends	No	No	Yes	Yes	Yes	Yes
Lagged Endogeneous Controls	No	No	No	Yes	No	Yes
Country-Year FE	No	No	No	No	Yes	Yes

All regressions include Year & Region FE & country level time trends. Multi-way clustered standard errors by country-year and region in columns.

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Thank you

Thank you for your attention and
your comments.

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Outlook: Actors - (ADM1 level)

	World Bank Aid b/se	World Bank Aid b/se	Chinese Aid b/se	Chinese Aid b/se
All_Gov	0.0525 (0.0886)	-0.0535 (0.0781)	-0.0485 (0.1491)	0.0575 (0.1630)
Iside_Gov	-0.0394 (0.0464)	-0.0599 (0.5001)	-0.1206 (0.0842)	-0.0810 (0.1092)
All_NonState	0.0419 (0.1196)	-0.0497 (0.1176)	0.0473 (0.1970)	0.3090 (0.2058)
NonState vs NonState	0.0584 (0.0605)	0.0597 (0.0548)	-0.0329 (0.1210)	0.1601 (0.1327)
Iside_NonState	-0.1623** (0.0779)	-0.0346 (0.0963)	-0.0928 (0.0781)	-0.0660 (0.0835)
Country-Year FE	No	Yes	No	Yes
Kleibergen-Paap underidentification test p-value	0.000	0.000	0.000	0.000
Kleibergen-Paap weak identification F-statistic	157.096	178.913	57.858	70.100

All regressions include Year & Region FE, country level time trends, regional time trends and control variables. Multi-way clustered standard errors by country-year and region in columns.

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Pre Trends - Aid & Conflict

	(1)	(2)	(3)	(4)	(5)
	β/se	β/se	β/se	β/se	β/se
Panel A: World Bank:					
$\ln(WBAid_{t+1})$	-0.0757*	-0.0779*	0.0001	0.0012	0.0475
	(0.0393)	(0.0409)	(0.0426)	(0.0471)	(0.0426)
Panel B: China					
$\ln(ChineseAid_{t+1})$	0.0195	0.0074	0.0079	0.0101	0.0364
	(0.1039)	(0.1278)	(0.1210)	(0.1303)	(0.1164)
Exogeneous Controls	No	Yes	Yes	Yes	Yes
Exogeneous Controls*Time	No	Yes	Yes	Yes	Yes
Linear Regional Trends	No	No	No	No	Yes
Lagged Endogeneous Controls	No	No	No	Yes	Yes
Country-Year FE	No	No	Yes	Yes	Yes

All regressions include Year & Region FE & country level time trends. Multi-way clustered standard errors by country-year and region in columns.

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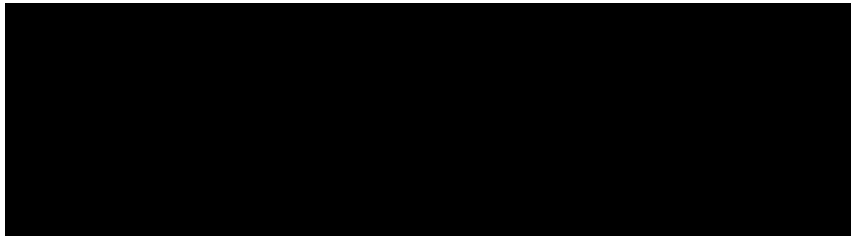
IV - 1st stages

$$A_{ir,t-1} = \beta_1 \text{Position}_{i,t-1} \times \text{Prob}_{ir,t-2} + X_{ir,t-1} \beta_2 + \gamma_{t-1} + \lambda_r + \epsilon_{ir,t-1},$$

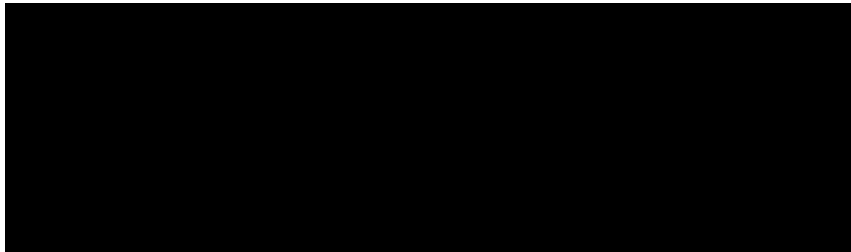
- Potentially endogenous probability is captured in second stage by $\text{Prob}_{ir,t-2}$
- Interaction of endog. variable with an exog. variable can be interpreted as exogenous (Bun et al., 2014; Nizalova and Murtazashvili, 2016)

Go back to [▶ main part](#).

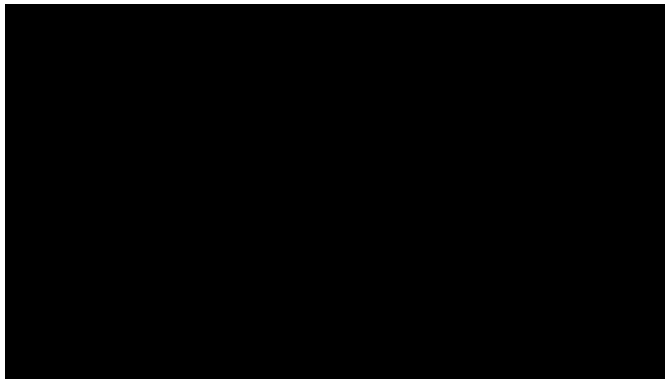
IV - 1st stage - IDA disbursements (ADM1 level)



IV - 1st stage - Chinese ODA-like flows (ADM1 level)



Reduced Form - IDA Position



Reduced Form - Chinese Steel

