

Double-Edged Sword: Understanding the Localised Effect of FDI Inflow in Conflict Settings*

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Abstract

We analyse how inward-FDI received amidst ongoing violence shapes armed conflict. We argue that FDI affects patterns of violence by influencing the state's counterinsurgency strategy. To prevent disinvestment, governments strive to capture territory linked to investment. Yet, heightened military presence in areas close to FDI reinforces reliance on irregular warfare, thus amplifying civilian victimization as a tool to elicit cooperation or enforce control. Using sub-national, geo-referenced data on FDI and armed conflict in African countries from 2003 to 2019, we find that conflict events within 5-10 km of a foreign investment see 22% more civilian casualties. The effect is largely driven by increased rebel-led, deliberate civilian targeting and amplified for extractive FDI. We address endogeneity concerns by comparing conflict dynamics between areas that experience an investment with areas that will experience one in the future within the same country-year. Our findings underscore the influence of globalization on political stability.

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1 Introduction

Foreign direct investment (FDI) is an important driver of economic development. With investments mounting to almost \$1.3 trillion at the end of 2022 and developing countries acquiring about half or more of all investments made in the last years, FDI has become crucial for capital formation around the world.¹ Yet, among recipients are also countries currently engaged in civil conflict such as Algeria, Cambodia, Colombia, Ethiopia, the Philippines, Nigeria, Sudan, Sri Lanka, or Mozambique. How does inward-FDI affect internal armed conflict?

While this question has gained significant attention of human right defenders and journalists, for instance in the wake of communities in Nigeria suing Shell for complicity in murder,² extant research offers little insight to understand how inward-FDI received during ongoing armed conflict would affect prospects of peace. Answering this question has important implications for a critical discussion: What role do foreign actors such as multinational companies (MNCs) play for peace and state-building?

Previous evidence on the impact of economic integration, and specifically FDI, on different forms of political stability is inconclusive. Some studies support a ‘capitalist peace’ theory, suggesting that economic interdependence or freedom generate economic benefits that exceed the potential gains of conflict thus promoting peace, while others argue that costs and benefits of globalization are unevenly distributed and therefore increase grievances and incentives to fight (*e.g.*, [Barbieri and Reuveny, 2005](#); [Bussmann and Schneider, 2007](#); [Tomashevskiy, 2017](#); [Hartzell et al., 2010](#); [Pinto and Zhu, 2022](#)). What is notably absent across analyses is an acknowledgement that FDI is often received during conflict and that armed conflict often varies across time and space. Further, most studies rely on highly aggregated data on FDI flows and armed violence and pay little attention to possible micro-dynamics.

We develop a disaggregated analytical framework to study how and why inward-FDI

¹<https://worldinvestmentreport.unctad.org/world-investment-report-2022/>

²<https://www.theguardian.com/world/2011/oct/03/shell-accused-of-fuelling-nigeria-conflict>, <https://www.amnesty.org/en/latest/press-release/2017/11/investigate-shell-for-complicity-in-murder-rape-and-torture/>

received during ongoing armed conflict affects patterns of violence. Our framework is centred on the idea that FDI shapes government's conflict management strategies for two reasons. First, investors are sensitive to political risk, e.g. that associated with political instability (Jensen et al., 2012). Second, expected economic rents, for instance those gained from FDI, play an important role in determining when it is worth fighting over a particular territory (Mesquita, 2020).

But governments face important resource constraints. Reaching peace via military victory or a successful negotiated settlement is difficult – especially within a short time frame (e.g., Toft, 2009; Mukherjee, 2014; Sexton et al., 2019; Matanock, 2020; Pettersson et al., 2019). At the same time, armed conflict is not necessarily detrimental to investors: disinvestment only occurs if violence affects investment sites directly (Blair et al., 2022). Thus, to prevent disinvestment, governments modify their counterinsurgency strategy to provide security *to investors*. The influx of FDI during armed conflict therefore alters *patterns of violence* as governments increase coercive state capacity in areas of investment.

Repertoires of violence employed by both the government and the rebel group are directly affected by the localised shift in military power balance in the proximity of investments (see also Kalyvas and Balcells, 2010). Most importantly, we expect it to increase civilian targeting close to FDI locations as a strategy to contest territorial control because weakened rebels need to rely more on strategies of irregular warfare (Kalyvas, 2006; Kalyvas and Balcells, 2010).

We can see such dynamics play out in practice. Governments often promise foreign investors and their workers military protection at extraction sites in order to keep investments flowing. In Mozambique, Total signed a security pact with the government to protect a \$20 billion liquefied natural gas project.³ Similarly, since 2009 the Nigerian government has hired thousands of former fighters to protect pipelines owned by multi-national companies operating in the Niger Delta and has, at times, even diverted troops from the front lines with Boko Haram.⁴ Consequent upticks in civilian casualties have

³<https://totalenergies.com/media/news/press-releases/total-signs-agreement-government-mozambique-regarding-security-mozambique>

⁴<https://www.wsj.com/articles/niger-delta-avengers-sabotage-oil-output-1465165361>

been shown in different contexts.⁵

We systematically test our argument using a novel dataset that combines geo-located data of FDI projects in Africa from 2003 to 2021 (from fDi Markets) with geo-referenced data on conflict events from the Uppsala Conflict Data Program Georeferenced Event Dataset (UCDP GED). Careful analysis of the effect of FDI on armed conflict faces difficult technical issues, specifically endogeneity. Our empirical strategy exploits the timing of FDI projects to effectively compare conflict dynamics in areas close to an active foreign investment to conflict dynamics in areas that will experience an FDI in the future – following [Knutsen et al. \(2017\)](#).

This design rules out unobservable factors affecting FDI location choices by foreign investors, which might correlate with conflict characteristics and introduce severe problems of endogeneity. Our results show that, on average, conflicts in areas with an active FDI experience over 22% more civilian casualties than those in areas that will experience an FDI in future time points. We find strong evidence that this effect is primarily driven by an increase in deliberate attacks against the civilian population conducted by rebels and is amplified when looking specifically at the influx of extractive FDI. Thus, our evidence suggests that FDI has important implications for prospects of peace by shaping strategies of violence employed by warring factions.

Our results yield broader implications for understanding how FDI affects peace and statebuilding. We contribute to the literature in international political economy on the effects of FDI and globalization for receiving countries. A large literature has discussed the effect of FDI on development and domestic political or institutional outcomes such as the rule of law, property rights, corruption, and labor rights ([Malesky, 2008](#); [Malesky and Mosley, 2018](#); [Sandholtz and Gray, 2003](#); [Pinto and Zhu, 2016](#); [Brazys and Kotsadam, 2020](#)). Although the effects documented vary, this literature convincingly shows that foreign capital significantly impacts a vast range of domestic societal outcomes. We push this literature further and investigate the effect of FDI on conflict. We offer a

⁵<https://www.amnesty.org/en/latest/news/2021/03/mozambique-civilians-killed-as-war-crimes-committed-by-armed-group-government-forces-and-private-military-contractors-new-report/>, <https://www.reuters.com/article/us-nigeria-delta-idUSTRE6B22PP20101203>

novel theoretical framework and extremely disaggregated empirics to show that FDI can significantly shift patterns of local violence in ways that run counter to development goals. The analysis thus also speak to an important literature on repertoires of violence and specifically the use of civilian targeting (Balcells and Kalyvas, 2014; Eck and Hultman, 2007; Hultman, 2007; M Wood, 2010; Wood, 2014; la Calle, 2017; Polo and González, 2020; Fielding and Shortland, 2012). We provide new insight into how external factors such as the inflow of FDI affects patterns of violence against civilians.

Our findings also serve as new evidence to inform policy debates on the effects of FDI for development. Many developing countries rely on FDI as a major source of capital and their governments extract substantial revenue from it. FDI is thus often integral to economic and political development. Yet, we find that FDI affects conflict directly with substantial negative consequences for civilians. Conflict is one of the biggest threats to development, accelerating cycles of underdevelopment and making it difficult for the government (and development actors) to address important concerns such as basic public service provision or climatic disaster response. In particular, high rates of civilian victimisation are likely to hamper state-building by affecting important dynamics such as the legitimacy of the state or mistrust. These effects last, even after conflict ends. Profit-seeking actors, like firms, are unlikely to incorporate them in their decision-making and will likely ignore the effect of their own investment on conflict management strategies. We conclude that foreign actors operating in fragile settings should be held accountable for their role in affecting violent outcomes.

2 Refocusing the Lens: FDI and Patterns of Violence

A substantial body of literature in Political Science and Economics investigates the causes and consequences of global economic integration, often measured as trade or foreign direct investment. Scholars have drawn links to an array of outcomes such as corruption, economic growth, democratization, and political stability – finding both positive and negative effects (*e.g.*, Pinto and Zhu, 2016; Malesky et al., 2015; De Soysa and Oneal,

1999; Kosack and Tobin, 2006; Ahlquist, 2006; Malesky, 2008).

This literature broadly claims that FDI shapes domestic affairs by causing governments to change policies so as to respond to investors' sensitivity to political risk. Foreign investment is a long-term enterprise for a multinational company, which evaluates potential risks and benefits from the initiative in the long run (Jensen et al., 2012). Investors that have the ability to move internationally (as many MNCs do) could choose to exit if political risk eventually runs too high, for instance because of escalating conflict. This prompts governments to internalise the costs associated with the possibility of disinvestment when choosing how to address investor' concerns. We thus assume that governments will be keen to provide the conditions necessary to prevent disinvestment. Yet, it remains unclear exactly *how* governments respond to investors' concerns and their consequences, especially during ongoing conflict.

Scholars studying FDI and political risk suggest that this sensitivity incites a 'race to the top' (Vogel, 1997). For instance, governments will adopt better governance standards to retain or attract investments such as rule of law promotion, property rights protection, or corruption control (e.g., Malesky, 2008; Sandholtz and Gray, 2003). In this vein, scholars examining the effect of FDI on violence advance a 'capitalist peace theory', suggesting that states' dependence on resources provided by foreign capital contribute to peace. Governments do not only want to meet the expectations of foreign investors, but are also motivated to do so because economic integration generates benefits that exceed the potential gains of conflict. Consequently, economic interdependence (often measured as FDI) is found to promote peace between states, to lower the risk of military coups and to reduce the probability of civil war – prevalence, rather than onset – (Barbieri and Reuveny, 2005; Bussmann, 2010; Bussmann and Schneider, 2007; Gartzke et al., 2001; Magee and Massoud, 2011; Tomashevskiy, 2017).

However, investors may not always hold such sway as the costs of peace sometimes exceed potential economic benefits – especially when governments would be forced to compromise their security interests, for instance by refraining from repression (Sorens and Ruger, 2012). At the same time, many of the 'race to the top' arguments ignore that

investors are not necessarily as sensitive to violence as some of the literature assumes. Investors often generate significant rents in fragile settings (Barry, 2018; Guidolin and La Ferrara, 2007). Indeed, investors may even benefit from violence as it reduces government oversight or the capacity of local communities to resist some forms of investment such as mining (Billon, 2001; Guidolin and La Ferrara, 2007; Maher, 2015). Additionally, preferences of foreign companies change once a project has begun and sunk costs have been paid (Barry, 2018). In fact, when applying a more disaggregated framework, scholars show that disinvestment only occurs if armed violence is observed close to sites of investment (Blair et al., 2022). Investments often even go up *during* ongoing violence if violence occurs away from sites of investment (Blair et al., 2022; Chen, 2017; Dai et al., 2017; Mihalache-O’Keef and Vashchilko, 2010).

As an implication, to study the effect of FDI on armed conflict, we need to understand when investors are likely to influence government’ behaviour and how this influence over policy-making affects patterns of violence. To do so, we adopt a localised lens which allows us to incorporate two important dynamics: *i*) violence will likely only deter foreign investors if it occurs at the site of investment (see Blair et al., 2022; Barry, 2018), and *ii*) patterns of armed violence vary across time and space (even for a single conflict). Using this approach we are able to reconcile some of the contrasting insights found in the literature and develop an argument on why and how FDI affects patterns of violence at a local level. We develop this framework in the next section.

2.1 The Effect of Inward-FDI during ongoing Armed Conflict

2.1.1 The Government’s Rationale

Governments that are engaged in armed conflict are often limited in their repertoire of actions to achieve peace by important resource constraints (*e.g.*, military capability, the costs of mounting a counter insurgency strategy) and by the complex reality of what it means to achieve peace or stability. Military victory is often unlikely or extremely costly, especially if increased spending on defense undermines capacity on other important matters (*e.g.*, social services) and may imperil political survival (Mukherjee, 2014; Sexton

et al., 2019). Similarly, a settlement of hostilities can take years, if not decades, of negotiations and may not hold in the long run. Finally, states are often confronted with multiple armed non-state actors with different goals (*e.g.*, Toft, 2009; Matanock, 2020; Pettersson et al., 2019).

How does inward-FDI during armed conflict change such dynamics? We argue that it generates a preference for the government to securitize areas linked to FDI, therefore shifting counterinsurgency priorities and goals. The influx of FDI generates an interest in controlling the territory of the investment. FDI does not just guarantee potential revenues for the government at the time of investment, but also in the longer term, as foreign corporations are less likely to be affected by (potentially frail) domestic economic conditions than local ones. Such expected economic returns affect governments' choices to dedicate resources in fighting over a particular territory (Mesquita, 2020). While fighting is costly and ending armed conflict altogether might be difficult – at least within short time frames – securing control over FDI territory is a feasible goal and might be enough to avoid disinvestment (Blair et al., 2022).

Governments are likely to protect an investment site by increasing coercive capacity (*e.g.*, increase deployment of security forces). It is not unusual that, after a foreign firm decides to invest in a conflict-affected area, it demands enhanced and immediate state protection to mitigate the damage represented by attacks against its facilities or employees (Rexer, 2021). Governments often comply and deploy troops to areas of FDI – at times even diverting them away from other important fronts. For instance, in Nigeria the army has repeatedly diverted troops from the front against Boko Haram to secure oil infrastructure amidst militant threats of attacks.⁶ Similarly, in Mozambique oil companies like Exxonmobil and Total are reported to have explicitly requested troops to be deployed to the area of their investment in Cabo Delgado after attacks by militants started here in 2018.⁷ Such changes in military strategy do not only reduce the risks associated with violent confrontation *for foreign investors*: they also have important consequences for

⁶See: <https://www.wsj.com/articles/niger-delta-avengers-sabotage-oil-output-1465165361>

⁷See: <https://www.opendemocracy.net/en/oureconomy/war-mozambique-natural-gas-blessing-turned-curse/>

patterns of violence observed at sites of investment.

Primarily, we argue, these changes in government strategy cause a localised increase in civilian victimisation. Civilians are likely to become the target of violence by security forces in contested areas as a way to elicit cooperation or enforce territorial control (Kalyvas, 2006; Schwartz and Straus, 2018). Absence of information on the rebel and ability to identify who is associated with the rebel – which is likely rampant when forces operate under time pressure after the influx of FDI to quickly enforce control in contested areas – can trigger tremendous levels of civilian victimisation (Kalyvas, 2006; la Calle, 2017; Fielding and Shortland, 2012). Civilians may also be targeted as a way to deter them from further collaborating with rebels (Schwartz and Straus, 2018). Additionally, governments tend to lack sufficient resources or capacity to use other tools, such as the provision of services, to elicit voluntary cooperation from civilians, *i.e.*, ‘winning hearts and minds’ (at least in the short term). Inability to provide such incentives has been shown to be linked to civilian victimisation as well (*e.g.*, M Wood, 2010).

Researchers also document civilian targeting as a way to clear territory, *i.e.*, trigger forced displacement. Existing explanations often emphasise ethnic ties to the opponent or a strong ideological/political allegiance as motivation for victimisation (Valentino et al., 2004; Steele, 2011; Balcells and Steele, 2016). In areas of investment, civilian victimisation may be an intentional tactic to trigger population displacement to allow investment-related activities, such as mining, to take place unabated and ensure the long-term success of an investment (as in the case of Colombia, see Maher, 2015). Displacement has also reportedly been used to cut off rebels from their civilian supporters (Valentino et al., 2004). Such mechanisms are likely aggravated by the conditions that FDI introduces. Security forces are not only operating under time pressure but also face less scrutiny as FDI rents make governments more accountable to investors than domestic constituencies. Such lack in accountability to the public further reduces the cost of using violence against civilians (Stanton, 2016).

2.1.2 The Rebel's Rationale

Rebels are not likely to easily cede control over areas of investment to the government just because the military power balance may have shifted. The influx of FDI likely affects rebels' aim to control a given territory. Controlling an FDI area can increase potential concessions a rebel group would acquire out of any settlement with the government, thus raising the stakes of controlling the area. Moreover, several scholars suggest that economic integration (including FDI) has a violence-inducing effect due to the uneven distribution of its costs and benefits, which increase both incentives and grievances to fight (*e.g.*, [Barbieri and Reuveny, 2005](#); [Bussmann and Schneider, 2007](#); [De Soysa and Fjelde, 2010](#); [Hartzell et al., 2010](#); [Olzak, 2011](#)). For instance, [Pinto and Zhu \(2022\)](#) argue that FDI increases the risk of civil conflict by causing market concentration and generating higher rents.

The FDI-induced shift in governments' counterinsurgency strategy requires rebels to adapt their military strategy to the new military power balance, which will have shifted in favor of the government *in areas of investment*. Discrepancy in military power balance varies across conflicts and even across time and space in a single conflict. Rebels and state security apparatuses often display varying warring capacity due to the uneven distribution of technologies and resources. Inward FDI directly affects where and how much the receiving state wields power and likely also increases the financial resources it may have at its disposal to support its counterinsurgency strategy.

Military power balance is important to understand what kind of warfare rebels engage in (*e.g.*, [Kalyvas and Balcells, 2010](#); [Polo and Gleditsch, 2016](#)). We argue that the influx of FDI forces rebels to rely more heavily on irregular warfare or so-called guerilla tactics *in areas of investment* as their military capacity is likely to now lag behind that of the state (see [Kalyvas and Balcells, 2010](#), for a more in-depth discussion on the subject).

In general terms this means that rebels are also more likely to organise into smaller, lightly armed groups that can go into hiding – easily blending in with the population ([Kalyvas and Balcells, 2010](#)). But due to their weaker military position they will want to avoid sustained, direct armed confrontation with the state and instead employ tactics such

as planned ambushes on state forces, town raids, or terrorist attacks; including heightened civilian victimisation (Kalyvas and Balcells, 2010; Balcells and Kalyvas, 2014). In fact, civilian victimisation is often the preferred ‘weapon of the weak’ in irregular conflict, especially after battlefield costs rise for rebels, for instance following battlefield losses or when rebels lack territorial control or face reduced financing (Eck and Hultman, 2007; Hultman, 2007; M Wood, 2010; Wood, 2014; la Calle, 2017). All these factors are likely present following the influx of FDI, consequently heightening rebel’s reliance on civilian victimisation as a warring strategy.

Hultman (2007) suggests that battlefield losses trigger civilian victimisation because rebels see it as a way to impose additional costs on the government, hoping for concessions. Meanwhile, la Calle (2017) proposes that rebels on the losing side are likely to target civilians as a way to persuade them to support them instead. Such a mechanism is in line with other work that portrays civilian victimisation as a tool to convince populations that the government is not able or willing to protect them (Fielding and Shortland, 2012). Similarly, Polo and González (2020) suggest that terrorist attacks in civil conflict (which often involve using violence against civilians, *i.e.*, noncombatants) have the aim to persuade others to support rebels.

The power shift is also likely to affect civilian support. Although the local population may not have a clear allegiance to the government (especially as it also faces victimisation from government forces), direct civilian support for rebels is likely to decrease following a shift in military power balance, which can be a further trigger of their victimisation. Populations often need to make an assessment as to who is likely to win when choosing who to support as the potentially winning warring party is imagined to be linked to protection during ongoing conflict (see also Schubiger, 2021). Following such a logic, increasing attacks against civilians is aimed at decreasing civilian support for the government or even at punishing communities for siding with government forces la Calle (2017).

We thus argue that the influx of FDI leads to an increase in deliberate civilian victimisation because rebels now face a militarily stronger adversary at sites of investment. This raises the costs of directly engaging in the battlefield and can motivate rebels to target

civilians to make strategic gains despite reduced military power and territorial control. Given the shifted power balance, civilian victimisation can be used to generate different strategic or military gains without running the risk of active military confrontation or defeat in areas of investment. Civilians are, in fact, largely unarmed and likely to lack protection by the state as security forces are focused on securing infrastructure linked to FDI rather than safeguarding populations.

Others have shown that such dynamics can lead to vicious cycles of civilian targeting where communities are repeatedly victimised by both government and rebel forces ([Fielding and Shortland, 2012](#); [la Calle, 2017](#)). We argue that the influx of FDI exacerbates such a vicious cycle because governments see themselves as needing to demonstrate more resolve, have greater need and capacity to capture territory linked to FDI, and have more to lose from disinvestment. Consequently, all the rebel goals linked to civilian targeting (from trying to gain concessions to mobilising civilians) are further more worthy of pursuit for rebels, even in the face of backlash by targeted civilians ([Polo and González, 2020](#)).

From this framework, we derive the following empirical expectation and two competing sub-hypotheses.

Hypothesis 1: *A conflict event will experience more civilian casualties by all warring actors if it occurs in the proximity of a location that sees FDI inflow.*

Hypothesis 2a: *A conflict event will experience more civilian casualties killed by the state if it occurs in the proximity of a location that sees FDI inflow.*

Hypothesis 2b: *A conflict event will experience more civilian casualties killed by the rebel if it occurs in the proximity of a location that sees FDI inflow.*

2.1.3 Type of FDI

The local effect of FDI on patterns of violence may be strongest when it comes to investment that is 'immobile' and consequently directly tied to a given location such as extractive FDI. Further, the leverage that any investor may hold over the government

is likely to depend on the value of FDI. [Mihalache-O'Keef \(2018\)](#) urges to disaggregate FDI by sector as not all investors have the same political or socio-economic influence. She shows that FDI in the primary sector (linked to extraction of raw materials and resources) drives civil conflict, while FDI in the tertiary sector (linked to service provision) may reduce it. Similarly, we argue that extractive FDI is likely linked to more civilian targeting as higher economic rents translate to heightened willingness to fight over a particular territory ([Mesquita, 2020](#)). This mechanism is likely to be strongest for extractive FDI because it offers armed groups the possibility to also extract revenue; especially when linked to lootable resources such as diamonds ([Billon, 2001; Le Billon, 2001](#)). We consequently argue that the detrimental effect of FDI on civilian victimisation will be most exacerbated with the influx of extractive FDI more than any other sector.

Hypothesis 3: *A conflict event will experience more civilian casualties if it occurs in the proximity of a location that sees extractive FDI inflow.*

2.1.4 Battlefield Losses

Apart from increased civilian targeting, the shift to guerilla tactics could also affect battlefield losses as rebels are less likely to resort to attacks that involve direct confrontation with their opponent. Since attacks are now more costly, rebels are much less likely to conduct attacks without increased intelligence and knowledge that they might be able to impose costs on the government. Therefore, the influx of FDI could surprisingly result in a localised reduction in rebel casualties for occurring clashes. At the same time, government casualties are likely unaffected by the influx of FDI as troops are deployed with the intent to capture territory at all cost, yet are at the same time likely better equipped and possess better intelligence.

Hypothesis 4a: *A conflict event will experience fewer rebel deaths if it occurs in the proximity of a location that sees FDI inflow.*

Hypothesis 4b: *A conflict event will be as deadly for government forces if it occurs in the proximity of a location that sees FDI inflow as it is away from an investment site.*

3 Empirical analysis

3.1 Data collection

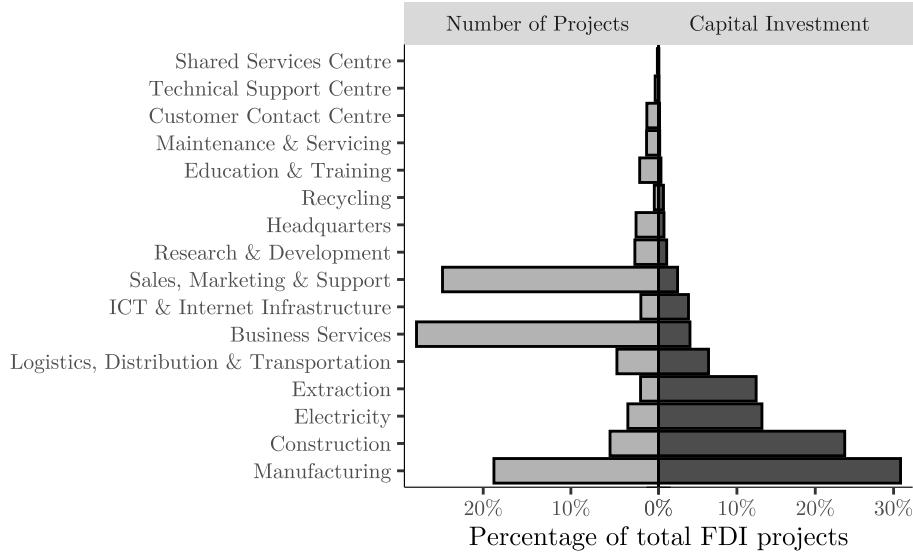
We build a novel dataset containing geolocated information on inward FDI projects and conflict events. We obtain this dataset by merging information from two sources. First, we follow [Brazys and Kotsadam \(2020\)](#) and gather data on FDI projects across Africa using the *fDi Markets* data by the Financial Times, which provide disaggregated information on location of investment by multinational enterprises since 2003. Looking at the years between 2003 and 2011, the dataset contains 11,689 unique FDI projects in Africa. However, given that our argument estimates the effect of a new FDI project on conflict, we only keep projects coded as ‘New’ and ignore ‘Closed’ ones, leaving us with 10,610 projects. Then, we rely on textual information about the location of FDI projects to geolocate FDI. Textual information includes country, administrative region, and locality (city, town, or village) of the project. The majority (7,511, or 71%) of the projects reports information on the location of the investment. We use it to create a query and supply it to a Google Maps API which successfully geolocates all 7,511 projects.⁸ This set represents the final group of FDI projects we consider. Figure 1 breaks down their number and size (in terms of capital investment) by their activity. Although the majority of these projects involved activities like ‘Business Services’ and ‘Sales, Marketing & Support’, these projects tend to involve a significantly lower investment of capital. Instead, the largest activities by capital investment are ‘Manufacturing’, ‘Construction’, ‘Electricity’, and ‘Extraction’.

Our second data source contains information on conflict events. We rely on data from version 20.1 of the Uppsala Conflict Data Program Georeferenced Event Dataset (UCDP GED) by [Sundberg and Melander \(2013\)](#).⁹ The dataset contains a total of 225,385 violent

⁸In Appendix A we discuss possible selection bias in our estimates derived from not including in the analysis the remaining 29% of the FDI projects that do not report information on the location. We use observable covariates for all FDI projects to argue that selection bias likely lead us to *underestimate* the size of our target effect, which reassures us on the validity of the results.

⁹We choose UCDP data over another popular source for conflict event data—the Armed Conflict Location & Event Data (ACLED)—because our theory justifies specific expectations about the effect of FDI on civilian deaths. ACLED does not distinguish its fatalities measure between government, rebel, and civilian forces, rendering it unsuited to our needs.

Figure 1: Geolocated fDi Markets projects, data on Africa (2003–2021). Distribution of projects’ activity by number of projects and capital investment



events occurring between 1989 and 2019. All events are geolocated by UCDP. To match our data availability on FDI projects, we select only violent events occurring in Africa after 2003. Further, we exclude from the dataset events defined as ‘non-state conflicts’ (violence between organized armed groups). We therefore consider only ‘state-based conflicts’—those where at least one of the two parties is the government of a state—and ‘one-sided violence’—targeted violence against civilians. These selections leave us with a total of 22,480 violent events taking place between 2003 and 2019 in 37 African countries. We then code three dependent variables on battle-related deaths from this dataset. We measure, for each conflict event i at time t , the number of battle-related deaths recorded among civilians, among government forces, and among rebel groups. We take the logarithm of these variables plus one in order to reduce skewness of the distribution.¹⁰

Our argument explains conflict intensity as a function of proximity to FDI projects. In order to merge the two data sources and study this relationship, we construct circular buffers around each conflict event with varying radius size. Our preferred choice is a buffer of 5km in radius, which we deem narrow enough and appropriate to our argument

¹⁰Because we study these dependent variables in linear models, all estimates β relative to explanatory variables can be interpreted as a $1 - e^\beta$ rate of change in the dependent variable for a one unit increase in the explanatory variable.

(it is a distance covered in approximately an hour walk on a regular terrain).¹¹ We merge the conflict-event data sources with the FDI data by looking at whether and which FDI projects are contained within the buffer zone defined around a conflict event. Next section explains how such spatial merging of the two data sources allows us to implement our research design.

3.2 Research design

Studying the effect of FDI on conflict dynamics poses a number of issues. The most pressing is the non-random location of foreign investments. Locations that receive investment might differ fundamentally from those that do not. For instance, foreign investors might decide (not) to invest in a certain location as a function of prospects of profit or stability. To the extent that these factors also correlate with conflict dynamics, observational studies risk to erroneously attribute differences in conflict intensity to investment, rather than to unobserved determinants shaping both. For instance, a negative association between conflict intensity and presence of FDI might mask investors' preferences for more stable environments, which in turn might be associated with low-intensity violence.

We employ the identification strategy proposed by [Kotsadam and Tolonen \(2016\)](#) and [Knutsen et al. \(2017\)](#) to clean our estimates from such endogeneity. This strategy exploits spatial-temporal variation in the distribution of FDI in order to control for factors that determine FDI locations by design. The intuition is to compare the intensity of conflict events that occur in the proximity of an existing investment with the intensity of conflict events that occur in the proximity of areas that will see an investment *in the future*. In other words, we use not-yet treated conflict events as a counterfactual for treated ones. The comparison is legitimate under the assumption that areas that see an investment in the future would have been as likely destination of investment for investors as those that see an investment at present. We therefore assume that the only factor varying between areas that see an investment at present and areas that will see an investment in the future is the existence of the investment itself.

¹¹The radius choice is admittedly arbitrary. However, in Figure B.1, we show that our results do not change when extending the radius size by intervals of 1km until a maximum of 15km.

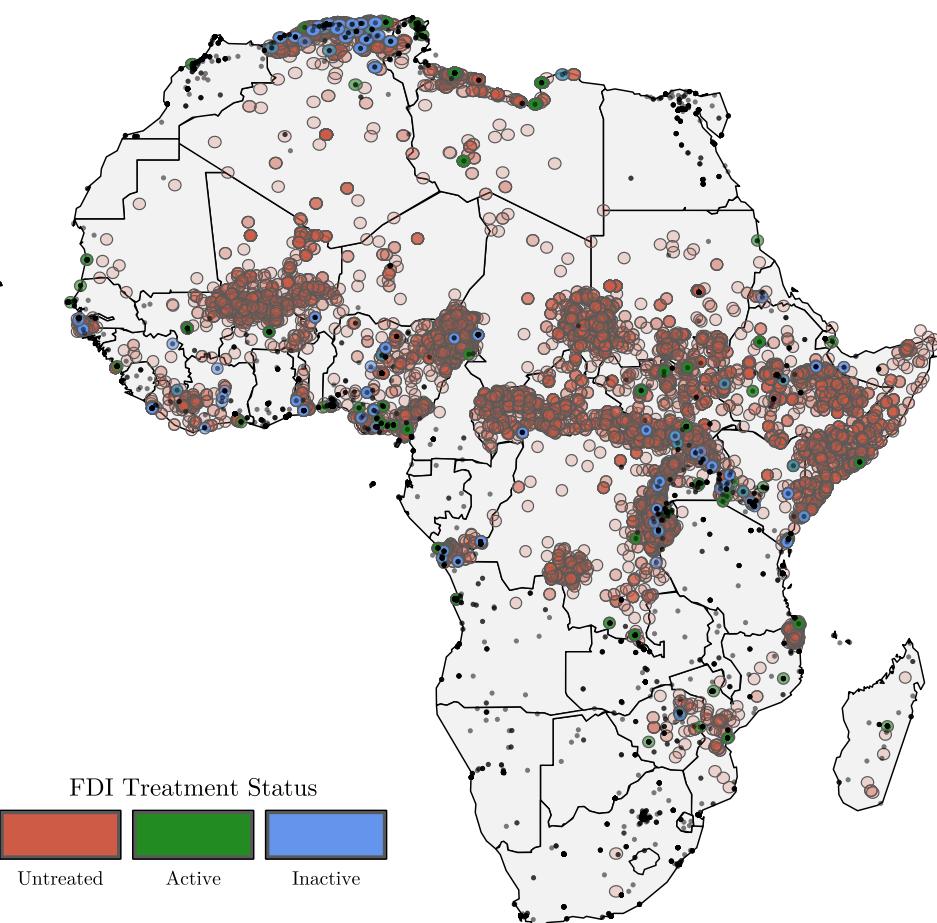
Our unit of observation is a conflict event i occurring at time t with its 5km circular buffer. We code each conflict event in one of *three* groups based on whether at least one FDI project is contained within its 5km-buffer zone: (1) conflict events proximate to at least one FDI project active at present time (coded as *Active*); (2) conflict events in no proximity of a foreign investment at present, but in the proximity of a *future* investment (coded as *Inactive*); (3) conflict events having no foreign investment in their buffer at any time point in our data (coded as *Untreated*).

Figure 2 exemplifies our procedure. It plots circular buffer zones around all conflict events. It also plots all geolocated investments as black dots. Conflict event buffers are colored based on their treatment status—that is, based on whether (1) at least one investment exists within their buffer at present (*Active*), (2) at least one future investment is contained in the buffer (*Inactive*), or (3) no investment at all occurs in the buffer at any time (*Untreated*). Although the buffers' treatment status is defined based on a 5km radius, circles are here represented with a 50km radius in order to be visible.¹² Our strategy effectively compares *Active* (green) and *Inactive* (blue) conflict events. To appreciate the advantage that this strategy guarantees, consider Algeria. Here, FDI projects concentrate in the coastal northern area which differs substantively from the southern part bordering Mali. Our identification strategy removes such differences by design by comparing conflict events occurring only in the proximity of active or inactive investments (which tend to be in the Northern area). Even within this area, we effectively only compare events that are treated at present with those that are not-yet treated (proximate to a future investment).

A descriptive look at the data confirms that such procedure removes significant bias over a naive comparison between conflict events proximate to an FDI project or not. Conflict events happening in the proximity of an *Active* FDI have about 8% more civilian casualties than all other conflict events ($P\text{-value} = 0.004$). While supportive of our argument, these results are highly suspect due to endogeneity and could substantively underestimate the value obtained when comparing the intensity of treated and not-yet

¹²This is the reason why, on the map, some buffer zones appear to be containing an investment (black dot) but are colored as *Untreated* (red): their treatment status is defined based on a 5-km radius as opposed to the 50-km one that is visible on the map.

Figure 2: Violent event buffers and FDI treatment status. Black dots represent geolocated FDI projects from fDi Markets. Circles represent buffer zones of 5km radius defined around violent events reported from the UCDP GED. Circles are plotted with a 50km radius in order to be visible but their treatment status is defined based on a 5km radius.



treated conflict events. When we operate this comparison, we see that conflict events in the proximity of an *Active* FDI have, in fact, 13% more civilian casualties than *Inactive* ones. ($P\text{-value} = 0.008$).¹³ The naive comparison is likely to underestimate the effect of FDI on conflict intensity due to investors' average preferences for setting up their activities more distant from areas of more intense confrontation.

In our analysis, we operate the comparison between *Active* and *Inactive* conflict events by means of a simple linear regression model estimated with ordinary least squares (OLS). The outcome variable is one of the three variables measuring the (logged) number of deaths—among civilians, government forces, or rebels—and the treatment variable is the three-level categorical indicator coding whether the conflict event's FDI status is *Active*, *Inactive*, or *Untreated*. Our design always includes country and year fixed effects so that we remove time-invariant and country-invariant heterogeneity between FDI patterns and violent events at these levels. All our standard errors are clustered at the country level.

4 Results

Table 1 reports our main estimates. Models are divided in three groups based on which actors' casualty count is modelled—civilians, rebels, or government forces. In each group, estimates are presented in sets of three models. The first model of each group is a sparse specification including only the three-level treatment variable and country and year fixed effects. The second specification adds a covariate for the average proportion of mountainous terrain in the buffer, to control for foreign investors' lower likelihood to invest in impervious areas as well as for the likely lower conflict intensity there.¹⁴ Finally, the third model adds a linear country-level time trend to account for unobservable country-specific temporal dynamics affecting both FDI project allocation and conflict intensity. In all models, the estimate of interest is presented in the first row—reporting the numeric comparison between *Active* and *Inactive* conflict buffers.

¹³All results described in this paragraph come from two-tailed t-tests based on buffers of 5km radius.

¹⁴We draw information on this covariate from PRIO-GRID 50km×50km cell data (Tollefsen et al., 2012). We use cell-specific information to obtain a measure specific to the buffer zones around our conflict events. This is done by averaging the value of the variable for cells intersecting with each buffer.

Table 1: The local effect of FDI on conflict intensity

	Civilian deaths			Rebel deaths			Government deaths		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Active vs Inactive	0.223** (0.105)	0.227** (0.105)	0.194* (0.108)	0.005 (0.080)	-0.003 (0.081)	-0.015 (0.050)	-0.073 (0.052)	-0.072 (0.052)	-0.073 (0.049)
Untreated vs Inactive	0.165* (0.085)	0.168* (0.085)	0.152* (0.087)	0.127 (0.089)	0.122 (0.091)	0.085* (0.049)	-0.018 (0.032)	-0.018 (0.031)	-0.015 (0.021)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes			Yes
Mean of outcome	0.648	0.648	0.648	0.417	0.417	0.417	0.259	0.259	0.259
Num.Obs.	22480	22454	22454	22480	22454	22454	22480	22454	22454
R2	0.133	0.133	0.155	0.080	0.081	0.099	0.047	0.047	0.055
R2 Adj.	0.131	0.131	0.151	0.078	0.079	0.095	0.045	0.045	0.051

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km

4.1 Civilian casualties

Models 1–3 test our expectation that a conflict event will experience more civilian casualties if it occurs in the proximity of a location that sees FDI inflow (Hypothesis 1). In models 1 and 2, we find that conflict buffers with an active FDI experience about 22% higher civilian deaths than buffers that will experience an FDI in future time points. The estimate is robust to the inclusion of a linear time trend (model 3). Although the effect decreases in size by three percentage points, an increase of 19% remains substantively quite large. Estimates are significant at conventional levels.

In the appendix (Figure B.1), we show that results are robust to alternative choices of buffer radii that vary from 5 to 15km, at intervals of 1km. However, in our research design increasing buffer radius introduces a trade-off between statistical power and endogeneity akin to enlarging the bandwidth of a regression discontinuity design. It increases the chance that a conflict event will be considered as treated (either *Active* or *Inactive*), thus increasing power, while at the same time potentially introducing more heterogeneous conflict events in the comparison.

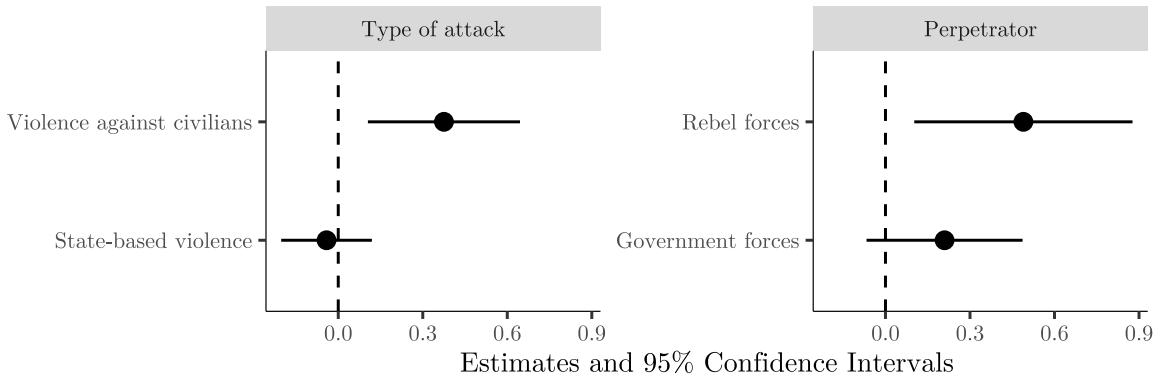
4.1.1 Type of attack and perpetrators

Our argument suggests that increases in civilian casualties are the result of more deadly attacks against civilians by both the government and rebel(s). To more explicitly test

these expectations (Hypothesis 2), we conduct two sub-group analyses. This allows us to provide insights into the mechanism laid out in our theory section. We first subset our conflict event data between cases of deliberate civilian victimization and state-based violence and replicate the model specifications adopted in Table 1. Second, we distinguish events by perpetrator.

The left panel of Figure 3 reports results when comparing civilian deaths in conflict events proximate to an *Active FDI* and in areas of a future FDI (*i.e.*, an *Inactive FDI*) for the sparse model – estimates are consistent with those reported here for other model specifications.¹⁵ The results show that events of civilian victimizations taking place close to an investment experience over 45% more civilian casualties than when they occur in areas that will see an FDI in future time-points. Instead, state-based violence does not experience more or less civilian casualties based on proximity with FDI. Thus, one-sided violence against civilians is driving our observed surge in civilian deaths in areas of investment, consistent with our framework. This suggests that civilian casualties are not an unintended consequence of conflict taking place in the proximity of active FDI; rather, they are an intentional target.

Figure 3: Sub-group analyses: type of attacks and perpetrators. Analysis splits the sample between one-sided violence against civilians *vs* state-based violence (left panel); and between one-sided violence attacks staged by rebels *vs* those staged by government forces (right panel). Full estimates are reported in Tables ...



In the right panel of Figure 3 we test our expectation captured in Hypotheses 2a and 2b – namely, that both the government and the rebel group will increase violence against

¹⁵Full estimates are reported in Appendix C.

civilians. We replicate the same analysis presented above by looking exclusively at events of civilian victimization and distinguish between attacks initiated by government or rebel forces. We find that one-sided events initiated by rebel forces experience about 63% more civilian casualties if they take place close to an *Active* FDI (when compared to events coded as *Inactive*). This provides evidence in favor of our hypothesis H2b. However, we do not find a similar effect for events of civilian victimization perpetrated by government forces, which do not result in a larger or smaller number of civilian casualties based on their proximity to FDI.

These results are consistent with the argument that rebel groups will resort to more violent acts of civilian victimization in areas of increased economic value and government presence as a ‘weapon of the weak’. Further, if FDI affects the intensity of one-sided attacks staged by rebel groups but not that of the state, this indicates that perhaps states do not need to rely more heavily on civilian targeting to secure territorial control, contrary to our expectation (Hypothesis 2a). In turn, rebels may perpetrate more violent attacks against civilians given their weakened military position following the influx of FDI (Hypothesis 2b). Such a substantive upsurge in civilian deaths could also indicate that violence is indiscriminate, i.e. not targeting specific individual – another signal that rebels have only weak territorial control (*e.g.*, [Kalyvas, 2006](#); [Anders, 2020](#)).

Several reasons could explain why we do not observe a similar intensification in violence against civilians by government forces. Unfortunately, we are not able to test them due to data limitations. Most importantly, although we may not observe heightened civilian victimisation by the government, it is possible that governments outsource civilian targeting. Investors tend to require governments to act quickly. But governments often lack the capacity to swiftly secure territorial control by relying on their regular security forces. Therefore, governments often collaborate with pro-government militias or even hire private military contractors (such as the Wagner Group) to help gain control over areas of investment (which also provides them with the necessary financial resources to pay for such services). Engagement of such forces has been shown to lead to increased civilian victimisation, especially as impunity is even more rampant ([Carey et al., 2015](#);

Carey and Mitchell, 2017; Koren, 2017; Serwat et al., 2022).¹⁶

These findings should thus be considered with caution and not directly interpreted to indicate that governments do not employ civilian targeting as a tactic to secure control over areas of investment. Consider, for instance, the case of Colombia where Maher (2015) documents how the government used civilian victimisation in areas of investment in the Arauca region to trigger population displacement to allow investment-related activities, such as mining, to take place unabated and ensure the long-term success of an investment.

We also cannot exclude that, while we do not observe a change in *intensity* of civilian targeting by the government, state forces increase the *number* of attacks against civilians in FDI areas given their heightened territorial control (Anders, 2020). In other words, if an effect is not detected at the intensive margin, as in our design, there is no reason why it could not be detected at the extensive margin. It should be noted that our research design is not able to directly test whether more events of violence against civilians are perpetrated by either actor – the extensive margin. It can just account for changes in *intensity* of conflict events.

4.1.2 Type of FDI: Extractive *vs* non-extractive

Our argument also suggests that the effect of FDI on armed conflict is most exacerbated when it comes to extractive FDI as it increases the value of a given territory and investment is highly ‘immobile’ (Hypothesis 3). Figure 4 reports the estimates obtained when replicating the models in Table 1 after recoding our treatment variable to capture whether the buffer contains an extractive¹⁷ (or non-extractive) FDI at present (*Active*) or in future time points (*Inactive*). We only report estimates relative to the main variable of interest (*i.e.*, comparison between *Active* and *Inactive* conflict buffers). Full estimates are reported in Appendix (Tables D.1 and D.2).

Consistent with our theory, we find that increases in civilian deaths are driven by FDI

¹⁶Although it has to be noted that militias emerging out of communities are less likely to target civilians due to their access to intelligence and them being embedded in the local community (Lyall, 2010; Stanton, 2016).

¹⁷Extractive FDI projects are defined as those in whose activity is classified by fDi Markets as either of ‘Extraction’ or ‘Electricity’. Non-extractive FDI include all the other categories. See Figure 1 for a full breakdown.

in extractive sectors. The effect is, in fact, much stronger for this type of ‘treatment’. The top coefficients show that conflict events in the proximity of *Active* extractive FDI projects experience about 33% higher casualties among civilians than events happening in areas that have yet to see an extractive FDI. Consistently with our framework, extractive investments tend to be more capital intensive (see Figure 1 which exacerbates the effect on civilian casualties by heightening the need for governments to secure control of their areas.

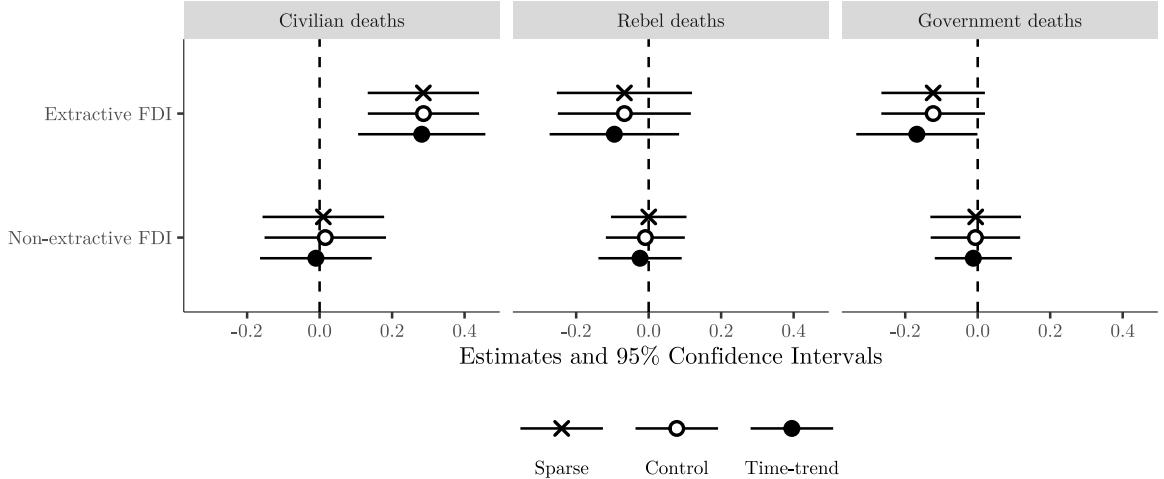
Moreover, we find no effect of non-extractive FDI—bottom coefficient—on any of the outcome variables measuring these groups’ number of fatalities. This suggests that the effect we are observing is specific to extractive investments. Consequently, FDI will only exert an influence on patterns of violence at sites of investment if investments are linked to extractive industry.

Interestingly, when we differentiate type of FDI, we also find that conflict events occurring close to extractive FDI experience about 13% fewer deaths among government forces. This could suggest that, rather than observing no change in battlefield deaths, as put forward by our argument (Hypothesis 4b), increased government capacity in areas of economic interest could be reducing governments fatalities. Yet, it should be noted that the effect is rather small in substantive terms and confidence intervals often include 0. Meanwhile, we find no effect in terms of rebel casualties, although our argument suggested we would likely observe a reduction (Hypothesis 4a).

4.2 Battlefield Losses

To conclude our analysis, we evaluate evidence in favor of hypotheses 4a and 4b. Model 4–6 in Table 1 test our expectation that FDI could be changing patterns of violence in terms of battlefield losses. Consistent with our theory, the main specifications would indicate that government forces are unaffected by FDI and do not see a change in the number of fatalities for a given conflict event (Hypothesis 4b) and contrary to our expectation, rebels do not see a change in fatalities either (Hypothesis 4a). Point estimates in models 4–9 are significantly small and fail to meet statistical significance at conventional levels. We

Figure 4: The effect of extractive *vs* non-extractive FDI on conflict intensity. Placebo test. Full disclosure of results in Tables D.1 and D.2



interpret these results as indicating that our comparison does not capture differences in conflict intensity among areas with and without investments for reasons that are unrelated to our civilian-specific explanation.

5 Conclusion

Foreign direct investment received during ongoing armed conflict has a substantive and robust impact on patterns of violence, specifically violence against civilians. We suggest that FDI heightens the government's willingness to allocate resources to securitise areas linked to investment, creating a shift in coercive state capacity that alters the military power balance in the proximity of investments. This carries important repercussions for local repertoires of violence as rebels are inclined to rely more heavily on strategies of irregular warfare. We document that civilian casualties are largely due to deliberate and more violent attacks against civilians perpetrated by rebels. Also, our empirical analysis indicates that the reported effects are driven by extractive FDI. We interpret this evidence in support of a ‘weapon of the weak’ argument in which, following the onset of a new FDI project, rebels engage more in irregular warfare and specifically become more violent in attacks against civilians in areas in which government forces are now more heavily present as this is their best strategy to contest governmental control.

This finding is an important addition to previous work on the effect of FDI on domestic stability which has, to a large extent, neglected micro-level dynamics pertaining to FDI and violence and ignored that many conflict-affected settings actually receive FDI during internal conflict. Just analysing whether FDI promotes peace or fuels violence at an aggregate level paints an incomplete picture of its effect on stability. In applying a more disaggregated analytical framework we follow recent research on the effects of FDI on development outcomes such as decentralisation or corruption, which has demonstrated the usefulness of disentangling the effects of FDI at a lower level (*e.g.*, Malesky, 2008; Malesky and Mosley, 2018; Malesky et al., 2015; Pinto and Zhu, 2016). At the same time, our analysis also provides important causal evidence on the effect of FDI by addressing important concerns over when and where FDI occurs in our identification strategy.

Our findings engage an important question in international political economy, conflict research and comparative politics more broadly: What role do foreign actors such as MNCs play in peace and state-building? The present analysis provides only a first glimpse into the role FDI plays for prospects of peace as it studies the effect *locally*. There is reason to believe that the mechanisms and effects we present here likely have implications for armed conflict and domestic stability beyond areas of investment. This remains to be theorised and tested in future research as doing so would have required the application of different research designs. Finally, further research on the effect of FDI on outcomes related to statebuilding or development would benefit from continuing to move away from a framework that portrays FDI as either positive or negative and instead ask how and why it may affect domestic actors and how these processes affect respective outcomes.

References

- Ahlquist, J. S. (2006). Economic Policy, Institutions, and Capital Flows: Portfolio and Direct Investment Flows in Developing Countries. *International Studies Quarterly*, 50(3):681–704.
- Anders, T. (2020). Territorial control in civil wars: Theory and measurement using

- machine learning. *Journal of Peace Research*, 57(6):701–714.
- Balcells, L. and Kalyvas, S. N. (2014). Does warfare matter? severity, duration, and outcomes of civil wars. *Journal of Conflict Resolution*, 58(8):1390–1418.
- Balcells, L. and Steele, A. (2016). Warfare, political identities, and displacement in spain and colombia. *Political Geography*, 51:15–29.
- Barbieri, K. and Reuveny, R. (2005). Economic globalization and civil war. *The Journal of Politics*, 67(4):1228–1247.
- Barry, C. M. (2018). Peace and conflict at different stages of the fdi lifecycle. *Review of International Political Economy*, 25(2):270–292.
- Billon, P. L. (2001). Thriving on war: The angolan conflict & private business. *Review of African Political Economy*, 28(90):629–635.
- Blair, G., Christensen, D., and Wirtschafter, V. (2022). How does armed conflict shape investment? evidence from the mining sector. *The Journal of Politics*, 84(1):116–133.
- Brazys, S. and Kotsadam, A. (2020). Sunshine or curse? foreign direct investment, the OECD Anti-Bribery Convention, and individual corruption experiences in Africa. *International Studies Quarterly*, 64(4):956–967.
- Bussmann, M. (2010). Foreign direct investment and militarized international conflict. *Journal of Peace Research*, 47(2):143–153.
- Bussmann, M. and Schneider, G. (2007). When globalization discontent turns violent: Foreign economic liberalization and internal war. *International Studies Quarterly*, 51(1):79–97.
- Carey, S. C., Colaresi, M. P., and Mitchell, N. J. (2015). Governments, informal links to militias, and accountability. *Journal of Conflict Resolution*, 59(5):850–876.
- Carey, S. C. and Mitchell, N. J. (2017). Progovernment militias. *Annual Review of Political Science*, 20:127–147.

- Chen, S. (2017). Profiting from fdi in conflict zones. *Journal of World Business*, 52(6):760–768.
- Dai, L., Eden, L., and Beamish, P. W. (2017). Caught in the crossfire: Dimensions of vulnerability and foreign multinationals' exit from war-afflicted countries. *Strategic Management Journal*, 38(7):1478–1498.
- De Soysa, I. and Fjelde, H. (2010). Is the hidden hand an iron fist? capitalism and civil peace, 1970-2005. *Journal of Peace Research*, 47(3):287–298.
- De Soysa, I. and Oneal, J. R. (1999). Boon or bane? reassessing the productivity of foreign direct investment. *American sociological review*, pages 766–782.
- Eck, K. and Hultman, L. (2007). One-sided violence against civilians in war: Insights from new fatality data. *Journal of Peace Research*, 44(2):233–246.
- Fielding, D. and Shortland, A. (2012). The dynamics of terror during the peruvian civil war. *Journal of Peace Research*, 49(6):847–862.
- Gartzke, E., Li, Q., and Boehmer, C. (2001). Investing in the peace: Economic interdependence and international conflict. *International Organization*, 55(2):391–438.
- Guidolin, M. and La Ferrara, E. (2007). Diamonds are forever, wars are not: Is conflict bad for private firms? *American Economic Review*, 97(5):1978–1993.
- Hartzell, C. A., Hoddie, M., and Bauer, M. (2010). Economic liberalization via imf structural adjustment: Sowing the seeds of civil war? *International Organization*, 64(2):339–356.
- Hultman, L. (2007). Battle losses and rebel violence: Raising the costs for fighting. *Terrorism and Political Violence*, 19(2):205–222.
- Jensen, N., Biglaiser, G., Li, Q., Malesky, E., Pinto, P., and Staats, J. (2012). *Politics and foreign direct investment*. University of Michigan Press.
- Kalyvas, S. N. (2006). *The logic of violence in civil war*. Cambridge University Press.

- Kalyvas, S. N. and Balcells, L. (2010). International system and technologies of rebellion: How the end of the cold war shaped internal conflict. *American Political Science Review*, 104(3):415–429.
- Knutsen, C. H., Kotsadam, A., Olsen, E. H., and Wig, T. (2017). Mining and local corruption in Africa. *American Journal of Political Science*, 61(2):320–334.
- Koren, O. (2017). Means to an end: Pro-government militias as a predictive indicator of strategic mass killing. *Conflict Management and Peace Science*, 34(5):461–484.
- Kosack, S. and Tobin, J. (2006). Funding self-sustaining development: The role of aid, fdi and government in economic success. *International Organization*, 60(1):205 – 243.
- Kotsadam, A. and Tolonen, A. (2016). African mining, gender, and local employment. *World Development*, 83:325–339.
- la Calle, L. D. (2017). Compliance vs. constraints: A theory of rebel targeting in civil war. *Journal of Peace Research*, 54(3):427–441.
- Le Billon, P. (2001). The political ecology of war: natural resources and armed conflicts. *Political geography*, 20(5):561–584.
- Lyall, J. (2010). Are coethnics more effective counterinsurgents? evidence from the second chechen war. *American Political Science Review*, 104(1):1–20.
- M Wood, R. (2010). Rebel capability and strategic violence against civilians. *Journal of Peace Research*, 47(5):601–614.
- Magee, C. S. and Massoud, T. G. (2011). Openness and internal conflict. *Journal of Peace Research*, 48(1):59–72.
- Maher, D. (2015). The fatal attraction of civil war economies: foreign direct investment and political violence, a case study of colombia. *International Studies Review*, 17(2):217–248.

- Malesky, E. J. (2008). Straight ahead on red: how foreign direct investment empowers subnational leaders. *The Journal of Politics*, 70(1):97–119.
- Malesky, E. J., Gueorguiev, D. D., and Jensen, N. M. (2015). Monopoly money: Foreign investment and bribery in vietnam, a survey experiment. *American Journal of Political Science*, 59(2):419–439.
- Malesky, E. J. and Mosley, L. (2018). Chains of love? global production and the firm-level diffusion of labor standards. *American Journal of Political Science*, 62(3):712–728.
- Matanock, A. M. (2020). How international actors help enforce domestic deals. *Annual Review of Political Science*, 23(1):357–383.
- Mesquita, E. B. d. (2020). Territorial conflict over endogenous rents. *The Journal of Politics*, 82(1):162–181.
- Mihalache-O'Keef, A. and Vashchilko, T. (2010). Chapter seven: Foreign direct investors in conflict zones. *Adelphi Series*, 50(412-413):137–156.
- Mihalache-O'Keef, A. S. (2018). Whose greed, whose grievance, and whose opportunity? effects of foreign direct investments (fdi) on internal conflict. *World Development*, 106:187–206.
- Mukherjee, S. (2014). Why are the longest insurgencies low violence? politician motivations, sons of the soil, and civil war duration. *Civil Wars*, 16(2):172–207.
- Olzak, S. (2011). Does globalization breed ethnic discontent? *Journal of Conflict Resolution*, 55(1):3–32.
- Pettersson, T., Högladh, S., and Öberg, M. (2019). Organized violence, 1989–2018 and peace agreements. *Journal of Peace Research*, 56(4):589–603.
- Pinto, P. M. and Zhu, B. (2016). Fortune or evil? the effect of inward foreign direct investment on corruption. *International Studies Quarterly*, 60(4):693–705.

- Pinto, P. M. and Zhu, B. (2022). Brewing violence: Foreign investment and civil conflict. *Journal of Conflict Resolution*, 66(6):1010–1036.
- Polo, S. M. and Gleditsch, K. S. (2016). Twisting arms and sending messages: Terrorist tactics in civil war. *Journal of Peace Research*, 53(6):815–829.
- Polo, S. M. and González, B. (2020). The power to resist: mobilization and the logic of terrorist attacks in civil war. *Comparative Political Studies*, 53(13):2029–2060.
- Rexer, J. (2021). The local advantage: Corruption, organized crime, and indigenization in the Nigerian oil sector. *Working Paper*.
- Sandholtz, W. and Gray, M. M. (2003). International integration and national corruption. *International Organization*, 57(4):761–800.
- Schubiger, L. I. (2021). State violence and wartime civilian agency: Evidence from peru. *The Journal of Politics*, 83(4):1383–1398.
- Schwartz, R. A. and Straus, S. (2018). What drives violence against civilians in civil war? evidence from guatemala’s conflict archives. *Journal of Peace Research*, 55(2):222–235.
- Serwat, L., Nsaibia, H., Carbone, V., and Lay, T. (2022). Wagner group operations in africa: Civilian targeting trends in the central african republic and mali. *ACLED (Armed Conflict Location & Event Data Project)*, 30.
- Sexton, R., Wellhausen, R. L., and Findley, M. G. (2019). How government reactions to violence worsen social welfare: evidence from peru. *American Journal of Political Science*, 63(2):353–367.
- Sorens, J. and Ruger, W. (2012). Does foreign investment really reduce repression? *International Studies Quarterly*, 56(2):427–436.
- Stanton, J. A. (2016). *Violence and restraint in civil war: Civilian targeting in the shadow of international law*. Cambridge University Press.

- Steele, A. (2011). Electing displacement: political cleansing in apartadó, colombia. *Journal of Conflict Resolution*, 55(3):423–445.
- Sundberg, R. and Melander, E. (2013). Introducing the UCDP georeferenced event dataset. *Journal of Peace Research*, 50(4):523–532.
- Toft, M. D. (2009). *Securing the Peace: The Durable Settlement of Civil Wars*. Princeton University Press.
- Tollefson, A. F., Strand, H., and Buhaug, H. (2012). PRIO-GRID: A unified spatial data structure. *Journal of Peace Research*, 49(2):363–374.
- Tomashevskiy, A. (2017). Investing in violence: foreign direct investment and coups in authoritarian regimes. *The Journal of Politics*, 79(2):409–423.
- Valentino, B., Huth, P., and Balch-Lindsay, D. (2004). “Draining the sea”: mass killing and guerrilla warfare. *International organization*, 58(2):375–407.
- Vogel, D. (1997). Trading up and governing across: transnational governance and environmental protection. *Journal of European public policy*, 4(4):556–571.
- Wood, R. M. (2014). From loss to looting? battlefield costs and rebel incentives for violence. *International Organization*, 68(4):979–999.

Appendix

Double-Edged Sword: Understanding the Localised Effect of FDI Inflow in Conflict Settings

A Geolocated *vs* non-geolocated FDI projects. Descriptives

In this section, we test difference in covariates between FDI projects that report information on their location (7,511, or 71% of 10,610 total projects) and those that cannot be geolocated (3,099 or 29% of the total).

In Table A.1 we present the distribution in covariates for these two groups of projects. We find that geolocated projects tend to be significantly smaller in terms of jobs created and capital investments. Moreover, they are significantly less likely to have high quality information on these covariates, at least with respect to whether the ‘Jobs Created’ figure is estimated or not.

Figure A.1 further extends the comparison by plotting distribution of FDI activity, MNC sector, and destination country for these projects. We find that the distributions of these variables are generally similar in the geolocated or not geolocated groups. However, we also observe some exceptions. Projects in the ‘Extraction’ activity and in the ‘Coal, oil & gas’ sectors tend to be more likely to not be geolocated.

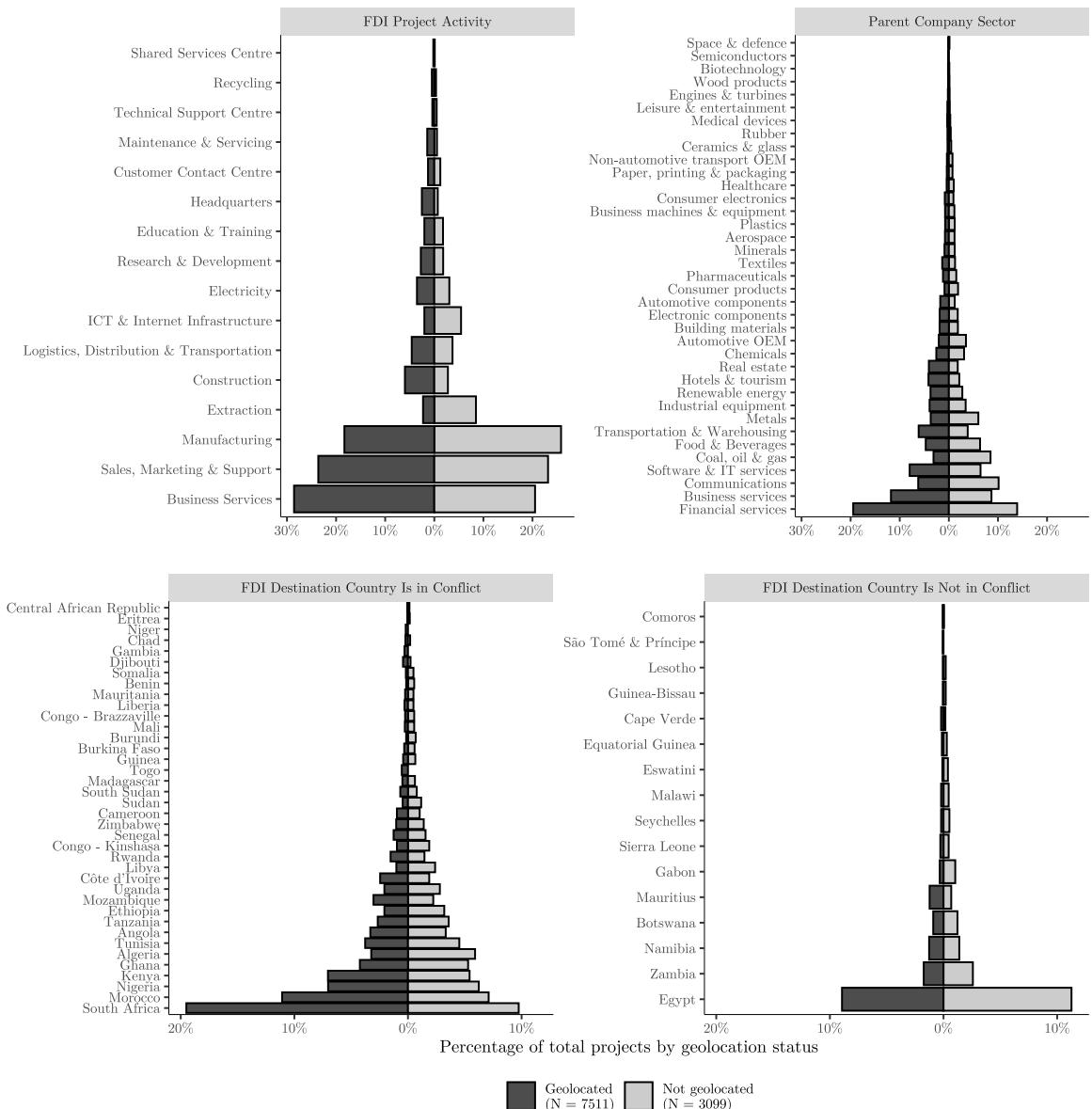
From these distributions, we can draw a few considerations as to how the selection into being geolocated or not biases our estimates. Our analyses are based on FDI projects that tend to be smaller in size (by capital investments and jobs created) and tend to under-represent extractive FDI. It is likely that these FDI, which are richer and more concentrated on relatively ‘immobile’ activities, would further heighten the conflict intensity in their proximity (see [Blair et al., 2022](#); [Maher, 2015](#); [Mihalache-O’Keef and](#)

(Vashchilko, 2010; Rexer, 2021). For this reason we can reasonably expect that, had these non-geolocated FDI projects been provided with location information and been included in the analysis, their effect should likely *increase* the observed positive effect, which likely underestimates the real effect of FDI on conflict intensity if selection bias is in place.

Table A.1: Comparison of covariates for geolocated and non-geolocated FDI projects

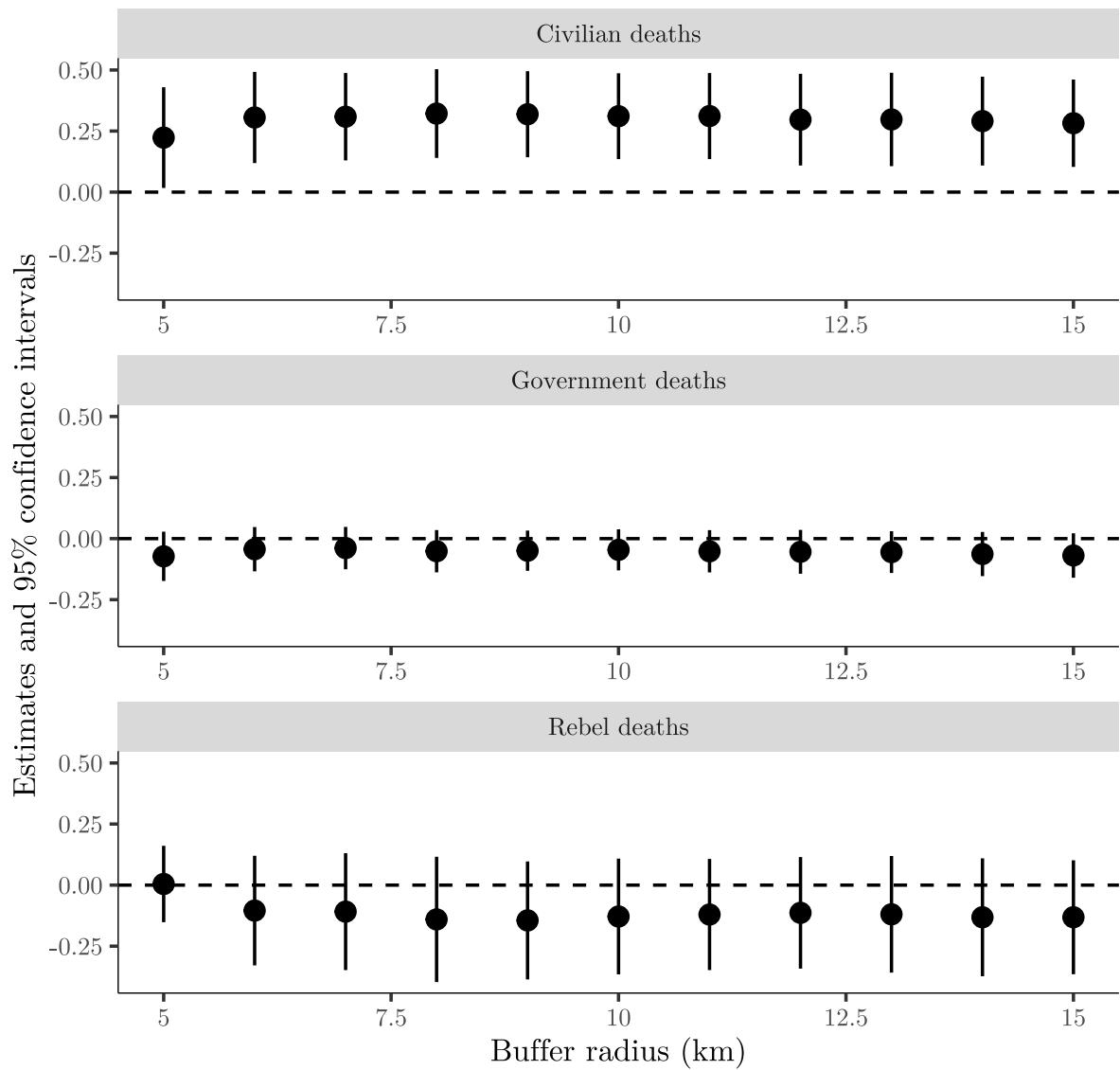
	Geolocated (N=7511)		Not geolocated (N=3099)		Diff. in Means	Std. Error
	Mean	Std. Dev.	Mean	Std. Dev.		
Jobs Created	185.56	464.30	220.24	452.39	34.68***	9.73
Jobs Created Is Estimated	0.88	0.32	0.95	0.23	0.06***	0.005
Capital Investment	93.80	585.97	127.51	544.71	33.71**	11.89
Capital Investment Is Estimated	0.83	0.37	0.84	0.37	0.006	0.008

Figure A.1: Comparison between geolocated and non-geolocated FDI projects by activity, sector, and destination country



B Alternative radius size for conflict events' buffers

Figure B.1: Estimates obtained when varying buffer radius from 5 to 15km, at intervals of 1km. Estimates relative to the comparison between *Active* and *Inactive* buffers. Sparse linear specifications. Top panel reports results when modelling civilian casualties, middle panel focuses on casualties among government forces, bottom panel studies rebel fatalities.



C Subgroup analysis: type of attacks and perpetrators

C.1 Type of violence: One-sided *vs* state-based violence

Table C.1: The local effect of FDI on conflict intensity (one-sided violence only)

	Civilian deaths			Rebel deaths		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Active <i>vs</i> Inactive	0.375*** (0.133)	0.375*** (0.130)	0.226** (0.100)	-0.0006 (0.0006)	-0.0006 (0.0006)	-0.0006 (0.0006)
Untreated <i>vs</i> Inactive	0.457*** (0.132)	0.458*** (0.131)	0.344*** (0.093)	-0.00005 (0.00007)	-0.00005 (0.00007)	-0.00009 (0.00009)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes
Mean of outcome	1.332	1.332	1.332	0	0	0
Num.Obs.	8756	8750	8750	8756	8750	8750
R2	0.105	0.106	0.135	0.002	0.002	0.002
R2 Adj.	0.100	0.101	0.126	-0.004	-0.004	-0.008

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km. Government deaths are not included as a dependent variable because the variable is a constant (with value 0) for cases of one-sided violence

Table C.2: The local effect of FDI on conflict intensity (state-based violence only)

	Civilian deaths			Rebel deaths			Government deaths		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Active <i>vs</i> Inactive	-0.042 (0.078)	-0.035 (0.076)	-0.043 (0.076)	0.124 (0.125)	0.100 (0.126)	0.085 (0.105)	-0.057 (0.080)	-0.055 (0.082)	-0.053 (0.077)
Untreated <i>vs</i> Inactive	-0.099 (0.068)	-0.094 (0.064)	-0.084 (0.065)	0.277** (0.129)	0.262* (0.129)	0.210* (0.103)	0.011 (0.040)	0.011 (0.040)	0.022 (0.034)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes			Yes
Mean of outcome	0.211	0.211	0.211	0.682	0.682	0.682	0.425	0.425	0.425
Num.Obs.	13724	13704	13704	13724	13704	13704	13724	13704	13704
R2	0.081	0.082	0.099	0.122	0.125	0.148	0.066	0.067	0.075
R2 Adj.	0.078	0.079	0.094	0.119	0.122	0.144	0.063	0.064	0.070

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km

C.2 Perpetrators of one-sided violence: rebel *vs* government forces

Table C.3: The local effect of FDI on conflict intensity (one-sided violence only) by perpetrator type

	Rebel targeting			Government targeting		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Active <i>vs</i> Inactive	0.490** (0.189)	0.481*** (0.174)	0.376** (0.151)	0.210 (0.135)	0.211 (0.137)	0.057 (0.077)
Untreated <i>vs</i> Inactive	0.532*** (0.182)	0.532*** (0.176)	0.435*** (0.146)	0.198 (0.125)	0.199 (0.126)	0.133 (0.104)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes
Mean of outcome	1.459	1.459	1.459	1.123	1.123	1.123
Num.Obs.	5452	5446	5446	3304	3304	3304
R2	0.123	0.126	0.142	0.120	0.120	0.159
R2 Adj.	0.115	0.119	0.131	0.107	0.107	0.139

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km. Conflict events limited to cases of one-sided violence. Dependent variable is here limited to civilian casualties

D Effects by type of FDI

D.1 Extractive *vs* non-extractive FDI

Table D.1: The local effect of extractive FDI on conflict intensity

	Civilian deaths			Rebel deaths			Government deaths		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Active <i>vs</i> Inactive	0.286*** (0.076)	0.287*** (0.076)	0.282*** (0.087)	-0.067 (0.092)	-0.067 (0.090)	-0.095 (0.088)	-0.123* (0.070)	-0.123* (0.071)	-0.168** (0.082)
Untreated <i>vs</i> Inactive	0.054 (0.042)	0.053 (0.043)	0.083*** (0.028)	0.170*** (0.053)	0.175*** (0.056)	0.094** (0.036)	0.042 (0.034)	0.040 (0.035)	0.020 (0.029)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes			Yes
Mean of outcome	0.648	0.648	0.648	0.417	0.417	0.417	0.259	0.259	0.259
Num.Obs.	22480	22454	22454	22480	22454	22454	22480	22454	22454
R2	0.133	0.133	0.155	0.080	0.081	0.099	0.048	0.048	0.056
R2 Adj.	0.131	0.131	0.151	0.078	0.079	0.095	0.045	0.045	0.052

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km

Table D.2: The local effect of non-extractive FDI on conflict intensity

	Civilian deaths			Rebel deaths			Government deaths		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Active <i>vs</i> Inactive	0.010 (0.083)	0.016 (0.083)	-0.010 (0.076)	0.0002 (0.051)	-0.009 (0.054)	-0.024 (0.057)	-0.006 (0.062)	-0.006 (0.061)	-0.012 (0.052)
Untreated <i>vs</i> Inactive	0.052 (0.074)	0.057 (0.074)	0.031 (0.065)	0.066* (0.034)	0.056 (0.034)	0.047* (0.024)	-0.009 (0.035)	-0.009 (0.035)	-0.006 (0.027)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mountainous terrain		Yes	Yes		Yes	Yes		Yes	Yes
Country time-trend			Yes			Yes			Yes
Mean of outcome	0.648	0.648	0.648	0.417	0.417	0.417	0.259	0.259	0.259
Num.Obs.	21724	21698	21698	21724	21698	21698	21724	21698	21698
R2	0.135	0.135	0.159	0.083	0.084	0.101	0.048	0.048	0.057
R2 Adj.	0.133	0.133	0.155	0.081	0.082	0.097	0.046	0.046	0.053

* p < 0.1, ** p < 0.05, *** p < 0.01

Notes:

All models are linear regressions estimated using OLS. Dependent variables are logged versions of the count + 1. All standard errors are clustered at the country level. Buffers around conflict events have radius of 5 km