Retreat or Reengage? Western Development Aid Responses to Russian Conflict Involvement in Africa

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GODAD

GODAD Working Paper No. 4, June 2026

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June 30, 2026

Abstract

Russia's renewed engagement in Africa, often mediated through paramilitary actors such as the Wagner Group, has introduced a new dimension of geopolitical competition in regions where Western development donors operate. This paper examines whether and how Western aid allocation responds to the involvement of Russian-affiliated actors in local conflicts. We combine geocoded conflict event data with subnational aid allocation data from Western bilateral donors and the World Bank to analyze donor responses across African regions. Using complementary event-study and panel fixed-effects approaches, we find that the first involvement of Russian-affiliated actors in a region is associated with a substantial decline in bilateral donor disbursements, while the World Bank increases both project presence and disbursements. Panel estimates further show that bilateral donors respond more negatively to Russian-affiliated violence than to conflict more generally, whereas the World Bank exhibits the opposite pattern.

Keywords: foreign aid; Russia; World Bank
JEL Codes: P45, F35, O12, O19, O55

1 Introduction

How do Western donors respond when a geopolitical rival establishes a military footprint in the same regions where they operate? This question has become increasingly pressing as Russian-affiliated paramilitary actors, most prominently the Wagner Group and its successor formations, have expanded their presence across Sub-Saharan Africa. The stakes extend in two directions. For Western donors, the presence of a geopolitical rival creates a genuine strategic dilemma: withdrawing from conflict-affected regions where Russian actors are active may

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reduce operational risk and avoid implicit association with instability, but it also cedes influence to a rival whose interests are explicitly antagonistic to theirs. Staying, or even increasing engagement, signals resolve and maintains a development presence, but requires operating under more difficult and politically charged conditions. For the African countries themselves, the outcome of this interplay is no less consequential. A substantial body of evidence links the presence of foreign aid to improvements in economic activity, health outcomes, institutional trust, and civic attitudes, while documenting that the withdrawal of aid or its replacement by actors with extractive and destabilizing agendas can reverse these gains. Whether Western donors retreat or dig in, and how their response evolves as geopolitical competition intensifies, may therefore shape development trajectories in affected regions for years to come. Which responses donors actually choose, whether the answer differs across institutional types, and how it changes over time, is an empirical question with consequences that extend well beyond the aid literature.

We address this question using a combination of geocoded conflict event data and subnational aid allocation data from a large set of Western donors, exploiting variation in the timing and location of Russian-affiliated actors involvement across African regions. Our analysis focuses on several complementary empirical strategies. First, we use an event study design to identify the short-run causal effect of Russian actors' first involvement in a region on subsequent donor behavior. Second, we complement this with a panel fixed-effects framework that captures longer-run patterns across all conflict-affected regions. Finally, we exploit Russia's full-scale invasion of Ukraine in February 2022 as an exogenous geopolitical shock to estimate whether, and how sharply, donor responses changed once the contest between Russia and the West became politically impossible to ignore. The invasion of Ukraine also serves an analytical purpose in this paper: it provides an exogenous shock to the political salience of Russian activity everywhere, allowing us to separate the operational drivers of donor response (conflict risk, security costs) from its geopolitical drivers (strategic competition, alliance signaling).

The focus on Russian-affiliated conflict events, rather than Russian presence more broadly, is deliberate. Wagner and its successor formations operate primarily through violence: battles, targeted killings, and strategic deployments are the observable footprint of their activity at the subnational level. The Armed Conflict Location and Event Data Project (ACLED) provides precisely this kind of georeferenced, high-frequency data, enabling us to move beyond country-level analysis and identify donor responses at the sub-national level. To capture the donor side, we draw on the Geocoded Official Development Assistance Dataset (GODAD), which provides subnational data on aid project allocation from 18 European bilateral donors, the United States, and the World Bank, allowing us to trace how aid flows shift within countries in response to changing conflict dynamics. This matters because aid allocation is itself a subnational decision: donors start, continue or discontinue projects in specific locations, and the relevant question is not whether a country hosts Russian actors, but whether a specific region does.

Our findings reveal systematic differences in how bilateral and multilateral donors respond to Russian military involvement. In the narrower and more precise event study, the entry of Russian-affiliated actors into a region is associated with a sharp decline in bilateral disbursements – project presence and commitments also fall although less precisely – consistent with an immediate operational withdrawal. The World Bank shows the opposite pattern: Russian entry is followed by higher project presence and a substantial increase in disbursements, while commitments remain largely unchanged. In the broader panel framework, bilateral donors reduce aid in response to conflict in general and even more so in response to Russian-affiliated violence, whereas the World Bank reacts little to generic conflict but expands operations in Russian-affected areas.

Following Russia's full-scale invasion of Ukraine in 2022, the patterns point to heterogeneous adjustment rather than a uniform reversal: the World Bank and AFD show relative declines in Russian-affected regions, while Sweden becomes more responsive to conflict overall without a significant differential response to Russian involvement. These varied responses suggest that the 2022 invasion may have changed the geopolitical stakes of engagement decisions differently depending on institutional structure and prior exposure.

These findings contribute to two bodies of literature. First, they add a subnational, causally identified perspective to the growing literature on geopolitical competition and donor behavior, which has so far largely relied on country-level data and correlational designs. Second, they engage with the aid and conflict literature by demonstrating that donors do not treat all conflicts equally: the identity and strategic purpose of the actors involved shapes the donor response, above and beyond the intensity of violence itself.

The paper proceeds as follows. Section 2 develops the theoretical framework and situates our contribution within the relevant literature. Section 3 describes the data and empirical strategy. Section 4 presents the main results from the event study and panel models, including heterogeneities along interesting dimensions. Section 5 examines the post-2022 period. Section 6 concludes.

2 Theoretical framework and literature

2.1 The realism–idealism frame and its limits

Classical international relations theory frames donor behavior through the contrast between realist and idealist foreign policy — the former prioritizing national interest and power, the latter deploying aid to promote democratic values and human rights (Morgenthau, 1962; Lancaster, 2008). In practice most donors combine both logics, and the balance shifts with circumstances (Boschini and Olofsgård, 2007). However, this dichotomy has limited traction in our setting: if Western donors respond to Russian military presence by increasing engagement as competitive counterbalancing, that response is itself realist. The more empirically useful distinction is not between realist and idealist actors, but between

different institutional logics — multilateral versus bilateral, technocratic versus politically accountable, long-horizon versus short-horizon — which shape how strategic calculations translate into operational aid decisions. We develop this distinction in the following subsection.

2.2 Donor behavior in conflict settings

A substantial body of literature examines how foreign aid allocation responds to conflict and political instability in recipient countries. The general finding is that donors reduce aid in conflict-affected settings, though the magnitude and direction of the response vary considerably depending on donor type, conflict intensity, and the strategic interests at stake. Bilateral aid, which is more directly tied to donor foreign policy objectives, has been shown to both escalate in response to strategic interests and contract in response to operational risk and reputational concerns (Bluhm et al., 2021; Fleck and Kilby, 2010). Multilateral donors, by contrast, tend to exhibit greater continuity of engagement, partly because their governance structures dilute the influence of any single member state's preferences, and partly because their mandates emphasize long-term development over short-term political signaling (Dreher et al., 2022).

Within this literature, a smaller but growing set of studies examines how the presence of rival donors or rival powers shapes aid allocation decisions. Fuchs et al. (2015) document strategic targeting among Western bilateral donors responding to each other's presence. Zeitz (2021) and Asmus-Bluhm et al. (2025) extend this to China and India, finding that emerging donors respond to each other's footprint in predictable ways. Blair and Roessler (2021) show that aid from competing powers, China and the United States, has distinct effects on local perceptions of legitimacy, suggesting that recipient populations, and by implication donors themselves, treat these flows as substitutes in a geopolitical competition rather than complements in a development project. Our paper extends this line of inquiry to a setting where the rival power does not primarily operate through aid at all, but through military and paramilitary activity, asking not how donors respond to a rival's development finance, but how they respond to a rival's coercive presence on the ground.

These considerations generate two expectations about donor behavior in regions where Russian-affiliated actors become active. First, bilateral donors, being directly accountable to domestic constituents and foreign ministries, have both the incentive and the institutional flexibility to adjust aid portfolios in response to geopolitical signals. When Russian-affiliated actors enter a region, two mechanisms push toward contraction: conflict intensity increases operational costs and security risk, and continued engagement in regions associated with Russian military activity may carry reputational or political costs. We therefore expect bilateral donors to exhibit an initial reduction in presence, more pronounced in disbursements, the most flexible and easy to adjust of the flows, and project counts, the most visible and politically legible metric, than in financial commitments, which are more contractually rigid. Second, the World Bank, operating under a technocratic mandate with long planning horizons and

governance structures that dilute the influence of any single member state, is more insulated from these pressures. We expect it to maintain or adjust rather than sharply reduce its engagement in Russian-affected areas.

A third expectation concerns longer-run dynamics. Immediate operational responses need not fully capture how donors react once Russian involvement becomes persistent. Over time, donors may either continue to withdraw from regions where operational risks and geopolitical competition intensify or adapt their engagement strategies as the strategic costs of disengagement become more salient. These responses are likely to differ across institutions. Bilateral donors, which are more directly exposed to political priorities and diplomatic relations, may place greater weight on operational and reputational risks, whereas multilateral institutions such as the World Bank may be better positioned to maintain or even expand engagement in strategically contested environments. We therefore expect donor responses to diverge not only between Russian-affiliated and other conflicts, but also across institutional types.

The full-scale invasion of Ukraine in February 2022 plausibly altered these dynamics by increasing the geopolitical salience of Russian influence in Africa. The direction of this effect, however, is theoretically ambiguous. For some bilateral donors, particularly those with direct strategic interests or prior exposure to Russian displacement, the invasion may have strengthened incentives to remain engaged. For others, competing fiscal and political priorities arising from the war in Ukraine may instead have reinforced incentives to scale back activities elsewhere. Although the World Bank's mandate provides greater insulation from short-term political pressures, its operations are ultimately shaped by shareholder priorities, which also shifted after 2022. We therefore examine whether the relationship between Russian involvement and donor engagement changed following the invasion, while remaining agnostic about both the direction and magnitude of these changes.

2.3 Russia's presence in Africa: strategy and observable footprint

Russia's current engagement in Africa is best understood not as development competition but as a strategy of geopolitical disruption. While the USSR pursued a more mixed approach during the Cold War, combining military support with human capital investment, educational exchanges, and the export of communist ideology (Gould-Davies, 2003; Matusevich, 2008), post-Soviet Russia abandoned these ambitions following the economic collapse of the 1990s and only began reasserting its African presence from around 2015 onward. Crucially, this re-engagement coincided with Russia's first assault on Ukraine and its initial exposure to Western sanctions and diplomatic isolation. The timing is not coincidental: Africa became, in part, a theater for demonstrating that Russia retained partners and influence beyond the reach of Western pressure. This second-wave Russian engagement is structurally different from its Soviet predecessor. It is more transactional, more opportunistic, and more narrowly focused on elite alignment and access to strategic resources (Feinstein and Pirro, 2021;

Nazarov, 2024). Russia has systematically targeted states with weak institutions, unstable governments, and governments hostile or indifferent to Western partners, including Libya, Sudan, the Central African Republic, Mali, Burkina Faso, and Madagascar. The primary instrument has been security cooperation: political support and military equipment offered to governing elites or military juntas in exchange for resource concessions, basing rights, and political backing in multilateral forums. The Wagner Group, and the paramilitary formations that succeeded it after Wagner's dissolution, served as the operational vehicle for this strategy, providing plausible deniability for the Russian state while delivering credible military capacity to allied regimes.

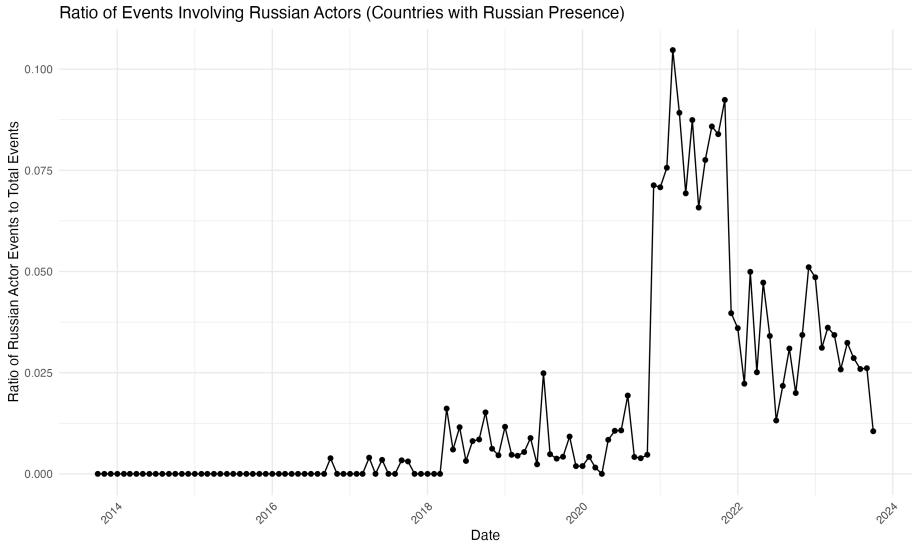
Importantly, Russian strategy explicitly targets the Western presence. In Mali and Burkina Faso, the arrival of Wagner-affiliated forces coincided with the expulsion of French troops and the termination of EU training missions. Similar events were observed in the Central African Republic. These episodes reflect a consistent pattern: the displacement or delegitimization of Western actors is an explicit component of Russian strategy in Africa, not a byproduct of it.

This has important implications not only for the interpretation of our results but also for empirical identification. Because Russian actors explicitly seek to displace Western influence, a simple negative correlation between Russian presence and aid cannot readily be interpreted as causal. Russian deployments may themselves respond to changing Western engagement, giving rise to reverse causality, while both processes may reflect common geopolitical developments. These concerns motivate our empirical strategy. We first exploit the timing of the initial Russian entry in an event-study framework, comparing treated locations with not-yet-treated areas. We then complement this with a differential distributed-lag design that compares donor responses to Russian-affiliated conflict with their responses to other conflicts of similar intensity within the same location over time.

This distinction also has important implications for interpretation. Unlike generic conflict events, which donors may treat as exogenous features of the operating environment, Russian-affiliated conflict events carry a direct competitive signal, indicating not merely elevated insecurity but the active presence of a state actor whose objectives include reducing Western influence in the region. We therefore expect donor responses to Russian-affiliated violence to differ systematically from their responses to other forms of conflict, above and beyond the intensity of violence itself.

Furthermore, the full-scale invasion of Ukraine in February 2022 plausibly sharpened these dynamics. We therefore expect donor responses to Russian-affiliated conflict to shift after 2022, as the invasion transformed engagement from a manageable operational choice into a visible geopolitical signal. The direction of this shift should vary by institutional type and prior exposure: donors directly displaced by Russian actors, and multilateral institutions whose major shareholders aligned against Russia, face the strongest incentives to maintain or increase engagement, while donors with weaker prior exposure may show little or no differential response.

Figure 1: Share of events involving Russian actors in total ACLED events over time



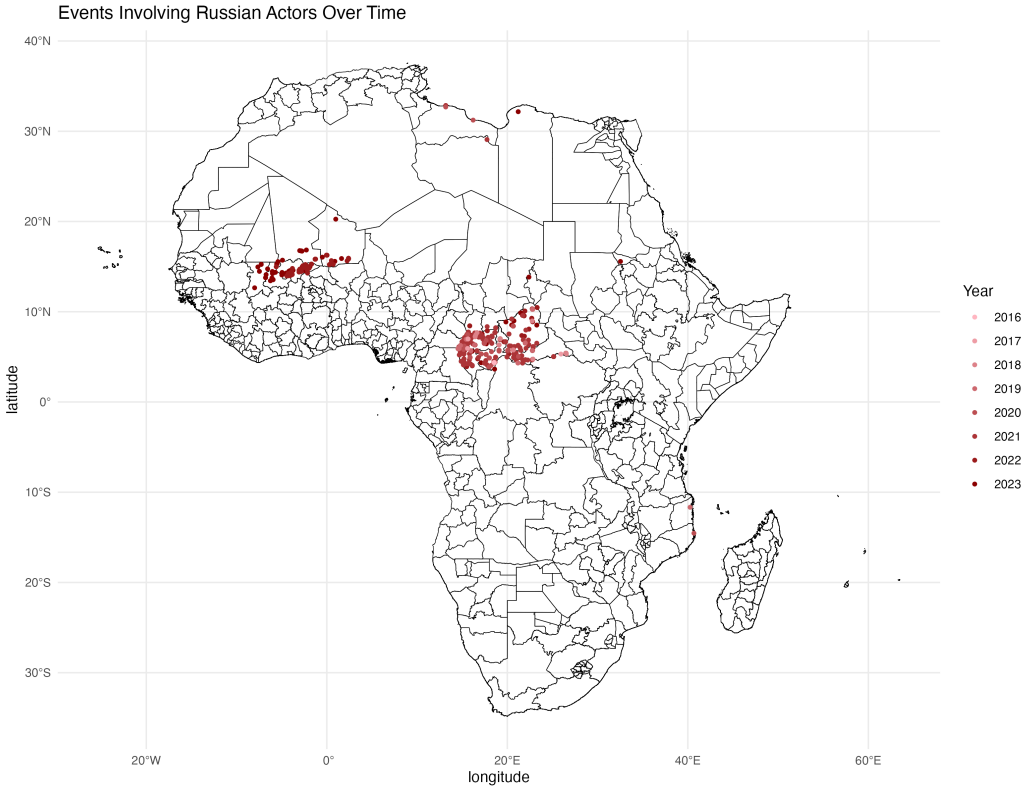
3 Data and methods

Data from the Armed Conflict Location and Event Data Project (ACLED) cover geolocalised violent incidents such as battles, political violence, riots, protests, but also strategic developments and troops deployments, including location coordinates, involved actors, dates, and fatalities. We focus on actors affiliated with the Russian government and with the Wagner Group. Figure 1 provides descriptive evidence consistent with the interpretation of Russian engagement as a strategic response to geopolitical isolation: events involving Russian-affiliated actors emerge only from around 2016 onward and increase steadily over time, peaking in 2021. This temporal pattern closely aligns with the period in which Russia re-engaged in Africa following its confrontation with the West after the initial invasion of Ukraine and the imposition of sanctions.[1]

The map in Figure 2 shows that these events are highly concentrated in space. Four countries – Central African Republic (CAR), Burkina Faso, Mali and Libya – stand for the vast majority, but occasional events happen in a handful of other countries, including Benin, Chad, the DRC, Cameroon and Egypt. Using this variation, we investigate how Western donors respond to conflict events in general and to the presence of Russian-affiliated actors in particular. To capture the presence of Western actors, this study draws on georeferenced foreign aid data from AidData.org and the Geocoded Official Development Assistance Dataset (GODAD) project (Bomprezzi et al., 2024). GODAD builds on

[1] Tables 12 and 13 in the Appendix disaggregates events by type to evaluate whether events involving Russian actors are "typical" relative to the broader distribution of event types.

Figure 2: Location of ACLED events involving Russian actors over time



the OECD's Creditor Reporting System (CRS) and offers geolocated information on aid projects from 18 European donors and the United States spanning the period from 1973 to 2020. In addition to Western bilateral donors, the dataset also incorporates geocoded aid project data from China (2000–2021), India (2007-2014), and the World Bank (1995–2023), enabling cross-donor comparisons across a wide temporal and geographic scope. Again, we focus on the period following 2014, a turning point that marked the beginning of Russia's renewed and intensified engagement in Africa. The dataset includes rich auxiliary information for each project, such as donor and recipient identities, donor agencies, aid modalities (e.g., grants, loans, or other official flows), sector and sub-sector classifications, and financial data on commitments and disbursements. This allows us to characterize baseline patterns in aid allocation and identify whether Russian involvement systematically alters donor behavior, by reducing or increasing engagement, or by shifting the type of aid within recipient regions.

Building on this, we then narrow our focus to explore whether donor behavior changed after the full-scale invasion of Ukraine in 2022 and the subsequent intensification of geopolitical tensions. In the original GODAD dataset, only two donors are present after 2022, the World Bank and the Agence Française de Développement (AFD). To expand coverage in the post-2022 period, we incorporate additional data for Sweden, for which comparable and recent project-level information was available. While data availability constrains the extension, Sweden constitutes a substantively relevant case as a major European donor with exposure to the contexts studied here.[2]

A key concern is reverse causality: Russian actors like Wagner may intentionally enter regions where Western donors are already reducing their engagement due to factors such as coups, political instability, or logistical constraints. In such cases, what might appear to be a donor response to Russian presence could instead reflect pre-existing patterns of disengagement. This dynamic risks biasing estimates of the "Russian effect" on aid allocation.

To identify the causal impact of Russian involvement, we estimate an event study using the Callaway and Sant'Anna (2021) estimator for staggered treatment timing. This method is specifically designed for settings when different units receive treatment at different points in time. In this case, the unit of analysis is 0.5-degree longitude-latitude grid cells, and the treatment is defined as the first year a cell records any Russian-affiliated event. The method compares outcomes for treated units before and after their first exposure to Russian actors in local conflicts, relative to units that are not yet exposed. Importantly, comparisons are restricted to regions that are on a similar conflict trajectory (as captured by ACLED data) but that have not yet experienced Russian involvement, thereby alleviating the selection issue, and the approach allows treatment effects to vary flexibly across cohorts and over time.[3]

[2]Sweden has also been actively engaged in European efforts to address Russian information influence in Africa, including supporting the development of strategic communication capacities within EU institutions and member-state networks.

[3]As additional robustness checks, we also implement the method using never-treated units

Formally, this method estimates the following group-time average treatment effect:

$$ATT_{g,t} = E\left[Y_t(1) - Y_t(0) \mid G = g, t \geq g\right] \tag{1}$$

which is the average causal effect at time t for the group of units first treated in period g. The estimator compares the change in outcomes over time for units treated in period g to the change in outcomes for an appropriate control group, in this case not-yet-treated units. It then aggregates these group-time specific effects using convex, interpretable weights. This approach ensures that estimates are robust to treatment effect heterogeneity and avoids the negative weighting problem that plagues standard DiD estimators in these settings.

While the event study framework provides causally identified estimates of how donor behavior changes following the involvement of Russian actors in local conflicts, it is limited in scope: it relies on variation in treatment timing, requires relatively rich data density around the treatment event, and does not work very well for individual donors. To complement this approach and broaden the analysis, we turn to a panel fixed-effects model that allows us to study aid responsiveness to Russian presence across a wider sample of regions and time periods.

This model incorporates both conflict intensity and a measure of Russian involvement, to examine whether and how the presence of Russian actors shapes donor reactions to conflict *differentially*. The panel fixed-effects estimates complement the event study by exploiting the full time-series variation in Russian presence — not only the moment of first entry — and by allowing flexible heterogeneity analysis across donor types, recipient characteristics, and project sectors. While the identification rests on within-cell variation conditional on year fixed effects and a type-matched conflict control rather than on a clean natural experiment, the differential design substantially narrows the set of potential confounders, and the consistency of results across specifications provides additional confidence in the patterns documented.

We estimate the following set of equations, a differential distributed-lag TWFE specification:

$$y_{ct} = \sum_{k=0}^{3} \beta_k^{\text{rus}} \cdot \text{Events}_{c,t-k}^{\text{rus}} + \sum_{k=0}^{3} \gamma_k \cdot \text{Events}_{c,t-k}^{\text{total}} + \alpha_c + \delta_t + \varepsilon_{ct} \tag{2}$$

where the dependent variable is either the number of projects or the commitments/disbursements in million USD,[4] by any specific donor or group of donors. c indexes 0.5-degree grid cells, t indexes years, and $\text{Events}^{\text{total}}$ is the same event type as the Russian treatment (type-matched control). The coefficients $\hat{\beta}_k^{\text{rus}}$

as control, instead. Reassuringly, the two approaches yield very similar conclusions.

[4]It must be kept in mind that location-specific amounts are estimated by dividing total amounts disbursed for a project by the number of locations corresponding to this project. This introduces noise in the data. Although we have no reason a priori to believe that resources are unevenly allocated in any systematic way towards certain regions, the results about dollar disbursements and commitments need to be interpreted with care.

capture the *differential* effect of events with Russian involvement relative to generic conflict events of the same type. The specification includes cell fixed effects, which absorb all time-invariant characteristics of each grid cell — such as geographic position, pre-existing donor relationships, and structural economic conditions — so that identification comes from changes within cells over time rather than cross-sectional differences across them. Year fixed effects control for aggregate shocks common to all cells in a given year, including global aid cycles, macroeconomic fluctuations, and geopolitical developments that affect donor behavior uniformly across the continent.[5]

We apply the inverse hyperbolic sine (IHS) transformation to all outcomes. For financial flows, IHS approximates a log transformation while remaining defined at zero and accommodating negative values (arising from project revisions), so coefficients approximate semi-elasticities across donors that differ in scale and geographic presence. For the count outcome, the zero-preservation property is the primary motivation; as a robustness check we also estimate Poisson QMLE models (Section 7.4), which treat project counts as non-negative integers and provide a more natural multiplicative specification.

4 Results

4.1 Event study - How do Western donors react to the first involvement of Russian actors in local conflicts?

Starting with the Callaway and Sant'Anna (2021) event-time estimates, we present results for: (i) Western donors in aggregate, comprising the 18 European bilateral donors plus the United States; and (ii) the World Bank (WB). The dependent variable is the number of projects implemented in a 0.5-degree grid cell.

Table 1: Summary Statistics: Eventually-Treated Cells Only

Treated Cells	193
First Treatment Year	2016
Last Treatment Year	2023
Mean Project Locations (bil.)	2.96
SD Project Locations (bil.)	7.57
Mean Project Locations (WB)	1.59
SD Project Locations (WB)	2.81

Table 2: Treated Cells by First Treatment Year

Treatment Year	N Cells
2016	2
2017	6
2018	10
2019	13
2020	24
2021	48
2022	45
2023	45

[5] As a robustness check, the specification is augmented with cell-specific linear time trends, which additionally absorb any pre-existing linear trajectory in donor activity within each cell. Results are reported in Section 7.2. Further checks include controlling for Russian event counts in neighbouring cells to address spatial spillovers (Section 7.3).

Figure 3: Russian involvement and project number over time

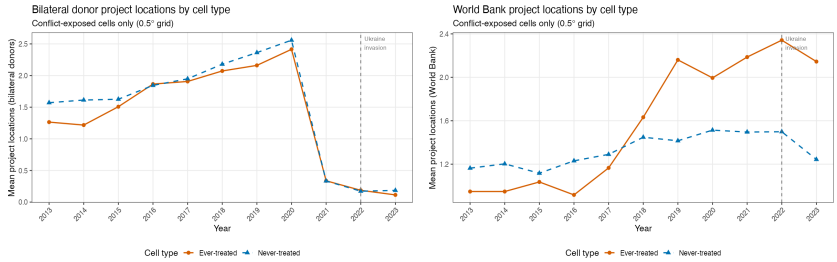


Table 3: Treated and Control Units by Event Time (pure not-yet-treated controls)

Event Time	Treated Cells	Not-Yet-Treated Controls
-3	193	175
-2	193	162
-1	193	138
+0	193	90
+1	148	45
+2	103	45
+3	55	45

Figures 4 and 5, report the estimates. Red dots show pre-treatment event-time ATT estimates (periods before first Russian involvement); blue dots show post-treatment estimates. Confidence bands are 95% uniform bands. A pre-treatment estimate indistinguishable from zero is consistent with parallel trends. The results indicate that the number of aid projects allocated by Western donors tends to decline (although not significantly) in regions where Russian actors become involved in local conflicts. In contrast, the World Bank appears to respond in the opposite direction, with a marked increase in project allocations.

Because several treatment cohorts are very small, the fully dynamic event-study estimates are noisy and in some cases weakly supported. We therefore summarize post-treatment effects using the simple aggregated ATT, also reported on the plot. To formally evaluate the parallel trends assumption, we report the p-value from a precision-weighted test of whether average pre-treatment effects differ from zero. In both cases, the test fails to reject the null hypothesis of parallel pre-trends, providing support for the validity of the identification strategy.

The number of projects is not the only outcome that responds to Russian involvement. We find similar, and if anything stronger, patterns for disbursements: the coefficient on Russian involvement is significantly negative for bilateral donors, while the corresponding World Bank coefficient is significantly positive. By contrast, commitments exhibit much weaker responses, suggesting

that donors adjust ongoing operations more readily than new funding decisions.

Figure 4: Impact of Russian involvement on project number, bilateral donors

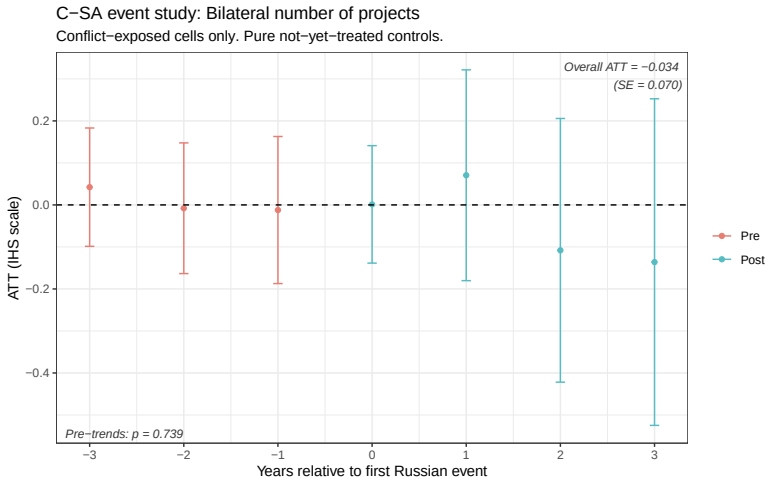
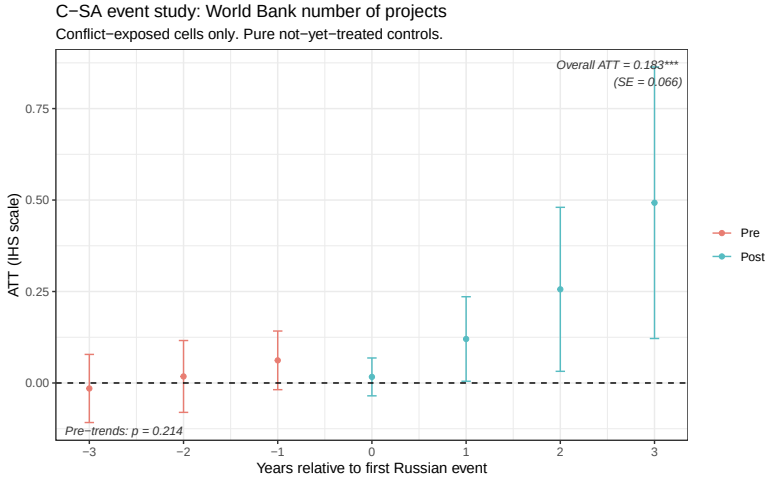


Figure 5: Impact of Russian involvement on project number, WB



Having established these aggregate patterns, the natural next question is whether they are driven by particular donors. Unfortunately, applying the same dynamic framework to individual donors is considerably more challenging, as the analysis becomes highly data-intensive. For several donors, the effects cannot be reliably estimated due to limited data or insufficient variation, and for most, any estimated responses are difficult to distinguish from statistical noise. We therefore defer the analysis of donor heterogeneity to the panel framework,

which provides greater statistical power by exploiting variation over the full sample. Section 4.3 examines differences across broader donor groups rather than individual donors.

4.2 Panel framework - Aid allocation patterns

Moving to the panel framework, we start with a simple specification of threshold response, most similar to the event study set up however not limited to the short-term reaction to first Russian entry. Table 4 compares cells experiencing conflicts with Russian involvement to cells without any violent events in odd columns, and a corresponding comparison for all conflicts in the even columns, thereby estimating donor responses to conflict with different involvements relative to peace. The dependent variable is either the number of projects or the commitments/disbursements in million USD, by all bilateral Western donors, allocated to each region.

The coefficients on *Conflict Events* are consistently negative across all outcomes, indicating that as conflict intensity rises within a given cell over time, bilateral donors scale back their presence: we observe fewer project locations, smaller commitments, and lower disbursements. The magnitude is moderate for generic conflict — each additional 10 conflict events within a cell-year is associated with approximately 1,5% fewer projects and 7–8% lower bilateral disbursements and commitments — consistent with a well-documented pattern of donor risk aversion and operational withdrawal in response to insecurity. The association is substantially larger for Russian-affiliated events: a 10-unit increase in Russian events is associated with approximately 14% fewer projects and 66–75% lower commitments and disbursements, suggesting that Russian military presence triggers a qualitatively stronger donor response than generic violence of comparable scale.[6]

Table 5 confirms a markedly different pattern for the World Bank. Unlike bilateral donors, the coefficients on *Conflict Events* are small and statistically indistinguishable from zero across outcomes in the even columns, indicating little systematic adjustment in response to conflict more broadly. By contrast, Russian-affiliated events are associated with significantly more project locations and larger disbursements, suggesting that the World Bank responds differently to Russian involvement than to generic violence. Rather than withdrawing, it appears to sustain or even expand its operational presence in areas experiencing Russian military or political engagement.

The specification of Tables 4 and 5, however, addresses a different estimand than our main models: it contrasts conflict with peace rather than isolating the Russian-specific effect conditional on conflict occurring.

[6] For IHS outcomes, coefficients can be interpreted approximately as semi-elasticities. For non-zero values, $\text{IHS}(y) \approx \log(2y)$, implying $\Delta \,\text{IHS}(y) \approx \Delta \log(y)$. The exact percentage change is $(e^{\beta} - 1) \times 100\%$, which for small β is approximately $\beta \times 100\%$.

Table 4: Aid flows from Western bilateral donors - comparison with no-conflict regions

	N projects		Disbursements		Commitments	
	Russian	Any conflict	Russian	Any conflict	Russian	Any conflict
Variables						
Conflict Events	-0.1465**	-0.0150***	-1.396**	-0.0706***	-1.089**	-0.0857***
	(0.0737)	(0.0049)	(0.5429)	(0.0251)	(0.5024)	(0.0245)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	17,886	70,642	17,886	70,642	17,886	70,642
R^2	0.64727	0.69465	0.54295	0.59328	0.42043	0.49741

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 5: Aid flows from WB - comparison with no-conflict regions

	N projects		Disbursements		Commitments	
	Russian	Any conflict	Russian	Any conflict	Russian	Any conflict
Variables						
Conflict Events	0.5250***	0.0018	2.972***	0.0023	-0.0758	-0.0284
	(0.0894)	(0.0023)	(0.5985)	(0.0187)	(0.3862)	(0.0196)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	17,886	70,642	17,886	70,642	17,886	70,642
R^2	0.75684	0.83267	0.61804	0.69140	0.24354	0.29248

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

We therefore turn to the differential distributed-lag specification in equation 2, which exploits variation across all cells and allows us to assess whether donors respond differently to Russian-related violence than to other forms of conflict. Table 6 first reports the aggregate results. Donors exhibit an overall negative response to conflict, but this pattern differs markedly for Russian involvement. For project locations and disbursements, Russian-affiliated events elicit a significantly more positive response relative to other conflicts, whereas for commitments they reinforce the overall negative response, particularly at longer lags.

Turning once more to the disaggregation between bilateral and multilateral donors, Table 7 shows that, conditional on conflict, bilateral donors do not react differently to Russian involvement in the short run, with the exception of

Table 6: Aggregate response: all donors (differential effect)

Dependent Variables:	Disbursements	Commitments	N projects
	Disbursements	Commitments	N projects
Model:	(1)	(2)	(3)
Variables			
Russian events, lag 0	0.1601***	-0.0851*	0.0187***
	(0.0381)	(0.0458)	(0.0066)
Russian events, lag 1	0.1190***	0.1884***	0.0234***
	(0.0387)	(0.0698)	(0.0063)
Russian events, lag 2	0.1563***	-0.1639**	0.0250***
	(0.0366)	(0.0685)	(0.0060)
Russian events, lag 3	-0.2727	-0.2496	-0.0402
	(0.1747)	(0.1880)	(0.0433)
Total events, lag 0	-0.0017	-0.0053***	-0.0006***
	(0.0015)	(0.0018)	(0.0002)
Total events, lag 1	-0.0022	-0.0074**	-0.0011***
	(0.0021)	(0.0031)	(0.0004)
Total events, lag 2	-0.0043	-0.0110***	-0.0015***
	(0.0029)	(0.0038)	(0.0004)
Total events, lag 3	-0.0043***	-0.0116***	-0.0016***
	(0.0016)	(0.0033)	(0.0004)
Fixed-effects			
cell_id	Yes	Yes	Yes
year	Yes	Yes	Yes
Fit statistics			
Observations	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

disbursements — the most operationally flexible instrument — which respond negatively at the contemporaneous period (lag 0). Effects on commitments and project locations emerge only after a three-year delay, at which point all three outcomes show large and statistically significant negative associations. This pattern is consistent with a gradual adjustment process: the contractual rigidity of committed and project-level aid limits immediate reallocation, but Russian entrenchment over time prompts a broader retrenchment.

Table 7: Aid flows from Western bilateral donors

	N projects	Disbursements	Commitments
Russian events, lag 0	-0.0071	-0.0678*	-0.0507
	(0.0064)	(0.0367)	(0.0347)
Russian events, lag 1	0.0043	-0.0052	-0.0017
	(0.0042)	(0.0283)	(0.0331)
Russian events, lag 2	0.0032	-0.0070	0.0296
	(0.0074)	(0.0417)	(0.0379)
Russian events, lag 3	-0.0797**	-0.6834***	-0.6762***
	(0.0336)	(0.2188)	(0.2275)
Total events, lag 0	-0.0006**	-0.0007	-0.0031*
	(0.0003)	(0.0025)	(0.0018)
Total events, lag 1	-0.0021***	-0.0135***	-0.0122***
	(0.0005)	(0.0033)	(0.0031)
Total events, lag 2	-0.0019***	-0.0098***	-0.0087**
	(0.0005)	(0.0032)	(0.0034)
Total events, lag 3	-0.0025***	-0.0111***	-0.0150***
	(0.0005)	(0.0026)	(0.0035)
Fixed-effects			
cell_id	Yes	Yes	Yes
year	Yes	Yes	Yes
Fit statistics			
Observations	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

The World Bank exhibits a distinct pattern in its response to conflict. Already Figure 5 and Table 5 revealed a differentially positive reaction following first Russian involvement, with effects growing in magnitude in the years after treatment. This differential response to Russian involvement is confirmed within conflict areas in Table 8: controlling for overall conflict intensity, Russian events carry an additional positive effect on World Bank project numbers and disbursements. The pattern differs, however, for commitments, where the World Bank—like bilateral donors—shows a significantly more negative re-

sponse to Russian involvement, suggesting greater caution when making new funding commitments despite maintaining or expanding implementation of existing operations. Together, these findings suggest that the World Bank treats Russian military and political engagement as a signal to sustain or even scale up its operational presence rather than to withdraw, a pattern consistent with an effort to preserve multilateral development engagement in strategically contested areas. This stands in sharp contrast to bilateral Western donors, whose response to both conflict generally and Russian-affiliated conflict specifically is characterized by reductions in aid flows, pointing to fundamentally different strategies between multilateral and bilateral development finance when geopolitical competition intensifies.

Table 8: Aid flows from the World Bank

	N projects	Disbursements	Commitments
Russian events, lag 0	0.0244***	0.1421***	-0.0936**
	(0.0053)	(0.0421)	(0.0407)
Russian events, lag 1	0.0246***	0.1108***	0.1416**
	(0.0068)	(0.0341)	(0.0721)
Russian events, lag 2	0.0256***	0.1473***	-0.2511***
	(0.0065)	(0.0307)	(0.0741)
Russian events, lag 3	0.0007	-0.1715	0.1375
	(0.0268)	(0.1595)	(0.1628)
Total events, lag 0	-0.0003	-0.0030	-0.0051**
	(0.0002)	(0.0019)	(0.0021)
Total events, lag 1	3.29×10^{-5}	0.0027	-0.0051
	(0.0003)	(0.0024)	(0.0038)
Total events, lag 2	-0.0002	-0.0006	-0.0047
	(0.0002)	(0.0014)	(0.0036)
Total, lag 3	0.0004	0.0029	-0.0031
	(0.0003)	(0.0019)	(0.0029)
Fixed-effects			
cell_id	Yes	Yes	Yes
year	Yes	Yes	Yes
Fit statistics			
Observations	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Why do bilateral and multilateral donors behave differently? This diver-

gence between bilateral and multilateral behavior likely reflects fundamental differences in mandate, governance structure, and operational flexibility. Multilateral institutions like the World Bank operate under a development-focused, technocratic mandate with long planning horizons and a strong emphasis on project continuity. Their governance involves multiple shareholder countries, which can dilute the influence of any single actor's foreign policy preferences, making responses to security threats more programmatic than political. In contrast, bilateral donors are more directly accountable to domestic constituencies and foreign policy objectives, giving them greater latitude to recalibrate aid portfolios in response to evolving conflict dynamics, including the presence of Wagner forces. As a result, bilateral donors may use reductions in project numbers or shifts in sectoral focus as tools for signaling disapproval or managing risk. This helps explain why multilateral engagement in Russia-affected areas appears more consistent and delivery-focused, possibly even intentionally compensating for other donors' retrenchment, while bilateral patterns are more heterogeneous and potentially more politically responsive.

4.3 Donor heterogeneity

While the aggregate patterns shown in Table 7 provide a useful overview, they mask substantial variation across individual donors.

Table 9 disaggregates the disbursement response by donor type.[7] This outcome was significant in the aggregate specification in Table 7, and the disaggregated results reveal meaningful heterogeneity across donors. The table distinguishes between strategic bilateral donors (the United States, France, the United Kingdom, and Germany)[8], Nordic donors (Sweden, Norway, Finland, Denmark, and Iceland), and other European donors (Italy, Spain, Belgium, the Netherlands, Austria, Switzerland, Portugal, Ireland, Luxembourg, and Greece). The World Bank is reported again separately as a benchmark.

The table shows that the aggregate negative response documented above is driven primarily by the group of strategic donors, while the responses of other donor groups are smaller and, in particular for the Nordic donors, generally muted. The results for commitments reinforce this pattern: they reveal a significantly negative response among strategic donors even for this outcome, that was obscured in the aggregate specification reported in Table 7. By contrast, the number of project locations exhibits weaker responses overall, suggesting that donors may seek to maintain their geographic presence while adjusting the scale of financial support. Correspondingly, heterogeneity across donor types is also less pronounced for this outcome. At the same time, because disbursement and commitment amounts are allocated across project locations using an approximation, project counts arguably provide the most reliable measure of

[7] Appendix 7.5 reports coefficients for individual donors.

[8] These countries are grouped together because they are major NATO bilateral donors with active security interests in Africa. The label "strategic" should be interpreted as descriptive rather than theory-driven, reflecting the pattern observed in the estimates rather than an ex ante classification.

Table 9: Donor groups: disbursements (differential effect)

Dependent Variable:	Disbursements			
	World Bank	Strategic bilateral	Nordic	Other European
Model:	(1)	(2)	(3)	(4)
Variables				
Russian events, lag 0	0.1421***	-0.0677*	-0.0174	-0.0505
	(0.0421)	(0.0386)	(0.0212)	(0.0457)
Russian events, lag 1	0.1108***	-0.0291	0.0215	0.0311
	(0.0341)	(0.0247)	(0.0168)	(0.0283)
Russian events, lag 2	0.1473***	-0.0265	-0.0055	0.0521
	(0.0307)	(0.0370)	(0.0183)	(0.0361)
Russian events, lag 3	-0.1715	-0.5622**	-0.1967	-0.5255**
	(0.1595)	(0.2395)	(0.1585)	(0.2485)
Total events, lag 0	-0.0030	-0.0057***	-0.0006	-0.0024
	(0.0019)	(0.0019)	(0.0014)	(0.0019)
Total events, lag 1	0.0027	-0.0137***	0.0004	-0.0128***
	(0.0024)	(0.0030)	(0.0014)	(0.0028)
Total events, lag 2	-0.0006	-0.0113***	-0.0013	-0.0059*
	(0.0014)	(0.0027)	(0.0016)	(0.0034)
Total events, lag 3	0.0029	-0.0137***	0.0017	-0.0160***
	(0.0019)	(0.0034)	(0.0021)	(0.0030)
Fixed-effects				
cell_id	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes
Fit statistics				
Observations	51,376	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

donor behavior. The stronger heterogeneity observed for financial flows should therefore be interpreted with appropriate caution.

4.4 Recipient heterogeneity

Geopolitical competition may be more intense in countries that remain unaligned than in those where historical ties have already determined allegiance. To test this, we split the sample by whether the dominant country in each grid cell had historical ties to the Soviet Union during the Cold War.[9]

Table 4.4 shows that the response to general conflict is similar in magnitude across the two subsamples, though estimates for the Soviet-legacy subsample lose precision due to the smaller sample size. More substantively, the differential increase in aid flows associated with Russian involvement in Table 6 is now shown to be concentrated in countries without historical Soviet ties. This suggests that donor responses are strongest where the geopolitical competition is still active, in countries that were not historically aligned with Russia but are perceived as more contested.

[9]Soviet-era countries are defined as: Angola, Mozambique, Ethiopia, Guinea, Mali, Republic of Congo, Tanzania, Zambia, Zimbabwe, Libya, Algeria, Sudan, Guinea-Bissau, Benin, Madagascar, Burkina Faso, Somalia, Cape Verde, and São Tomé and Príncipe.

Table 10: Soviet-era heterogeneity: sample split

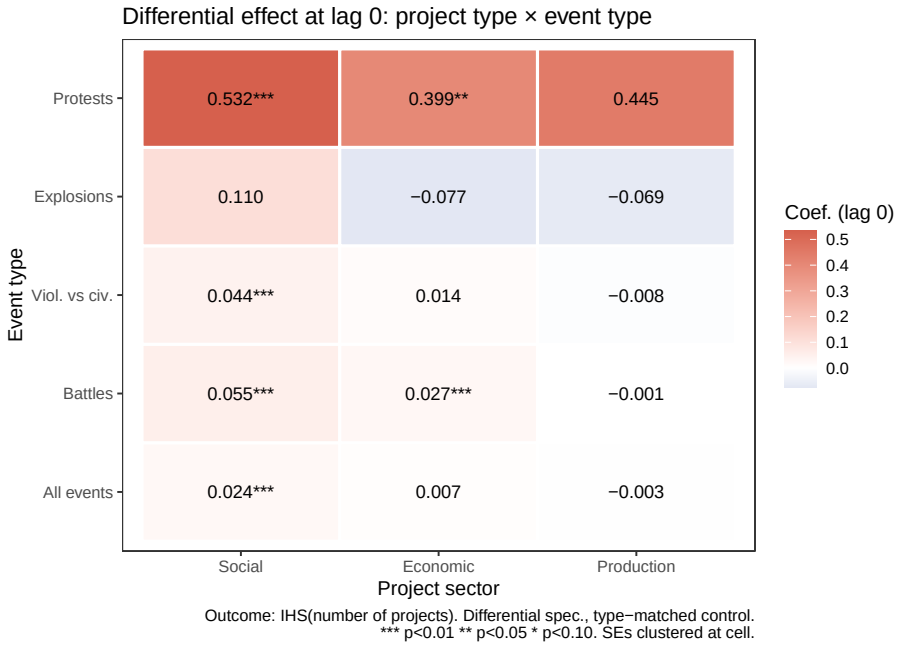
	Soviet-era ties			No Soviet-era ties		
Dependent Variables:	Disbursements	Commitments	N projects	Disbursements	Commitments	N projects
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Russian events, lag 0	0.0067	-0.0962	-0.0009	0.2430***	-0.0833	0.0261***
	(0.0923)	(0.1024)	(0.0138)	(0.0459)	(0.0539)	(0.0063)
Russian events, lag 1	-0.3651	-0.1739	-0.0061	0.1771***	0.2153***	0.0276***
	(0.2796)	(0.1705)	(0.0134)	(0.0464)	(0.0752)	(0.0075)
Russian events, lag 2	-0.5693	0.9599	-0.1382	0.1686***	-0.1827***	0.0284***
	(0.6161)	(1.296)	(0.1278)	(0.0391)	(0.0672)	(0.0067)
Russian events, lag 3	-0.5444	-2.142**	0.0200	-0.3697*	-0.1927	-0.0522
	(0.7429)	(0.9562)	(0.1103)	(0.2027)	(0.2022)	(0.0452)
Total events, lag 0	-0.0009	-0.0064**	-0.0007**	-0.0049	-0.0017	-0.0007
	(0.0020)	(0.0025)	(0.0003)	(0.0030)	(0.0043)	(0.0004)
Total events, lag 1	0.0035	-0.0012	0.0004	-0.0049*	-0.0151***	-0.0021***
	(0.0026)	(0.0033)	(0.0004)	(0.0030)	(0.0046)	(0.0005)
Total events, lag 2	-0.0037	-0.0064	-0.0012*	-0.0036*	-0.0144***	-0.0016***
	(0.0052)	(0.0057)	(0.0006)	(0.0021)	(0.0054)	(0.0005)
Total events, lag 3	-0.0045	-0.0075*	-0.0013**	-0.0033	-0.0123***	-0.0018***
	(0.0028)	(0.0042)	(0.0006)	(0.0022)	(0.0035)	(0.0004)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	18,000	18,000	18,000	33,376	33,376	33,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

4.5 Event type heterogeneity

So far the analysis has treated donor flows as a single aggregate. Disaggregating by project sector and event type allows us to ask whether Russian influence operates through specific channels — for instance, whether security-related events shift aid toward social infrastructure rather than economic production, or whether the effect is driven by a particular type of violence. Each cell in the heatmap shows the lag-0 differential coefficient for a given sector–event-type combination: a red cell indicates that Russian events are associated with more donor activity in that sector than a generic event of the same type would predict, while a blue cell indicates the reverse. Significance stars follow conventional thresholds ($p < 0.01$, $p < 0.05$, $p < 0.10$).

Figure 6: Number of projects



Some clear patterns emerge. The social sector (health, education, governance) consistently attracts a positive differential response to Russian events, with statistically significant coefficients across nearly all event types for both disbursements and project counts. The production sector, by contrast, shows negative or near-zero differentials throughout, and for disbursements and commitments the negative effect is statistically significant — suggesting that Russian military activity is associated with a contraction in productive-sector aid relative to what comparable non-Russian violence would predict, plausibly because infrastructure and extractive projects are harder to sustain in areas with active Russian operations.

The largest differentials, for both disbursements and project counts, are associated with protests rather than direct military violence. Since Russian-affiliated protests in ACLED frequently include orchestrated demonstrations — anti-French rallies, pro-Wagner mobilisations — this may reflect donors responding most strongly precisely when Russian influence operations are most visible and politically charged.

The pattern for commitments is noisier and less conclusive, consistent with commitments being a more forward-looking flow than disbursements.

Figure 7: Disbursements

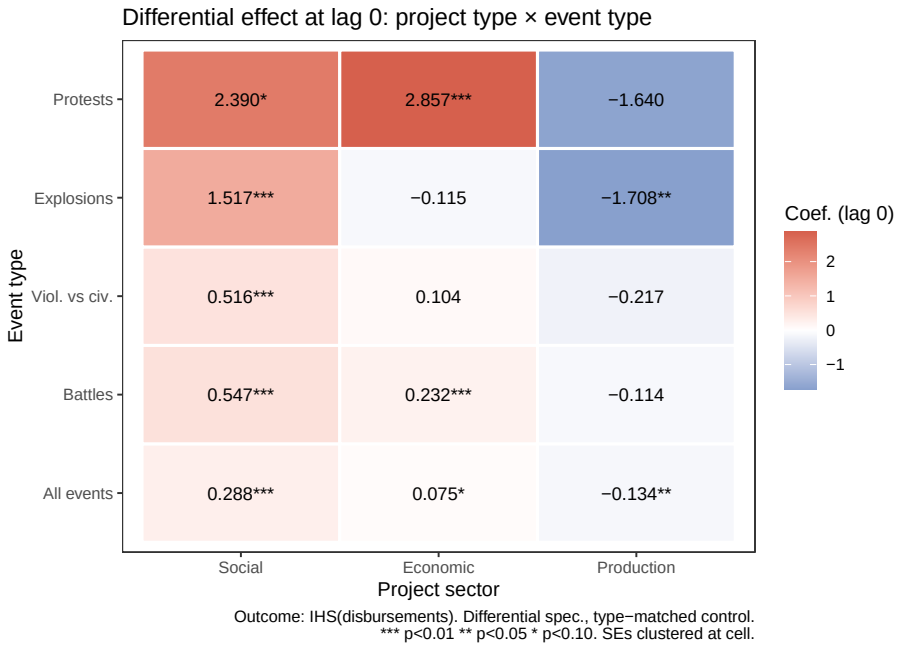
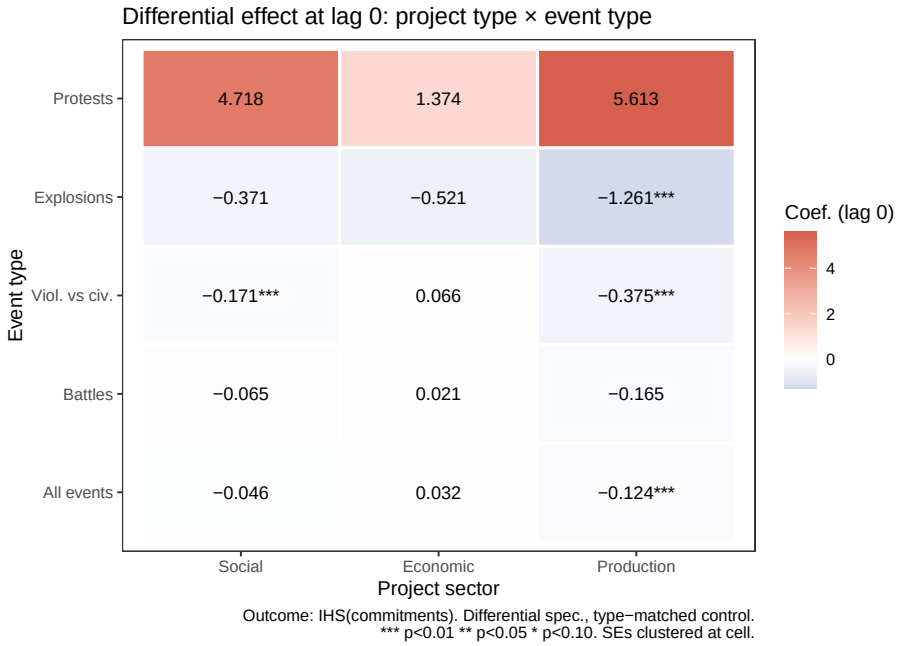


Figure 8: Commitments



5 Response to the Russian invasion of Ukraine

For a few donors, GODAD provides data extending to 2023, enabling us to examine whether their behavior shifted following the full-scale invasion of Ukraine in 2022 and the subsequent escalation of geopolitical tensions. Importantly, the differential change in aid allocation between regions with and without Russian involvement, before and after 2022, can be interpreted as causally identified, as the geopolitical shock of 2022 is plausibly exogenous to aid dynamics at the subnational level in African countries.

We therefore estimate a simplified version of equation 2, adding an interaction with the post-2022 indicator to capture whether donors' responses to Russian involvement changed after the full-scale invasion. Because the post-2022 period is short in the data, the specification includes only a single lag rather than the full distributed-lag structure:

$$y_{ct} = \alpha_c + \lambda_t + \beta_1 Events^{rus}_{c,t-1} + \beta_2 Events^{total}_{c,t-1} + \beta_3 Events^{rus}_{c,t-1} \cdot \mathbf{1}[t \geq 2022] + \beta_4 Events^{total}_{c,t-1} \cdot \mathbf{1}[t \geq 2022] + \varepsilon_{ct}. \tag{3}$$

where the dependent variable is like before, either disbursements or commitments in million USD, or the number of projects or the commitments, allocated

to cell c in year t. As before, the variable $Events^{total}$ measures the number of total ACLED events reported in the same region, and $Events^{rus}$ is the number of events involving Russia-related actors, both lagged one year.

Areas with prior Russian involvement still attract significantly higher aid flows relative to other conflict areas, but this differential declines after 2022, particularly for disbursements and project counts. Disaggregating by donor reveals that, as the pre-2022 premium, also the post-2022 reversal is driven almost entirely by the World Bank, which significantly increases disbursements and project locations in Russian-affected areas before 2022 and significantly reduces them afterwards; the effect on commitments is not statistically distinguishable from zero in either period, suggesting the WB adjustment operates mainly through active spending rather than forward planning.

Sweden shows no differential response to Russian events in either period. Instead, Sweden increases flows to conflict-affected areas generally after 2022 — the post-2022 interaction on total conflict events is positive and significant across all three outcomes — consistent with a broader humanitarian scaling-up rather than a geopolitically targeted response.

France presents the opposite pattern: it reduces flows to conflict areas across the board after 2022, with the total conflict interaction negative and highly significant for disbursements, commitments, and project counts. Within that general withdrawal, disbursements decline differentially more in Russian-affected areas (the Russian interaction is significant at the 10% level), suggesting that France's post-2022 retrenchment in Africa — consistent with its military and diplomatic losses in the Sahel — is most pronounced precisely where Russian influence is active.

Table 11: Post-invasion structural break: World Bank, Sweden, and France

	Disbursements	Commitments	N projects
Russian events, lag 1	0.7748***	0.3153*	0.1167***
	(0.2557)	(0.1902)	(0.0352)
Total events, lag 1	-0.0012	-0.0019	-7.65×10^{-5}
	(0.0022)	(0.0031)	(0.0003)
Russian events, lag 1 × post-2022	-0.5624**	-0.2210	-0.0741***
	(0.2196)	(0.1976)	(0.0275)
Total events, lag 1 × post-2022	0.0008	-0.0148**	-0.0003
	(0.0023)	(0.0061)	(0.0005)
Fixed-effects			
cell_id	Yes	Yes	Yes
year	Yes	Yes	Yes
Fit statistics			
Observations	64,220	64,220	64,220

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

6 Conclusion

This paper examines how Western development donors respond when a geopolitical rival establishes a military footprint in the regions where they operate. Using geocoded conflict event data from ACLED and subnational aid allocation data from the GODAD dataset, we study donor responses to the involvement of Russian-affiliated actors, primarily the Wagner Group and its successor formations, in local conflicts across Sub-Saharan Africa. Our empirical strategy combines an event study design exploiting staggered first exposure to Russian-affiliated violence, a panel fixed-effects framework capturing longer-run allocation patterns, and a difference-in-difference specification leveraging Russia's full-scale invasion of Ukraine in February 2022 as an exogenous geopolitical shock. The results reveal a three-layered pattern of donor adjustment that evolves across time horizons and institutional types.

In the years following the first Russian involvement, bilateral disbursements in treated cells are, on average, about 73% lower than they would have been in the absence of Russian activity, benchmarked against the counterfactual evolution of not-yet-treated cells. This is the strongest response across outcomes, consistent with disbursements being the most operationally flexible and politically responsive dimension of aid. Project counts (-3%) and commitments (-8%) also decline, although neither effect is statistically significant. The World Bank exhibits the opposite pattern. Following the entry of Russian-affiliated actors, the number of projects increases by 18%, while disbursements increase threefold. Commitments, however, remain statistically indistinguishable from zero.

Looking beyond Russian first involvement, to all periods and cells affected, the patterns are confirmed. Panel fixed-effects estimates, which capture behavior across all periods of Russian presence rather than just the moment of first entry, show that bilateral donors allocate relatively fewer projects, disbursements, and commitments to Russian-affected regions than to comparable conflict-affected regions without Russian involvement. This negative differential is most pronounced among the four largest NATO bilateral donors — the US, France, the UK, and Germany — whose aid flows respond most strongly to Russian presence, consistent with these being the donors with the greatest strategic exposure and the strongest incentive to disengage from contested operating environments. Nordic and other European bilateral donors show weaker and less consistent differential responses.

The World Bank's longer-run pattern is qualitatively distinct: it shows limited responsiveness to conflicts in general, reflecting a more programmatic and delivery-focused mode of engagement. However, the differentially positive and statistically significant reaction to Russian presence indicates that the WB enhances its typical conflict-driven response when Russian actors are involved, consistent with the strategic importance of engagement rising as a geopolitical rival entrenches in the same operating space. Rather than treating Russia-affected regions as simply more dangerous versions of other conflict zones, the WB appears to treat Russian presence as a competitive signal, engaging not despite the Russian presence but partly in response to it.

The nature of this engagement is not uniform across sectors or event types. Disaggregating by project sector, the positive differentials in aid flows are concentrated in social infrastructure — health, education, and governance projects — while production-sector aid shows a negative differential. This suggests that when donors do respond to Russian presence, they do so through high-visibility, population-facing projects rather than economic or productive investments, which may be more vulnerable to disruption. Among event types, protest-related Russian activity triggers the largest responses, consistent with orchestrated pro-Russian or anti-Western demonstrations functioning as the most legible geopolitical signal for donors. The pattern is also heterogeneous across recipient countries: the differential response is concentrated in countries without historical Soviet ties, where the geopolitical competition is still live. In countries with deep Cold War-era Russian connections, donor behavior is less reactive, as if allegiances are already perceived as settled.

We also examine whether Russia's full-scale invasion of Ukraine in 2022 altered the patterns documented above, as the war fundamentally changed both the geopolitical context and the strategic importance of Russian influence in Africa. The evidence for the post-2022 period is necessarily preliminary, however, as it is based on only three donors and a single year after the invasion.[10] Future data will be needed to establish whether these patterns persist. The available evidence nevertheless points to some interesting differences across donors. For the World Bank, the post-2022 period is associated with a relative decline in both project counts and disbursements in Russian-affected regions. For the Agence Française de Développement, the previously neutral response to conflict reverses sharply after the invasion, with significant reductions across all aid flows, and particularly disbursements in Russian-affected regions. This shift is consistent with France's changing geopolitical position in the Sahel: having lost military footholds in Mali and Burkina Faso to Russian-affiliated forces, it may also have had fewer incentives to maintain a development presence. Sweden, by contrast, exhibits a stronger response to conflict after 2022, but no significant differential response to Russian-affected regions, consistent with a donor lacking direct prior exposure to Russian displacement and therefore facing weaker incentives for strategic re-engagement.

Taken together, these findings make three contributions. First, they add sub-national, causally identified evidence to the literature on geopolitical competition and donor behavior, which has so far largely relied on country-level data and correlational designs. The results confirm that donors do not treat all conflicts equally: the identity and strategic purpose of the actors involved shapes donor responses above and beyond conflict intensity itself. Second, they document a previously uncharacterized heterogeneity in donor responses to conflict: the sign of the response depends on donor type, with the World Bank increasing engagement in Russian-affected regions while bilateral donors reduce it. This divergence — within the same conflict environment and the same time period

[10] As the data end in 2023, the analysis cannot capture the substantial restructuring of Western aid budgets that began in 2024.

— is difficult to reconcile with a purely humanitarian account, since humanitarian needs would affect both donor types equally. It points instead toward institutional differences in how geopolitical competition enters aid allocation. Third, the post-2022 results demonstrate that a global geopolitical shock can rapidly alter sub-national aid allocation patterns in distant theaters, with the direction and magnitude of the shift depending on institutional structure and prior exposure rather than on local conditions alone.

Several limitations should be noted. First, the analysis is constrained by data availability: the post-2022 comparison covers only three donors, which limits the generalizability of those findings. Second, although the differential distributed-lag design substantially reduces the scope for confounding by comparing responses to Russian events with responses to other conflicts of the same type within the same cell and year, it cannot eliminate all identification concerns. The main remaining concern is the presence of time-varying cell-level factors that predict both Russian engagement and donor responses, beyond their effect on general conflict intensity. Robustness checks including cell-specific linear time trends, which account for gradual within-cell trajectories in both conflict exposure and aid flows, produce estimates that are more negative than the baseline. This suggests either that World Bank activity was already increasing in cells that subsequently attracted Russian presence, or that any pre-trends are not well captured by a linear specification. For this reason, the C-SA estimates provide the most credible evidence of genuine post-entry engagement, although they are limited to a smaller set of cells and capture only the first instance of Russian involvement.

The paper also does not directly observe the decision-making processes behind aid allocation, leaving the proposed mechanisms, including operational withdrawal, contractual rigidity, competitive re-engagement, and geopolitical signaling, as plausible interpretations rather than demonstrated causal pathways. Future research should address these gaps through qualitative case studies in countries with significant Russian presence, particularly Mali, Burkina Faso, and the Central African Republic, where the displacement of Western actors by Russian-affiliated forces is most clearly documented. Incorporating public perception data would also allow researchers to assess whether donor re-engagement in Wagner-affected regions translates into sustained legitimacy with recipient populations, a question with direct implications for the developmental effectiveness of geopolitically motivated aid.

References

Asmus-Bluhm, G., V. Z. Eichenauer, A. Fuchs, and B. Parks (2025). Does India Use Development Finance to Compete With China? A Subnational Analysis. *Journal of Conflict Resolution 69*(2-3), 406–433.

Blair, R. A. and P. Roessler (2021). Foreign Aid and State Legitimacy: Evidence

on Chinese and US Aid to Africa from Surveys, Survey Experiments, and Behavioral Games. *World Politics 73*(2), 315–357.

Bluhm, R., M. Gassebner, S. Langlotz, and P. Schaudt (2021). Fueling conflict? (De)escalation and bilateral aid. *Journal of Applied Econometrics 36*(2), 244–261.

Bomprezzi, P., A. Dreher, A. Fuchs, T. Hailer, A. Kammerlander, L. C. Kaplan, S. Marchesi, T. Masi, C. Robert, and K. Unfried (2024). Wedded to prosperity? informal influence and regional favoritism. *CESifo Working Paper*.

Boschini, A. and A. Olofsgård (2007). Foreign aid: An instrument for fighting communism? *The Journal of Development Studies 43*(4), 622–648.

Callaway, B. and P. H. Sant'Anna (2021). Difference-in-differences with multiple time periods. *Journal of Econometrics 225*(2), 200–230.

Dreher, A., V. Lang, B. P. Rosendorff, and J. R. Vreeland (2022). Bilateral or multilateral? International financial flows and the dirty-work hypothesis. *The Journal of Politics 84*(4), 1932–1946.

Feinstein, S. G. and E. B. Pirro (2021). Testing the world order: strategic realism in Russian foreign affairs. *International Politics 58*(6), 817–834.

Fleck, R. K. and C. Kilby (2010). Changing aid regimes? US foreign aid from the cold war to the war on terror. *Journal of Development Economics 91*(2), 185–197.

Fuchs, A., P. Nunnenkamp, and H. Öhler (2015). Why Donors of Foreign Aid Do Not Coordinate: The Role of Competition for Export Markets and Political Support. *The World Economy 38*(2), 255–285.

Gould-Davies, N. (2003). The Logic of Soviet Cultural Diplomacy. *Diplomatic History 27*(2), 193–214.

Lancaster, C. (2008). *Foreign aid: Diplomacy, development, domestic politics*. University of Chicago press.

Matusevich, M. (2008). Journeys of hope: African diaspora and the soviet society. *African Diaspora 1*(1–2), 53–85.

Morgenthau, H. (1962). A Political Theory of Foreign Aid. *The American Political Science Review 56*(2), 301–309.

Nazarov, V. P. (2024). National interests in Russia's foreign policy. *MGIMO Review of International Relations 17*(1), 7–21.

Zeitz, A. O. (2021). Emulate or differentiate? chinese development finance, competition, and world bank infrastructure funding. *The Review of International Organizations 16*(2), 265–292.

7 Appendix

7.1 Summary statistics of ACLED events and aid projects

Table 12: Mean ± SD of ACLED Event Counts (All Years, All Cells)

Event type	Non-Russian	Russian
Battles	0.823 ± 8.010	0.0077 ± 0.1757
Explosions / Remote Violence	0.268 ± 4.532	0.0011 ± 0.0458
Protests	0.946 ± 6.362	0.0001 ± 0.0075
Riots	0.420 ± 2.626	0.0002 ± 0.0155
Strategic Developments	0.283 ± 2.128	0.0048 ± 0.1201
Violence Against Civilians	0.840 ± 5.082	0.0068 ± 0.1917

0.5° grid cells, 2013–2023.

Table 13: Event Composition (Shares) and Mean Fatalities per Event by Actor Type

Event Type	Non-Russian	Russian
Battles	23.0%	37.4%
Explosions / Remote Violence	7.5%	5.2%
Protests	26.4%	0.3%
Riots	11.7%	0.8%
Strategic Developments	7.9%	23.3%
Violence Against Civilians	23.5%	33.1%
Mean fatalities per event	1.55	2.87

Table 14: Mean ± SD of Donor Flows (All Cells, All Years)

	Project N	Disbursements (mil. USD)	Commitments (mil. USD)
By donor group			
World Bank	1.238 ± 3.070	1.583 ± 19.394	2.381 ± 35.906
Bilateral donors	1.365 ± 6.593	0.511 ± 5.404	2.221 ± 37.155
By project sector (all donors)			
Social	1.230 ± 4.258	1.291 ± 17.180	1.879 ± 29.024
Economic	0.598 ± 1.616	0.834 ± 13.954	2.205 ± 37.780
Production	0.402 ± 1.415	0.360 ± 5.118	0.779 ± 22.069

0.5° grid cells, 2013–2023. IDA/IBRD breakdown not available at cell level.

Table 15: WB Project Locations by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	1.1188	0.0000	2.8133	0.0000	46.0000	0.6691
2014	1.1554	0.0000	3.0185	0.0000	49.0000	0.6686
2015	1.0782	0.0000	2.7655	0.0000	43.0000	0.6766
2016	1.1268	0.0000	2.9472	0.0000	84.0000	0.6570
2017	1.1710	0.0000	2.9789	0.0000	52.0000	0.6467
2018	1.3440	0.0000	3.2031	0.0000	66.0000	0.6213
2019	1.2954	0.0000	3.1049	0.0000	62.0000	0.6190
2020	1.3866	0.0000	3.3727	0.0000	63.0000	0.6126
2021	1.3884	0.0000	3.3139	0.0000	64.0000	0.6197
2022	1.3887	0.0000	3.3444	0.0000	64.0000	0.6127
2023	1.1637	0.0000	2.8033	0.0000	51.0000	0.6401

Table 16: WB Disbursements (mil. USD) by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	1.2452	0.0000	14.2344	-0.2941	1018.9922	0.6875
2014	1.1628	0.0000	7.9232	-1.9505	304.3230	0.6940
2015	1.3477	0.0000	17.7837	-20.0417	1189.3096	0.6827
2016	1.5043	0.0000	24.3922	-1.6532	1418.8154	0.6817
2017	1.4627	0.0000	12.1981	-0.6660	576.2798	0.6658
2018	1.5100	0.0000	21.5214	-0.6875	1478.9728	0.6515
2019	2.0749	0.0000	27.5793	-2.5736	1203.0590	0.6313
2020	1.9587	0.0000	20.1615	-1.1650	979.4047	0.6204
2021	2.0069	0.0000	23.1288	-2.3982	1145.3631	0.6261
2022	2.2298	0.0000	24.1276	-2.1582	1074.1768	0.6197
2023	0.9147	0.0000	7.9606	-0.1437	415.2112	0.6401

Table 17: WB Commitments (mil. USD) by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	2.0750	0.0000	34.3592	0.0000	2421.2754	0.9088
2014	3.5666	0.0000	45.9464	0.0000	2120.0000	0.8879
2015	2.2967	0.0000	43.5243	0.0000	2823.7423	0.9447
2016	1.5572	0.0000	21.9583	0.0000	1433.4110	0.8787
2017	2.5327	0.0000	26.8118	0.0000	1165.2575	0.8949
2018	2.6054	0.0000	37.8892	0.0000	2332.4644	0.8496
2019	2.2740	0.0000	32.4491	0.0000	2088.6761	0.9042
2020	3.7895	0.0000	55.2991	0.0000	3553.1919	0.8963
2021	3.4002	0.0000	43.1805	0.0000	2274.6522	0.9201
2022	2.0174	0.0000	18.8534	0.0000	694.7050	0.9461
2023	0.0711	0.0000	4.3624	0.0000	322.9501	0.9997

Table 18: Bilateral Project Locations by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	1.4173	0.0000	5.6378	0.0000	203.0000	0.6850
2014	1.4609	0.0000	5.9963	0.0000	217.0000	0.6901
2015	1.4868	0.0000	6.1315	0.0000	200.0000	0.6825
2016	1.7066	0.0000	6.9805	0.0000	289.0000	0.6668
2017	1.8150	0.0000	7.3219	0.0000	260.0000	0.6724
2018	2.0153	0.0000	8.0530	0.0000	299.0000	0.6694
2019	2.1601	0.0000	9.1545	0.0000	379.0000	0.6619
2020	2.3268	0.0000	10.4000	0.0000	387.0000	0.6724
2021	0.2965	0.0000	1.6459	0.0000	43.0000	0.8994
2022	0.1551	0.0000	1.4683	0.0000	89.0000	0.9472
2023	0.1707	0.0000	1.5674	0.0000	90.0000	0.9485

Table 19: Bilateral Disbursements (mil. USD) by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	0.5737	0.0000	6.6261	-0.3648	355.2795	0.7326
2014	0.5556	0.0000	5.1783	0.0000	262.4285	0.7367
2015	0.6397	0.0000	8.2363	0.0000	565.5758	0.7214
2016	0.6848	0.0000	6.0358	0.0000	246.6078	0.7133
2017	0.6764	0.0000	5.2876	0.0000	156.2232	0.7228
2018	0.7398	0.0000	5.6627	0.0000	232.1903	0.7202
2019	0.7940	0.0000	6.4225	0.0000	314.5217	0.7107
2020	0.7802	0.0000	6.5069	0.0000	363.4430	0.7054
2021	0.0772	0.0000	0.6883	0.0000	22.5580	0.9246
2022	0.0519	0.0000	0.7923	0.0000	47.3879	0.9567
2023	0.0496	0.0000	0.8141	0.0000	56.1877	0.9601

Table 20: Bilateral Commitments (mil. USD) by Year and Cell

Year	Mean	Median	SD	Min	Max	Prop. Zero
2013	3.3995	0.0000	34.2544	0.0000	1396.6094	0.7493
2014	3.5720	0.0000	53.0664	0.0000	2199.5000	0.7618
2015	2.4373	0.0000	32.5272	0.0000	1143.3516	0.7660
2016	3.5873	0.0000	59.2690	0.0000	3739.0085	0.7519
2017	3.5569	0.0000	42.4799	0.0000	1620.6221	0.7622
2018	3.0395	0.0000	46.6720	0.0000	2461.0380	0.7519
2019	2.7080	0.0000	46.6557	0.0000	3179.3064	0.7541
2020	1.3431	0.0000	18.4861	0.0000	1139.6924	0.7636
2021	0.7272	0.0000	10.2593	0.0000	420.4451	0.9463
2022	0.0342	0.0000	0.7989	0.0000	52.9987	0.9902
2023	0.0241	0.0000	0.3152	0.0000	14.6132	0.9863

7.2 Cell-specific linear time trends

The baseline distributed-lag TWFE specification of Tables 7 and 8 is augmented with a cell-specific linear time trend. This absorbs any pre-existing linear trajectory in donor activity within each cell, so the treatment coefficients capture effects *above and beyond* a cell's own trend.

The addition of the cell-specific trend yields more negative estimates across all donors, and the positive WB differential turns negative. This suggests that part of the baseline WB result reflects a pre-existing upward trend in WB activity in cells that subsequently attracted Russian presence. Whether this reflects selection of Russian actors into areas of active Western engagement, or anticipatory WB scaling-up in contested areas, cannot be determined from the current design. The C-SA estimates, which pass pre-trend tests and show a positive WB ATT, provide the most credible evidence that some genuine post-entry engagement occurs, but the cell-trend results counsel caution about the magnitude of the baseline panel estimates.

Table 21: Cell-specific linear trends: WB vs bilateral (differential effect)

Dependent Variables:	Disbursements	Commitments	N projects	Disbursements	Commitments	N projects
		World Bank			Bilateral	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Russian events, lag 0	-0.1235***	-0.1144	-0.0135***	-0.1345**	-0.0789*	-0.0069
	(0.0382)	(0.0756)	(0.0034)	(0.0551)	(0.0449)	(0.0070)
Russian events, lag 1	-0.2617***	0.1139	-0.0186***	-0.0538	-0.0168	0.0044
	(0.0482)	(0.0834)	(0.0056)	(0.0676)	(0.0416)	(0.0074)
Russian events, lag 2	-0.4301***	-0.2949***	-0.0377***	-0.0695	0.0061	0.0031
	(0.0628)	(0.1080)	(0.0093)	(0.0899)	(0.0577)	(0.0101)
Russian events, lag 3	-0.2470*	0.1795	-0.0252	-0.3672**	-0.3566***	-0.0218
	(0.1405)	(0.4146)	(0.0155)	(0.1557)	(0.1334)	(0.0203)
Total events, lag 0	-0.0025	-0.0021	-0.0002	0.0033	-0.0006	0.0004
	(0.0034)	(0.0044)	(0.0002)	(0.0022)	(0.0037)	(0.0005)
Total events, lag 1	-0.0006	-0.0010	-0.0004**	-0.0094**	-0.0086*	-0.0011
	(0.0021)	(0.0048)	(0.0002)	(0.0037)	(0.0048)	(0.0008)
Total events, lag 2	0.0016	0.0006	0.0001	-0.0078***	-0.0094**	-0.0015***
	(0.0022)	(0.0046)	(0.0002)	(0.0023)	(0.0037)	(0.0005)
Total events, lag 3	-0.0016	0.0023	-0.0002	-0.0052**	-0.0065**	-0.0004
	(0.0026)	(0.0043)	(0.0002)	(0.0023)	(0.0028)	(0.0004)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Varying Slopes						
year (cell_id)	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	51,376	51,376	51,376	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

7.3 Neighbour spillover control

Lags 0–3 of the sum of Russian-affiliated events in the 8 queen-contiguous neighbouring cells ($\pm 0.5°$) are added as additional controls. The test checks whether main-cell treatment coefficients are robust to contamination from neighbouring Russian activity. Russian activity in neighboring cells is associated with higher aid flows to a given cell, consistent with a substantial spatial reallocation of aid from directly affected areas toward nearby regions that remain more accessible. This pattern is observed for both bilateral donors and the World Bank. Importantly, the negative effect of Russian presence within the focal cell remains largely unchanged for bilateral donors, suggesting that the main result is not driven by omitted neighboring conflict. For the World Bank, however, the positive own-cell response becomes smaller once neighboring Russian activity is taken into account. This suggests that part of the apparent increase in World Bank engagement may reflect broader regional spillovers or the relocation of operations to adjacent areas, rather than an expansion targeted exclusively at the directly affected cell. Nevertheless, taken together, the estimates suggest that World Bank engagement increases at the regional level, with operations expanding not only in Russian-affected locations but also in surrounding areas, consistent with a strategy of maintaining development presence across the broader conflict-affected region.

Table 22: Neighbour spillovers: WB vs bilateral (differential effect)

Dependent Variables:	Disbursements	Commitments	N projects	Disbursements	Commitments	N projects
		World Bank			Bilateral	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Russian events, lag 0	0.0592	-0.0994**	0.0135**	-0.1503***	-0.1170***	-0.0195***
	(0.0499)	(0.0486)	(0.0055)	(0.0422)	(0.0391)	(0.0073)
Russian events, lag 1	0.0193	0.1147	0.0135**	-0.0763**	-0.0830*	-0.0086
	(0.0377)	(0.0814)	(0.0061)	(0.0374)	(0.0452)	(0.0068)
Russian events, lag 2	0.0554*	-0.2385***	0.0121**	-0.1078**	-0.0680	-0.0134
	(0.0327)	(0.0912)	(0.0054)	(0.0504)	(0.0513)	(0.0100)
Russian events, lag 3	-0.1091	0.1484	0.0074	-0.6318***	-0.6247***	-0.0716***
	(0.1280)	(0.1740)	(0.0198)	(0.1819)	(0.1827)	(0.0270)
Total events, lag 0	-0.0029	-0.0051**	-0.0003	-0.0007	-0.0031*	-0.0006**
	(0.0019)	(0.0021)	(0.0002)	(0.0025)	(0.0018)	(0.0003)
Total events, lag 1	0.0027	-0.0050	4.66×10^{-5}	-0.0134***	-0.0121***	-0.0021***
	(0.0023)	(0.0038)	(0.0003)	(0.0034)	(0.0031)	(0.0005)
Total events, lag 2	-0.0006	-0.0047	-0.0002	-0.0098***	-0.0088**	-0.0019***
	(0.0014)	(0.0036)	(0.0002)	(0.0032)	(0.0034)	(0.0005)
Total events, lag 3	0.0027	-0.0031	0.0004	-0.0113***	-0.0151***	-0.0025***
	(0.0020)	(0.0029)	(0.0003)	(0.0027)	(0.0035)	(0.0005)
Nb. Russian, lag 0	0.0335***	0.0008	0.0043***	0.0342***	0.0266***	0.0050***
	(0.0103)	(0.0137)	(0.0009)	(0.0102)	(0.0079)	(0.0014)
Nb. Russian, lag 1	0.0366***	0.0103	0.0043***	0.0279***	0.0331***	0.0051***
	(0.0082)	(0.0159)	(0.0010)	(0.0087)	(0.0079)	(0.0014)
Nb. Russian, lag 2	0.0271***	-0.0133	0.0036***	0.0334***	0.0318***	0.0050***
	(0.0098)	(0.0182)	(0.0013)	(0.0105)	(0.0110)	(0.0018)
Nb. Russian, lag 3	0.0579	0.0466	0.0120*	0.0462	0.0464	0.0109*
	(0.0584)	(0.0737)	(0.0072)	(0.0495)	(0.0549)	(0.0061)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	51,376	51,376	51,376	51,376	51,376	51,376

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

7.4 Poisson QMLE

Same differential distributed-lag specification as Tables 6, 7, and 8 estimated via Poisson QMLE (`fepois`) with level (non-negative) outcomes instead of IHS-transformed outcomes. Coefficients are interpretable as semi-elasticities. Disbursements are excluded because GODAD net-flow values can be negative (project revisions and returns), violating the Poisson support requirement. Applied to commitments and number of project locations, shown separately for aggregate, World Bank, and bilateral donors. All-events treatment, type-matched total control. Standard errors clustered at cell level. Notice much smaller sample size because Poisson QMLE drop units with no variation in the dependent variable.

Table 23: Aid flows from WB and bilateral donors (Poisson QMLE)

Dependent Variables:	Aggregate	World Bank Commitments	Bilateral	Aggregate	World Bank N projects	Bilateral
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Russian events,lag 0	0.0408	0.0757	-0.0236	0.0019	0.0193***	-0.0175
	(0.0545)	(0.0659)	(0.0505)	(0.0133)	(0.0052)	(0.0227)
Russian events,lag 1	0.0894***	0.0827**	0.1252***	0.0162	0.0246***	-0.0198
	(0.0267)	(0.0331)	(0.0352)	(0.0144)	(0.0045)	(0.0161)
Russian events,lag 2	-0.1778*	-0.3343**	0.0580*	0.0148	0.0241***	-0.0327**
	(0.1070)	(0.1454)	(0.0328)	(0.0149)	(0.0059)	(0.0142)
Russian events,lag 3	0.0037	0.0436	-0.1041	-0.0327	-0.0250	0.0659
	(0.0661)	(0.0855)	(0.0715)	(0.0308)	(0.0200)	(0.0609)
Total events, lag 0	0.0029***	0.0020	0.0042***	-0.0006**	-0.0009***	0.0004**
	(0.0011)	(0.0016)	(0.0014)	(0.0003)	(0.0003)	(0.0002)
Total events, lag 1	-0.0025	-0.0031	-0.0035	-2.16×10^{-5}	-0.0003	0.0003
	(0.0017)	(0.0027)	(0.0035)	(0.0002)	(0.0003)	(0.0002)
Total events, lag 2	0.0048**	0.0059***	0.0029	-0.0003	7.26×10^{-5}	0.0003
	(0.0019)	(0.0018)	(0.0030)	(0.0003)	(0.0002)	(0.0002)
Total events, lag 3	-2.58×10^{-5}	-0.0015	0.0023	-0.0002	0.0001	0.0002
	(0.0009)	(0.0012)	(0.0019)	(0.0002)	(0.0002)	(0.0003)
Fixed-effects						
cell_id	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	30,632	18,552	23,832	35,424	24,032	27,600

Clustered (cell_id) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

7.5 Impact of ACLED events on commitments and disbursements by donor

Each point is the differential lag-k coefficient from a separate regression per donor. 95% confidence intervals, SEs clustered at cell. Donors ordered within colour groups (red = World Bank, blue = Strategic bilateral, green = Nordic, orange = Other European). Facets show lags 0–3.

Figure 9: Individual donors response: disbursements

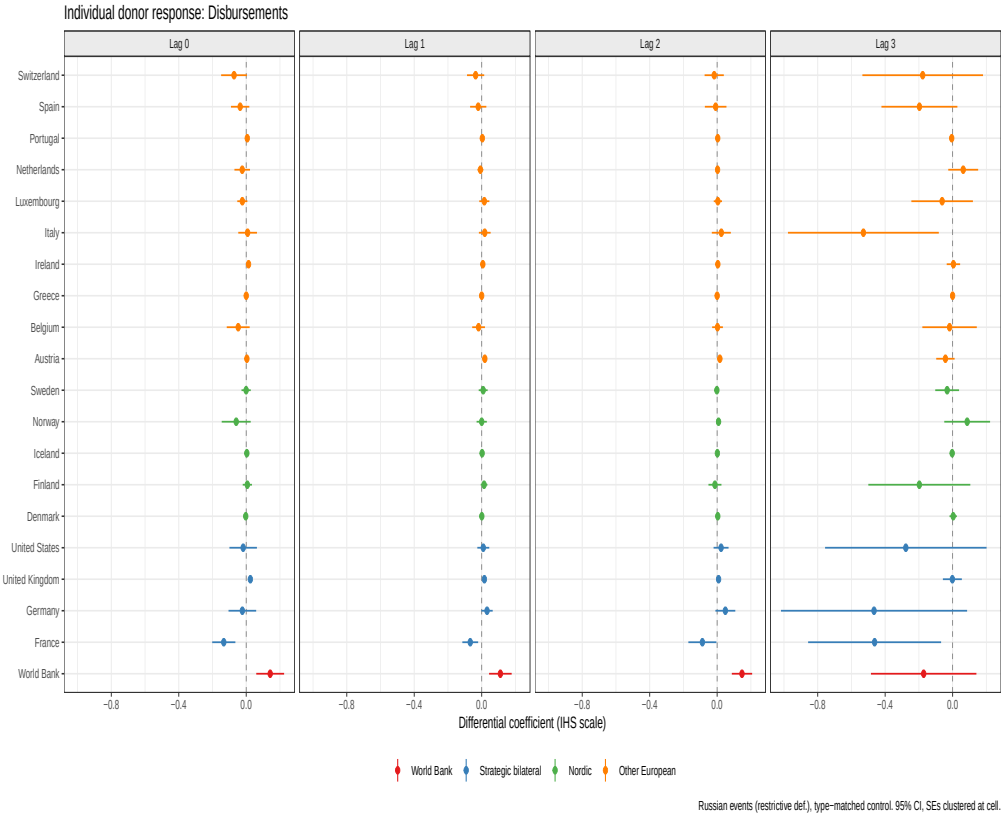


Figure 10: Individual donors response: commitments

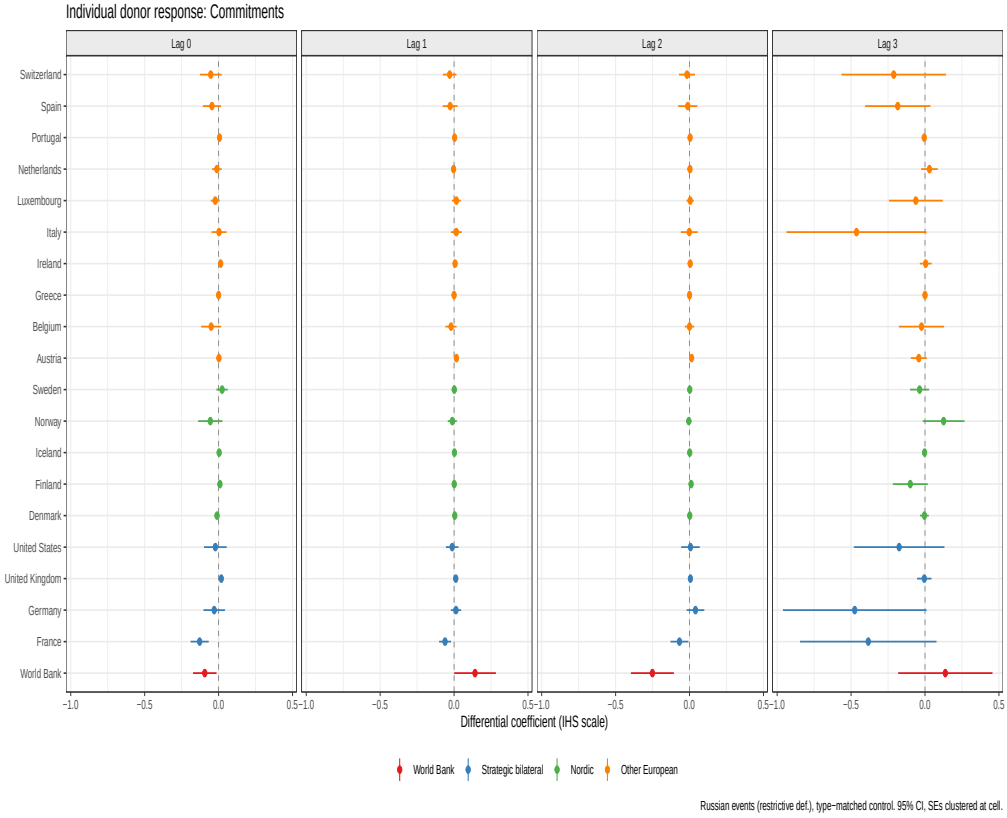


Figure 11: Individual donors response: number of projects