

Double-Edged Sword: The Hidden Civilian Toll of FDI 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 25% 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 US\$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 to capital formation around the world (UNCTAD 2022). Yet, among recipients are also countries currently engaged in civil conflict, such as Algeria, Cambodia, Colombia, Ethiopia, the Philippines, Nigeria, Sudan, Sri Lanka, and Mozambique. How does inward FDI affect internal armed conflict?

While this question has gained significant attention from human right defenders and journalists—for instance in the wake of communities in Nigeria suing Shell for complicity in murder (AmnestyInternational 2017; Smith 2011)—extant research offers little insight to understand how inward FDI received during ongoing armed conflict would affect prospects for peace. Answering this question has important implications for a critical discussion: what role do foreign actors such as multinational companies (MNCs) play in 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; Hartzell et al. 2010; Pinto and Zhu 2022; Tomashevskiy 2017). 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 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, in-

vestors are sensitive to political risk, such as 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., Matanock 2020; Mukherjee 2014; Pettersson et al. 2019; Sexton et al. 2019; Toft 2009). 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 strategies 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 localized 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 US\$20 billion liquefied natural gas project.¹ Similarly, since 2009 the Nigerian government has hired thousands of former fighters to protect pipelines owned by multinational companies operating in the Niger Delta and has, at times, even diverted troops from the front lines with Boko Haram (Hinsaw and Kent 2016). Consequent upticks in civilian casualties have been shown in different contexts (AmnestyInternational 2021; Tife 2010).

¹ See: <https://totalenergies.com/media/news/press-releases/total-signs-agreement-government-mozambique-regarding-security-mozambique>.

We systematically test our argument using a novel dataset that combines geolocated data of FDI projects in Africa from 2003 to 2021 (from fDi Markets) with georeferenced 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 active FDI experience over 25 per cent more civilian casualties than areas that will experience FDI at 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 peace prospects by shaping strategies of violence employed by warring factions.

Our results yield broader implications for understanding how FDI affects peace and state-building. 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 labour rights (Brazys and Kotsadam 2020; Malesky 2008; Malesky and Mosley 2018; Pinto and Zhu 2016; Sandholtz and Gray 2003). 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 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 speaks to an important literature on repertoires of violence and specifically the use of civilian targeting (Balcells and Kalyvas 2014; Eck and Hultman 2007; Fielding and Shortland 2012; Hultman 2007; la Calle 2017; M Wood 2010;

Polo and González 2020; Wood 2014). We provide new insight into how external factors, such as the inflow of FDI, affect 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 victimization 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, such as 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 FDI. 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., Ahlquist 2006; De Soysa and Oneal 1999; Kosack and Tobin 2006; Malesky 2008; Malesky et al. 2015; Pinto and Zhu 2016).

This literature broadly claims that FDI shapes domestic affairs by causing governments to change policies in response to investors' sensitivity to political risk. Foreign investment is a long-term enterprise for a multinational company, which evaluates the long run potential risks and benefits from the initiative (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 internalize the costs associated with the possibility of disinvestment when choosing how to address investors' 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 conflicts.

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 (in terms of prevalence rather than onset) (Barbieri and Reuveny 2005; Busmann 2010; Busmann 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, such as 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 localized lens which allows us to incorporate two important dynamics: (1) violence will likely only deter foreign investors if it occurs at the site of investment (see Barry 2018; Blair et al. 2022), and (2) 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

The government's rationale

Governments that are engaged in armed conflict are often limited in their repertoire of actions to achieve peace due to important resource constraints (e.g., military capability, the costs of mounting a counterinsurgency 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 defence undermines capacity for other important matters (such as social services) and may imperil political survival (Mukherjee 2014; Sexton et al. 2019). Similarly, 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., Matanock 2020; Pettersson et al. 2019; Toft 2009).

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 are local ones. Such expected economic returns affect governments' choices to dedicate resources to 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. increased 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 amid militant threats of attacks (Hinshaw and Kent 2016). 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 (Chimhangwa 2020). Such changes in military strategy do not only reduce the risks associated with violent confrontation *for foreign investors*: they also have important consequences for patterns of violence observed at sites of investment.

Primarily, we argue, these changes in government strategy cause a localized increase in civilian victimization. Civilians are likely to become the targets 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 group and lack of ability to identify who is associated with the group—which is likely rampant when forces operate under time pressure to quickly enforce control in contested areas following an influx of FDI—can trigger tremendous levels of civilian victimization (Fielding and Shortland 2012; Kalyvas 2006; la Calle 2017). Civilians may also be targeted 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—that is, ‘winning hearts and minds’ (at least in the short term). Inability to provide such incentives has been shown to be linked to civilian victimization (e.g. M Wood 2010).

Researchers also document civilian targeting as a way to clear territory (i.e. trigger forced displacement). Existing explanations often emphasize ethnic ties to the opponent or a strong ideological/political allegiance as motivation for victimization (Balcells and Steele 2016; Steele 2011; Valentino et al. 2004). In areas of investment, civilian victimization may be an intentional tactic to trigger population displacement to allow investment-related activities, such as mining, to take place unabated and to 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 to domestic constituencies. Such lack of accountability to the public further reduces the cost of using violence against civilians (Stanton 2016).

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 acquires in 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 grievances and incentives to fight (e.g., Barbieri and Reuveny 2005; Busmann 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 favour 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 capacities 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 guerrilla tactics *in areas of investment* as their military capacity is likely to now lag behind that of the state (see, for a more in-depth discussion on the subject, Kalyvas and Balcells 2010).

In general terms this means that rebels are also more likely to organize 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 victimization (Balcells and Kalyvas 2014; Kalyvas and Balcells 2010). In fact, civilian victimization 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; la Calle 2017; M Wood 2010; Wood 2014). All of these factors are likely present following the influx of FDI, consequently heightening rebels' reliance on civilian victimization as a warring strategy.

Hultman (2007) suggests that battlefield losses trigger civilian victimization 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 victimization 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 conflicts (which often involve using violence against civilians—that is, 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 victimization 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 victimization. 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 aims 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 victimization 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 victimization 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 victimized 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 mobilizing civilians) are 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.

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 socioeconomic 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 victimization will be most severe with an influx of extractive FDI, compared to 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.

Apart from increased civilian targeting, the shift to guerrilla 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 localized reduction in rebel casualties occurring during clashes. Government casualties are likely unaffected by the influx of FDI as troops are deployed with the intent to capture territory at all cost, but are at the same time likely better equipped and possess better intelligence.

Hypothesis 4a: A conflict event will have 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.

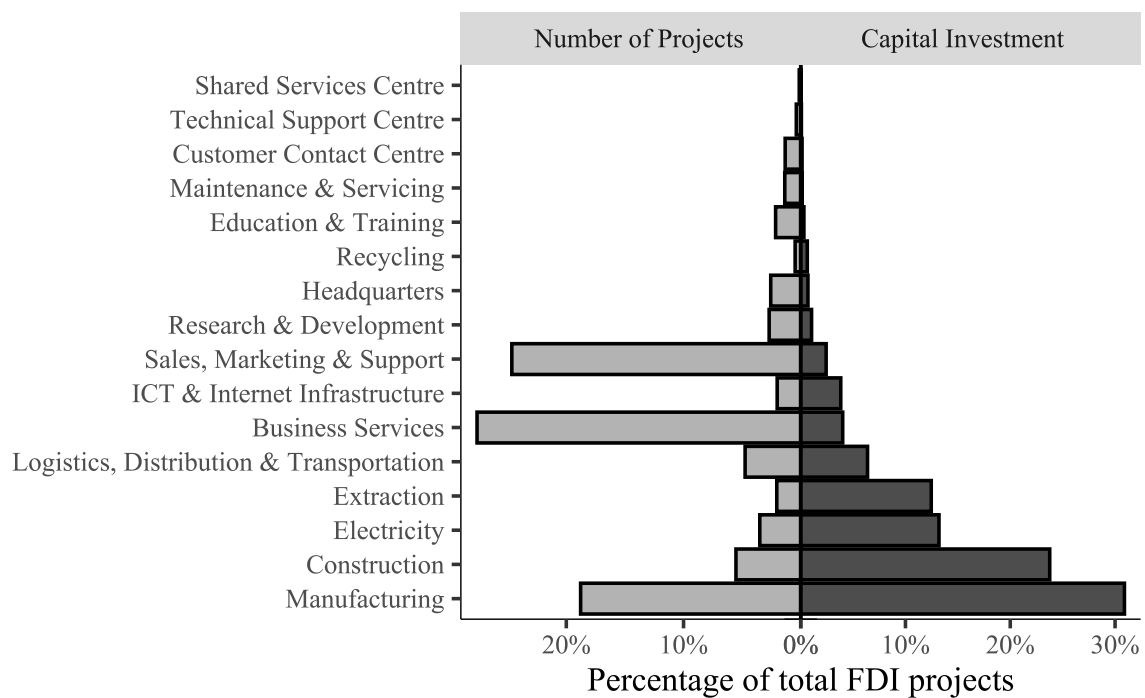
3 Empirical analysis

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 from the *Financial Times*, which provides 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 per cent) of the projects reports information on the location of the investment. We use this to create a query and supply it to a Google Maps API which successfully geolocates all 7,511 projects.² This set represents the final group of FDI projects we consider. Figure 1 breaks down these projects (in terms of capital investment) by their type of activity. Although the majority of these projects involved activities such as ‘business services’ and ‘sales, marketing, and support’, these projects tend to involve significantly lower capital investment. The largest activities by capital investment are ‘manufacturing’, ‘construction’, ‘electricity’, and ‘extraction’.

Figure 1: Distribution of projects’ activity by number of projects and capital investment



Source: authors’ compilation based on data from geolocated fDi Markets projects for Africa (2003–21).

Our second data source contains information on conflict events. We rely on data from version 20.1 of the UCDP GED by Sundberg and Melander (2013).³ The dataset contains a total

² In Appendix A we discuss possible selection bias in our estimates derived from not including in the analysis the remaining 29 per cent of the FDI projects that do not report location information. We use observable covariates for all FDI projects to argue that selection bias likely leads us to *underestimate* the size of our target effect, which reassures us on the validity of the results.

³ We 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.

of 225,385 violent 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 1 in order to reduce skewness of the distribution.

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 5 km radius, which we deem narrow enough and appropriate to our argument (it is a distance covered in approximately an hour’s walk on regular terrain).⁴ 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. The 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

ACLED does not distinguish its fatalities measure between government, rebel, and civilian forces, rendering it unsuitable to our needs.

⁴ The radius choice is admittedly arbitrary. However, in Figure B.6 we show that our results do not change when extending the radius size by intervals of 1 km to a maximum of 15 km.

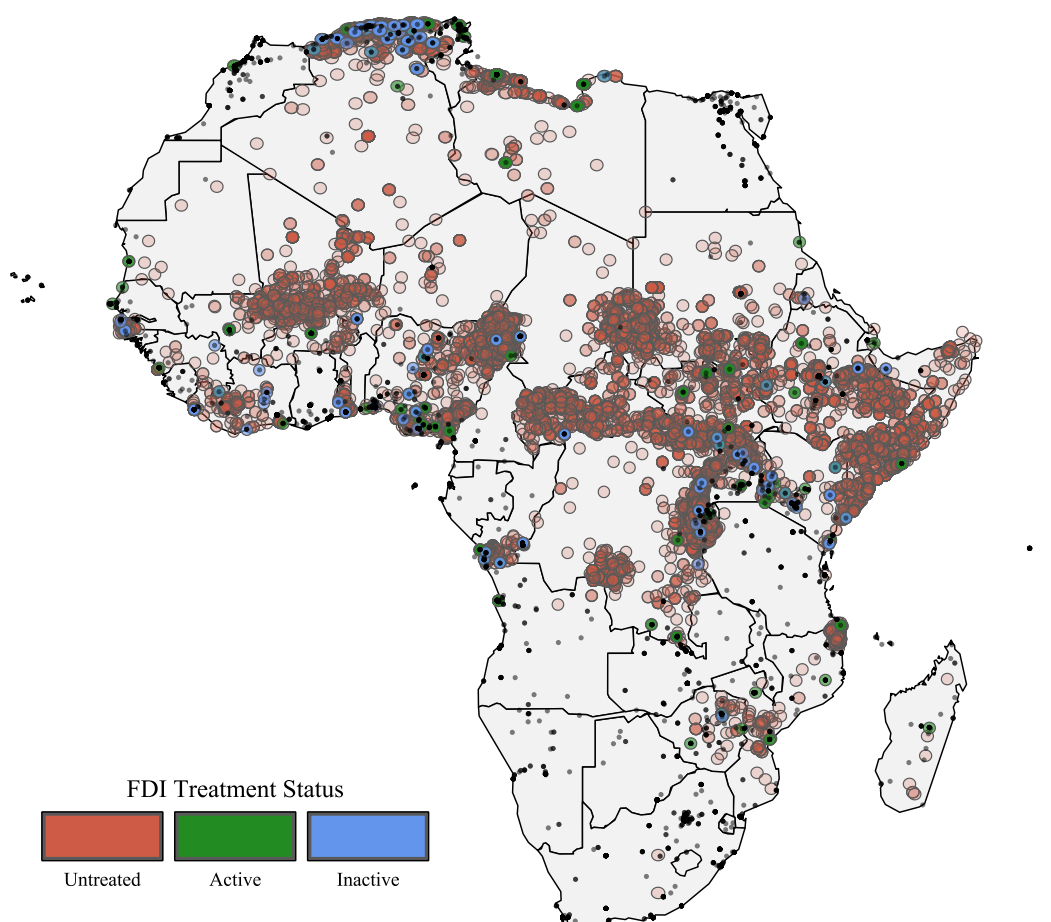
factors also correlate with conflict dynamics, observational studies risk erroneously attributing differences in conflict intensity to investment, rather than to unobserved determinants shaping both. For instance, a negative association between conflict intensity and presence of FDI might mask investors' 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 spatiotemporal 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 investment in the future would have been as likely destinations of investment for investors as those that see 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.

Our unit of observation is a conflict event i occurring at time t within the 5 km circular buffer. We code each conflict event in one of *three* groups based on whether at least one FDI project is contained within its 5 km 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*); and (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 coloured 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

Figure 2: Violent event buffers and FDI treatment status



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

Source: authors' compilation.

the buffers' treatment status is defined based on a 5 km radius, circles are here represented with a 50 km radius in order to be visible.⁵ Our strategy effectively compares *Active* (green) and *Inactive* (blue) conflict events. To appreciate the advantage that this strategy guarantees, consider Algeria. Here, FDI projects are concentrated 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

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

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 per cent more civilian casualties than all other conflict events ($p = 0.004$). 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-treated conflict events. When we operate this comparison, we see that conflict events in the proximity of an *Active* FDI have, in fact, 13 per cent more civilian casualties than *Inactive* ones. ($p = 0.008$).⁶ 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, government, or rebel 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

⁶ All results described in this paragraph come from two-tailed t-tests based on buffers of 5 km radius.

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.⁷ 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.

We focus first on models 1–3, which study our main dependent variable of interest (civilian casualties). We investigate findings on this dependent variable extensively in the subsections below and return to the other groups' casualty counts (studied in models 4–9) at the end of the results section.

Table 1: The local effect of FDI on conflict intensity

	Civilian deaths			Government deaths			Rebel 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)	-0.073 (0.052)	-0.072 (0.052)	-0.073 (0.049)	0.005 (0.080)	-0.003 (0.081)	-0.015 (0.050)
Untreated vs Inactive	0.165* (0.085)	0.168* (0.085)	0.152* (0.087)	-0.018 (0.032)	-0.018 (0.031)	-0.015 (0.021)	0.127 (0.089)	0.122 (0.091)	0.085* (0.049)
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	0.259	0.259	0.259	0.417	0.417	0.417
Num.Obs.	22480	22454	22454	22480	22454	22454	22480	22454	22454
R2	0.133	0.133	0.155	0.047	0.047	0.055	0.080	0.081	0.099
R2 Adj.	0.131	0.131	0.151	0.045	0.045	0.051	0.078	0.079	0.095

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

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 have more civilian casualties if it occurs in the proximity of a location that sees FDI inflow (Hypothesis 1). In models 1 and 2,

⁷ We draw information on this covariate from PRIO-GRID 50 × 50 km 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.

we find that conflict buffers with an active FDI experience about 25 per cent⁸ higher civilian deaths than buffers that will experience an FDI at future time points. The estimate is robust to the inclusion of a linear time trend (model 3). Although the effect decreases in size by 4 percentage points, an increase of 21 per cent remains substantively quite large. Estimates are significant at conventional levels.

In the Appendix (Figure B.6), we show that our results are robust to alternative choices of buffer radii that vary from 5 km to 15 km at intervals of 1 km. However, in our research design increasing the 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.

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.

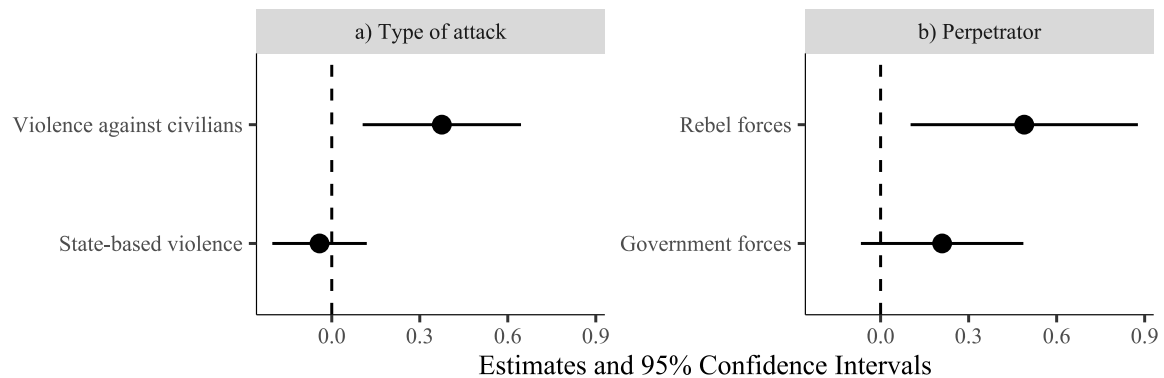
Panel (a) of Figure 3 reports results when comparing civilian deaths in conflict events proximate to an *Active* FDI and in areas of a future FDI (i.e. an *Inactive* FDI) for the sparse model. Estimates are consistent with those reported here for other model specifications.⁹ The results show that events of civilian victimization taking place close to an investment experience over 45 per cent more civilian casualties than when they occur in areas that will see an FDI at future

⁸ Because our dependent variables are logged and the models are linear regressions, the rate of change over the mean of the (un-logged) dependent variable resulting from a one-unit increase in X is obtained as: $r = 1 - e^{\beta}$. We interpret all our coefficients this way.

⁹ Full estimates are reported in Appendix C.

time points. State-based violence does not experience more or less civilian casualties based on proximity to 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



Note: this analysis splits the sample between one-sided violence against civilians vs state-based violence (left panel); and between one-sided violent attacks staged by rebels vs those staged by government forces (right panel). Full estimates are reported in Appendix C.

Source: authors' compilation.

In panel (b) 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 civilians. We replicate the same analysis presented above by looking exclusively at events of civilian victimization and distinguishing between attacks initiated by government or rebel forces. We find that one-sided events initiated by rebel forces experience about 63 per cent more civilian casualties if they take place close to an *Active* FDI (when compared to events coded as *Inactive*). This provides evidence in favour of Hypothesis 2b. 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 heav-

ily 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 individuals)—another signal that rebels have only weak territorial control (e.g., Anders 2020; Kalyvas 2006).

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 victimization 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 victimization, especially as impunity is even more rampant (Carey et al. 2015; Carey and Mitchell 2017; Koren 2017; Serwat et al. 2022).¹⁰

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 victimization in areas of investment in the Arauca region to trigger population displacement to allow investment-related activities, including mining, to take place unabated and to 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

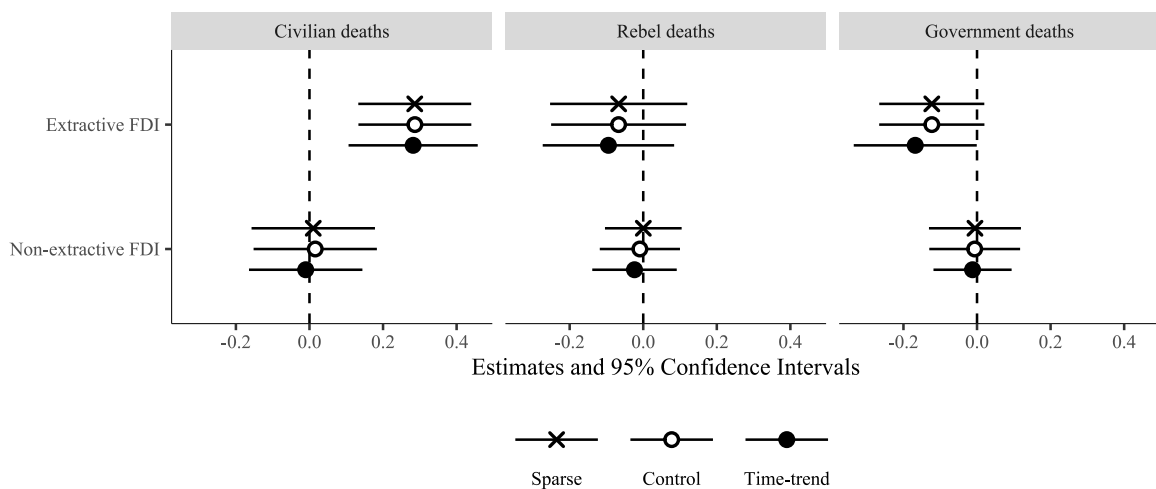
¹⁰Although it has to be noted that militias emerging out of communities are less likely to target civilians due to their access to intelligence and them being embedded in the local community (Lyall 2010; Stanton 2016).

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 only account for changes in *intensity* of conflict events.

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 extractive (or non-extractive) FDI at present (*Active*) or in future time points (*Inactive*).¹¹ 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 the Appendix (Tables D.6 and D.7).

Figure 4: The effect of extractive vs non-extractive FDI on conflict intensity



Note: placebo test. Full disclosure of results in Tables D.6 and D.7.

Source: authors' compilation.

Consistent with our theory, we find that increases in civilian deaths are driven by FDI in extractive sectors. The effect is, in fact, much stronger for this type of ‘treatment’. The top

¹¹ Extractive FDI projects are defined as those whose activity is classified by fDi Markets as either ‘Extraction’ or ‘Electricity’. Non-extractive FDI includes all the other categories. See Figure 1 for a full breakdown.

coefficients show that conflict events in the proximity of *Active* extractive FDI projects experience about 33 per cent higher casualties among civilians than events happening in areas that have yet to see an extractive FDI. Consistent 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 18 per cent 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 government 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 favour of Hypotheses 4a and 4b. Models 4–9 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 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 interpret these results as indicating that our comparison does not capture differences in conflict intensity between 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 secure areas linked to investment, creating a shift in coercive state capacity that alters the military power balance in the proximity of investments. This has 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. Only 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 decentralization or corruption, which has demonstrated the usefulness of disentangling the effects of FDI at a lower level (e.g., Malesky 2008; Malesky et al. 2015; Malesky and Mosley 2018; 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 theorized 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 state-building 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.

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Double-Edged Sword: The Hidden Civilian Toll of FDI in Conflict Settings

Supplementing Information

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A Geolocated vs non-geolocated FDI projects: descriptives

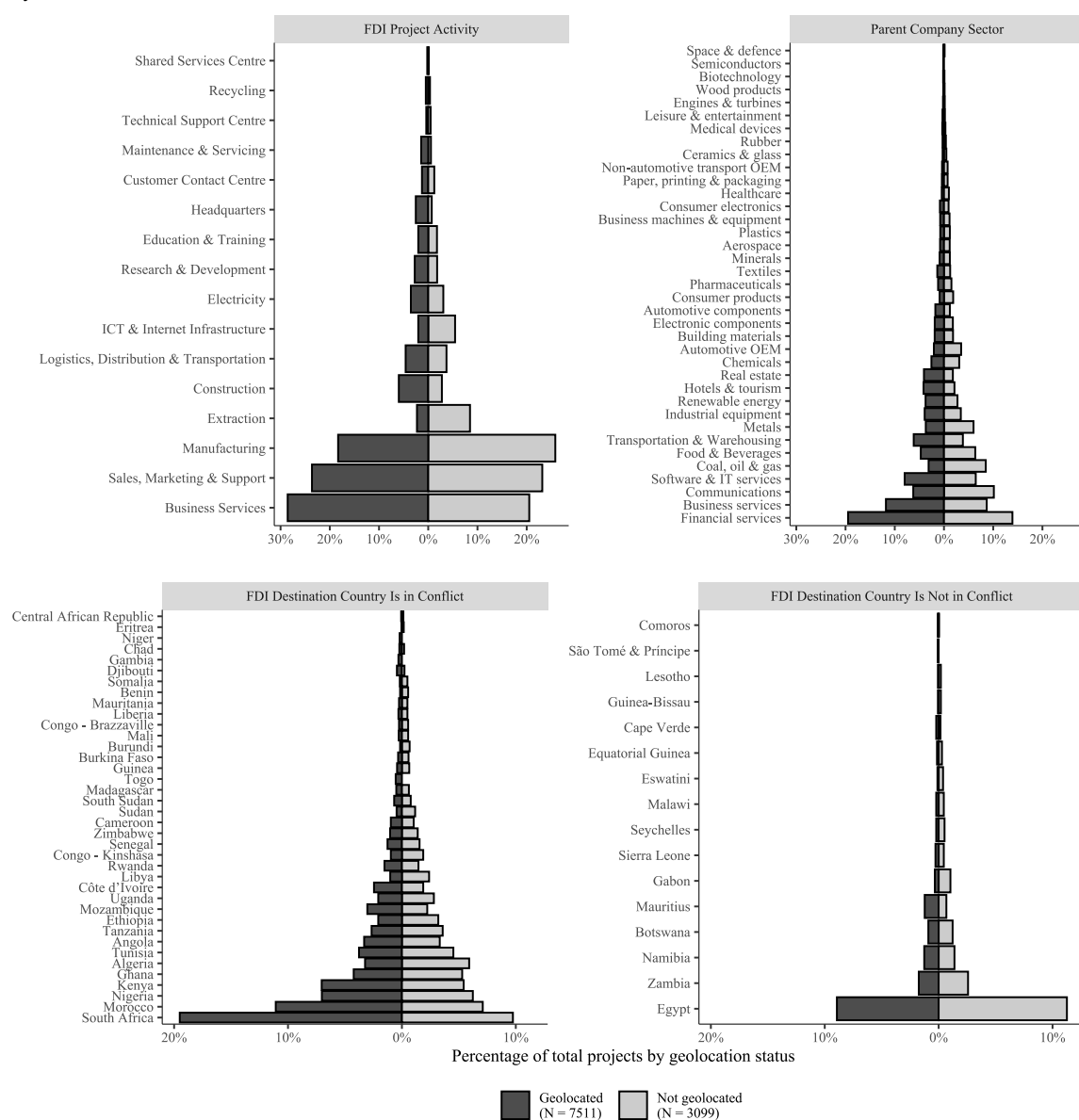
In this section we test difference in covariates between FDI projects that report information on their location (7,511, or 71 per cent of 10,610 total projects) and those that cannot be geolocated (3,099 or 29 per cent of the total).

In Table A.2 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.5 extends the comparison by plotting the 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 ideas 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 projects, which are richer and more concentrated in 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 would likely *increase* the observed positive effect, which likely underestimates the real effect of FDI on conflict intensity if selection bias is in place.

Figure A.5: Comparison between geolocated and non-geolocated FDI projects by activity, sector, and destination country



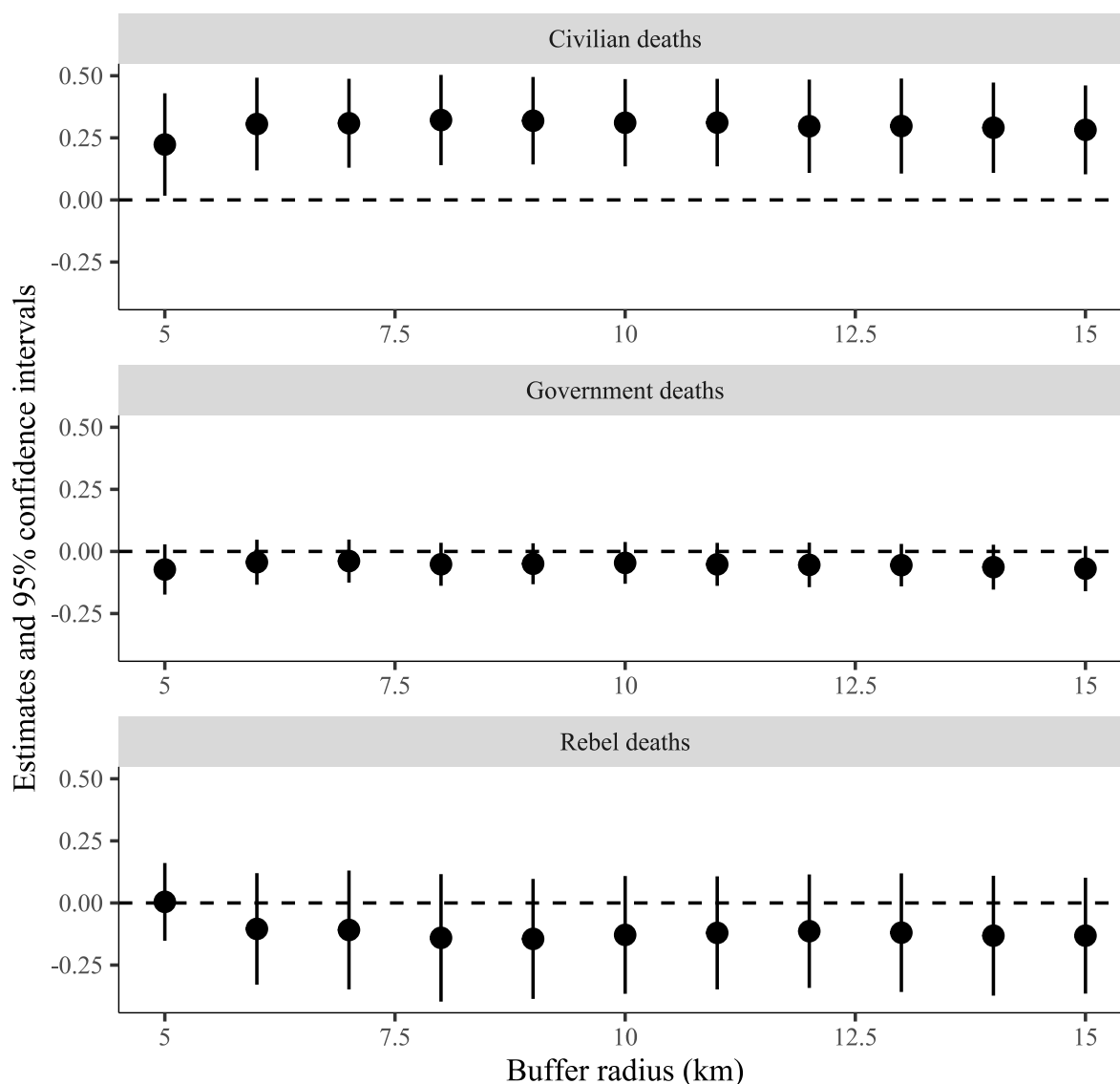
Source: authors' compilation.

Table A.2: 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

B Alternative radius size for conflict event buffers

Figure B.6: Estimates obtained when varying buffer radius from 5 km to 15 km at intervals of 1 km



Note: estimates are 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.

Source: authors' compilation.

C Subgroup analysis: type of attacks and perpetrators

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

Table C.3: 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 vs 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 vs 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.4: 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 vs 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 vs 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.5: 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 vs 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 vs 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: extractive vs non-extractive FDI

Table D.6: 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 vs 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 vs 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.7: 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 vs 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 vs 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