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Abstract
Purpose – By examining the link between the two types of FDI and intrastate conflict from 1990 to 2015 in 138 countries, this paper intends to test the peace-through-FDI thesis.
Design/methodology/approach – To empirically test the hypotheses, this study examines county-year observations from 1990 to 2015 for 138 countries. An instrumental variable method is utilized to this end.
Findings – This paper shows that, while greenfield FDI generates pacifying effects on intrastate conflict, M&A investment is likely to promote the onset of intrastate conflict.
Originality/value – Despite the extensive literature on FDI and the onset of intrastate conflict, many have approached FDI as a singular phenomenon, and have not broken it down into its constituent parts of greenfield and brownfield investment types. Theorizing that this practice had oversimplified and blurred the relationship of FDI on intrastate conflict onset, the authors pursued the collection of novel data in order to more completely distinguish between the two types of FDI. With this novel approach dividing FDI into its component parts, the authors break open the black box of FDI to empirically find out the extent of its diverse influence on the onset of intrastate conflict.
Keywords M&A, Greendfield FDI, Intrastate conflict
Paper type Research paper

Introduction
As the world has become financially integrated, increased efforts have been made to analyze the impact of foreign direct investment (FDI) on domestic politics particularly intrastate conflict. FDI can reduce the likelihood of intrastate conflict by contributing to economic growth of the host country (Barbieri and Reuveny, 2005; Kariuki and Kabaru, 2022) and the capacity of governments to raise additional revenues and thus stabilize the political regime (Fearon and Laitin, 2003; Kim, 2022). FDI can also generate positive spillover effects on the society in human rights (Blanton and Blanton, 2007; Kim and Trumbore, 2010) or income equality (Herzer and Nunnenkamp, 2013), which reduces grievances in the public and

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increases the cost of mobilizing people to rebel. Foreign investors’ threat to exit the economy against political instability may reduce the incentive to initiate/resume intrastate conflict. However, it is also claimed that FDI in fact increases the risk of intrastate conflict (Gissinger and Gleditsch, 1999; Pinto and Zhu, 2022; Wegenast and Schneider, 2017). By generating negative effects on economic growth (Calderón et al., 2004; Chaudhury et al., 2020) or income inequality (Reuveny and Li, 2003; Tsai, 1995), FDI can boost social discontent and the probability of domestic violence (Gissinger and Gleditsch, 1999). FDI can also weaken state control of the economy vis-à-vis multinational corporations (MNCs), cause market concentration and high rents (Pinto and Zhu, 2022), and increase political instability (John, 2005) and human rights violations, which enhances the risk of an escalation of low-level conflict to civil war (Rost, 2011).

These conflicting views of the role of FDI in intrastate conflict and inconsistent empirical findings in the previous work are puzzling. As a way to account for the inconsistency, this paper highlights the importance of distinguishing between two types of FDI (Brakman et al., 2007; UNCTAD, 2017), cross-border mergers and acquisitions (M&A), so called brownfield investment and greenfield investment in studies of FDI and intrastate conflict. Although previous studies have explored the link between aggregate FDI and conflict (e.g., Bak and Moon, 2016; Bussmann, 2010; Bussmann and Schneider, 2007; Joshi and Quimm, 2020; Li, 2006; Pinto and Zhu, 2022), there are virtually no studies that examine how specific types of FDI influence intrastate conflict or peace.

Greenfield FDI is a type of investment wherein finances of MNCs are employed in a state to create new physical facilities and operations in a location wherein there had previously been none. Therefore, greenfield investment by nature is associated with a transfer of great amount of assets, technology, and knowledge to the host country as a necessity to set up new facilities and undertake the investment project, likely promoting employment and economic growth (Jensen, 2003). This stands in contrast to brownfield FDI, under which the resources of MNCs are simply used to purchase or lease existing production facilities. As a result, brownfield investment generally targets areas where such facilities are operating at a suboptimal level leading to an opportunity to purchase/lease them for external actors (Blonigen et al., 2014). Cross-border M&A, which refer to a number of different transactions associated with the consolidation of companies or assets, are known as a representative form of brownfield investment. The main goal of this investment is often to acquire the host country’s existing resources, exploit local firms’ complementary capabilities such as technical know-how and patent rights (Klimek, 2011), and improve the cost savings through economies of scale. Due to its nature of investment, cross-border M&A may not generate significant positive effects on the economy (Calderón et al., 2004).

Due to these differences, we argue that, while greenfield FDI generates pacifying effects on intrastate conflict, M&A investment is likely to promote the onset of intrastate conflict. By examining the link between the two types of FDI and intrastate conflict from 1990 to 2015 in 138 countries, this paper presents empirical support for the claim. The theoretical arguments and empirical findings of this paper offer novel insights into the peace-through-FDI thesis.

**FDI, cross-border M&A and intrastate conflict**

*FDI and intrastate conflict*

Among other factors such as ethnic or religious diversity in a society, economic conditions are considered as core contributing factors to the incidence of intrastate conflict (Buhaug et al., 2011; Collier and Hoeffler, 1998, 2004). FDI flows have significantly increased in the world economy since the early 1990s (Jensen, 2006). A host of scholars report that FDI reduces the probability of intrastate conflict (Barbieri and Reuveny, 2005; Bussmann, 2010; Bussmann and Schneider, 2007).
There are three main logical explanations behind the peace-through-FDI thesis. The first explanation focuses on the positive impact of FDI on economic or social conditions. FDI is often considered to facilitate knowledge exchange, technology transfer, job creation as well as productivity improvement, market competitiveness, and thus economic growth (Alfaro et al., 2004; Li and Liu, 2005). FDI is also argued to be positively associated with the advancement of human rights (Blanton and Blanton, 2007; Kim and Trumbore, 2010), press freedom (Dutta and Roy, 2009) or income equality (Herzer and Nunnenkamp, 2013). Improved economic and social conditions reduce the risk of intrastate conflict by expanding the size of resources that the government can utilize to stabilize the political regime, lower grievances in the public and thus deter potential rebels from mobilizing (Fearon and Laitin, 2003).

The second theoretical logic that underlies the peace-through-FDI thesis is the "patronage" hypothesis. Political leaders, particularly in non-democracies, are tempted to allocate political resources as private goods so that they can maintain support from members of the winning coalition for their political leadership and eliminate threats to regime survival (Ames, 1987; Bueno de Mesquita et al., 2000; Tomashevskiy, 2017). In this regard, FDI can serve as private goods for political leaders. By sharing profits from FDI contracts with members of the winning coalition, political leaders can strengthen members’ commitment to the leadership and reduce the likelihood of elite defection (Bak and Moon, 2016).

Another theoretical logic focuses on the threat of foreign investors, such as MNCs, to exit the economy against a rise of political instability. MNCs particularly in developing countries enjoy strong bargaining power with host governments over diverse issues such as the terms of entry, exit or operations (Ramamurti, 2001). A threat to exit may reduce the incentive of the government or any rebel group to initiate/resume intrastate conflict out of concerns of losing foreign investment and associated benefits.

Although logically sound, these theoretical arguments also face criticism. Unlike the first theoretical logic and its expectation, FDI can have negative effects on economic or social conditions. In many cases, FDI reduces economic growth (Calderón et al., 2004) or worsens the distribution of income or human capital (Basu and Guariglia, 2007; Reuveny and Li, 2003; Tsai, 1995), which may boost the level of grievances in the society and the probability of domestic violence (Buhaug et al., 2014; Gissinger and Gleditsch, 1999). FDI can also weaken state control of the economy vis-à-vis multinational corporations, causing easy layoffs, labor rights violations and deteriorating working conditions (Blanton and Blanton, 2012) [1]. Competitive pressures may force governments to lower their labor standards to host foreign investment and remain competitive in global markets (Collinsworth et al., 1994; Mosley and Uno, 2007). Consequently, FDI is responsible for increased political instability (John, 2005).

In addition, FDI can generate a shift in the distribution of resources and may benefit specific groups in a regime, rather than the state as a whole. In ethnically or religiously divided states, shifts in the distribution of resources in favor of one group over others may increase grievances (Tomashevskiy, 2017). In particular, when local businesses based around valuable natural resources such as oil are taken by foreign investors under government control, domestic complaints and resistance can easily spark and generate mobilization of people to rebel/protest.

Moreover, the threat to exit by foreign investors may be nonexistent or perceived as not being credible. When the size of sunk costs is large and the investment is not easily mobile, foreign investors do not enjoy much control over the investment and thus lose much of their bargaining power against host governments. In particular when foreign investors intend to do business in a local economy only for a short term, such threats may not be observed.

We claim that while greenfield investment aligns with the peace-through-FDI thesis well, cross-border M&A do not. Greenfield investment is highly associated with improved economic conditions (Harms and Ménon, 2018; Nguyen et al., 2021; Wang and Wong, 2009) or reduced income inequality (Jensen and Rosas, 2007). Although it may serve as private goods
for political leaders, this type of investment is unlikely to negatively affect the provision of public goods. In addition, since greenfield FDI is positively associated with technology transfer to the host country, job creation and economic growth; forward-looking foreign investors are likely to exercise strong bargaining power over a potential risk of intrastate conflict. In fact, Witte et al. (2017) report that nationwide political conflict reduces total and non-resource related greenfield FDI. For all these reasons, we argue that greenfield FDI is likely to reduce the probability of intrastate conflict. By contrast, M&A investment which differs from greenfield FDI in terms of the nature and motive of investment is likely to increase the risk of intrastate conflict.

Cross-border M&A and intrastate conflict
Cross-border M&A investment has become a distinct mode of FDI in recent decades. According to a report (UNCTAD, 2017), cross-border M&A investment accounts for about 39% of the total FDI that occurred between 1990 and 2016, culminating at about 70.6% in 2000. As MNCs are increasingly subject to global competition for resources, M&A investment will likely be of more importance in the future (Demirbag et al., 2008; Meyer and Estrin, 2001).

The issue is that cross-border M&A investment may not support the peace-through-FDI thesis but promote intrastate conflict. The theoretical mechanisms of this expectation are three-fold. First, cross-border M&A tend to generate negative effects on a local economy by increasing unemployment rates and worsening working conditions without significantly contributing to economic growth. The main goal of cross-border M&A is to acquire the host country’s existing resources or organizational and technical skills (Klimek, 2011). Therefore, cross-border M&A may not increase productivity of the overall economy (Calderón et al., 2004). This is because M&A sales in many cases do not expand the host country’s capital stock but just represent rents accruing to previous owners (Harms and Méon, 2018). Harms and Méon (2018) find that cross-border M&A have no significant effects on economic growth, while greenfield investment enhances it.

With respect to the employment effects of cross-border M&A, scholars generally report that this mode of investment has a negative impact on employment (Conyon et al., 2002; Lehto and Böckerman, 2008), although the relationship could vary contingent on the type of M&A (Lehto and Böckerman, 2008). If cross-border M&A are significantly motivated by the cost savings through economies of scale, this investment is likely to lead to downsizing and reduced employment, potentially causing protests from local managers and employees who are replaced due to restructuring.

In addition, when cross-border M&A are motivated by the desire of foreign firms to exploit local firms’ complementary capabilities including technical know-how, patent rights and undervalued assets caused by in particular financial crises, this investment is often followed by transfer of technologies and managerial skills from local firms to foreign firms, radical restructuring, mass layoffs and “asset stripping” (Chang, 2008; Meyer and Estrin, 2001). Accordingly, cross-border M&A are frequently associated with rising unemployment rates, increasing deterioration of working conditions (Lougui and Broström, 2021) and income or human capital inequality (Basu and Guariglia, 2007; Reuveny and Li, 2003; Tsai, 1995), which may boost the level of grievances in the society and the probability of domestic violence (Gissinger and Gleditsch, 1999; Rost, 2011).

Second, unlike the “patronage” hypothesis, cross-border M&A may not generate positive effects on regime stability. According to the hypothesis, FDI can generate resources that political leadership, particularly in authoritarian regimes, can utilize as private goods to buy off potential political challengers.

However, public goods as well as private goods are important resources for political leaders’ survival, particularly in democracies (Bueno de Mesquita et al., 2000). This implies
that regime stabilizing effects of FDI as private goods can be effective when they do not significantly suppress the provision of public goods (Bueno de Mesquita and Smith, 2010). However, there is no clear evidence that cross-border M&A increase public goods provision to citizens. This investment is not likely to increase the host country’s capital stock (Harms and Méon, 2018) or promote economic growth and tax revenues (Calderón et al., 2004). Instead, M&A are likely to decrease the provision of public goods, while greenfield investment or other types of resources such as foreign aid as private goods may not negatively affect public goods provision (Jensen and Rosas, 2007). MNCs often use M&A as a tactic to establish monopolistic positions in local markets, inflating the prices of products and causing a high level of corruption (Zhu, 2017). Due to its negative effects on the provision of public goods, particularly in the sectors of public health and utilities, cross-border M&A investment often promotes fierce protests and anger from the public toward MNCs and host governments (Aid, 2005).

Consequently, even though cross-border M&A investment as private goods generates positive effects on regime stability by offering additional resources to political leaders, such positive effects can be canceled out to some extent by their negative effects on public goods provision. In addition, due to a sudden surge of capital inflows to the economy, M&A investment is likely to incentivize rebel groups to challenge the government, as the “greed” hypothesis explains. That is, even though cross-border M&A increase resources available to the government, they will simultaneously make the government a more attractive target to opposing groups or rebels. Also, privatization of enterprises through cross-border M&A in the sectors of electronic commerce and communications can weaken state control of rebels. Deregulation of these sectors can help rebels to easily evade state control and acquire external resources needed to wage war and conflict against the state (Barbieri and Reuveny, 2005; Berdal, 2003).

Third, foreign investors of M&A are not likely to exercise bargaining power over a potential risk of intrastate conflict. Since cross-border M&A investment is frequently oriented to transfer assets from newly purchased firms, in many cases such investors tend to minimize productive activities and pursue a short-term exit from the local economy once the asset transfer is complete. This suggests that M&A investors may not have a strong incentive to make a threat to exit. Previous findings of the link between political instability and FDI inflows are consistent with this expectation. A host of scholars argue that the decision of FDI investment is not significantly influenced by political instability or civil conflict in the host country (Arel-Bundock, 2017; Globerman and Shapiro, 2003; Li, 2006; Li and Resnick, 2003). This is because, although forward-looking foreign investors can make investment decisions strategically to avoid destinations with high risk of political instability, it is also true that high-risk locations can serve as profitable destinations for investment particularly if the investment is oriented toward natural resources or valuable assets. To be sure, political instability can discourage some foreign investors. But political instability can encourage other foreign investors if it opens a door to easily enter a profitable market and helps them to make advantageous deals with local counterparts (Maher, 2015). For M&A investors whose goal is to acquire the host country’s existing resources and local firms’ complementary capabilities at a low price, the risk of political instability may not be the most disturbing factor in their decision to choose investment destinations. Accordingly, they may not have a strong willingness to exercise bargaining power with local forces over political violence or intrastate conflict.

In sum, due to significant differences in the nature and motive of investment, cross-border M&A investment is expected to generate negative effects on the economy and the political regime and thus promote the risk of intrastate conflict, while greenfield investment may have the opposite effects. To test our claims, we build off the following hypotheses of intrastate conflict.
H1. As the volume of greenfield investment inflows increases, the likelihood of intrastate conflict decreases in the host country.

H2. As the volume of cross-border M&A inflows increases, the likelihood of intrastate conflict increases in the host country.

Research design
Data and variables
To empirically test the hypotheses, this study examines county-year observations from 1990 to 2015 for 138 countries. The intrastate conflict data comes from the UCDP/PRIO Armed Conflict Data set (Gleditsch et al., 2002). When a violent conflict occurred between a named, non-state armed group and the government of the state results in at least 25 battle-related deaths in a year, the onset of intrastate conflict variable is coded as one and zero otherwise.

Our key explanatory variables are cross-border M&A and greenfield FDI inflows. Cross-border M&A inflow represent the net value of financial transactions between MNCs and their local affiliates that are associated with the consolidation of existing companies or assets. Greenfield FDI inflows are defined as the net value of financial transactions excluding cross-border M&A inflows [5]. Their net investment inflows are measured as a percentage of GDP per country in a given year to account for the importance of M&A or FDI for an economy. The variables are log-transformed [6]. As discussed in detail in the following section, we employ an instrumental variable method to address a potential endogeneity issue between investment and intrastate conflict onset. One year lagged forms of these variables are used in the models as an additional way of minimizing bias coming from a possible reverse causality. Meanwhile, since the impact of investment on intrastate conflict onset can be realized longer than one year after an investment is made, we also use variables that account for the sum of investment made in the previous two or three years [7]. In addition, to capture the impact of accumulated FDI on intrastate conflict, we control for FDI stock as a percentage of GDP [8]. Data on FDI, cross-border M&A and FDI stock comes from United Nations Conference on Trade and Development (UNCTAD, 2017).

There are several control variables in the models. The level of trade openness is likely to be associated with FDI flows and the onset of intrastate conflict. The sum of exports and imports of goods and services as a percentage of GDP is used to measure the level of trade openness. Trade data come from World Bank and the OECD. Regime types are linked to the onset of intrastate conflict (Vreeland, 2008). That is, autocracies have a higher probability of being embroiled in a civil conflict as compared to their fully established democratic and authoritarian counterparts (Hegre et al., 2001). Scholars also suggest that regime types and FDI flows are correlated with each other (Jensen, 2003; Olson, 1993; Li and Resnick, 2003). To control for the curvilinear relationship between regime types and the onset of intrastate conflict, we include variables of democracy and its squared term in the models. The democracy variable is measured using the Polity IV data set (Marshall et al., 2013). For easy interpretation, we add 10 to the original values with the result that the scale of this measure varies from zero (least democratic) to 20 (most democratic).

Similarly, a rapid regime change is likely to be linked to intrastate conflict onset (Hegre et al., 2001) and FDI flows. If there was a three or greater change in the value of the democracy variable in the last three years, we code the regime change variable as one and zero otherwise.

As the size of population increases, the likelihood of intrastate conflict onset increases as well (Elbadawi and Sambanis, 2002; Hegre and Sambanis, 2006). Population data comes from the World Bank, and the variable is log-transformed. Intrastate conflict is also more likely when countries possess a lot of rough terrain (Hegre and Sambanis, 2006), which can also significantly extend the duration of the conflict (Buhaug et al., 2009). The log-transformed
percentage of mountainous terrain is used as a measure of this variable. Data comes from Fearon and Laitin (2003).

When it comes to intrastate conflict, the rebellions that often contribute to them are based in part on the grievances held by the population (Collier and Hoeffler, 2004; Regan and Norton, 2005). To control for the level of grievances, we include ethnic and religious fractionalization in our models. High levels of ethnic or religious fractionalization are likely to increase the chance of intrastate conflict. Data on ethnic and religious fractionalization comes from Fearon and Laitin (2003). Since economic performance is associated with both FDI flows and intrastate conflict, we control for GDP growth rates. A sluggish economy is likely to promote the onset of intrastate conflict. GDP growth data comes from the World Bank. All control variables except ethnic and religious fractionalization and mountainous terrain variables are lagged by one year to reduce bias from possible reverse causality. To account for regional differences in the baseline hazard of intrastate conflict, we also include regional dummies for countries in the West, Eastern Europe, Latin America, Sub-Saharan Africa and Asia. Therefore, countries in the other regions such as North Africa and the Middle East are in the reference category. Descriptive statistics are reported in Table 1A in online appendix.

Endogeneity and estimation

Although a host of scholars claim that armed conflict has no significant impact on FDI flows (Lee, 2017; Li, 2006; Li and Vashchilko, 2010), it is also argued that previous or ongoing intrastate conflict or the expectation of its onset may create conditions that facilitate or deteriorate FDI inflows. In other words, a reverse causality may exist in the relationship between FDI and intrastate conflict, potentially causing biased and inconsistent estimates. Intimidating atmosphere, heightened financial risk and increasing uncertainty of investment return created by intrastate conflict may substantively reduce the amount of FDI (Bussmann, 2010; Jensen, 2006). On the other hand, since intrastate conflict, particularly civil war, causes relocation of population or changes in ownership of property and business, the onset of intrastate conflict may promote foreign investors’ opportunity and willingness to invest in valuable natural resource extractive industries such as oil (Lee, 2017; Maher, 2015). It is also argued that the influence of civil war on FDI inflows is conditioned on the type of civil war termination (Bak and Lee, 2021; Joshi and Quinn, 2020).

To deal with this potential endogeneity issue, we employ an instrumental variable method with the two-stage residual inclusion (2SRI) approach. This produces more consistent estimates than the conventional two-stage least-squares (2SLS) regression, when the dependent variable in the second stage is nonlinear, which is the case in this analysis (Bak and Moon, 2016; Terza et al., 2008). As robustness tests, we also employed the 2SLS approach and reported the results in Tables 2A and 3A in the online appendix. Virtually, the substantive results remain the same.

A good instrumental variable should be a strong predictor of FDI inflows but theoretically not associated with intrastate conflict onset. We utilize two instrumental variables. Remoteness is the inter-capital geographical distance between a host country and the 20 richest economies in the world weighted by their GDP per capita [9]. The other instrumental variable is the highest marginal corporate tax rate a host country has in a year. Both variables are highly associated with FDI inflows but uncorrelated with intrastate conflict onset. Bilateral distance data are generated from EUGene program (Bennett and Stam, 2000) and GDP per capita data come from the World Bank (2018). Corporate tax rate data come from Tax Foundation (2015) and OECD (2018) [10].

For the first stage estimation of cross-border M&A and greenfield FDI equations, we utilize the ordinary least squares method. To control for heterogeneity across countries, fixed effects models are utilized. The $F$ statistics of the first-stage regression of FDI equations is
about 19.1, which is well above the thresholds for strong instruments suggested by Staiger and Stock (1997) and Stock and Yogo (2005) [11]. For the second-stage estimation of intrastate conflict onset equation, we utilize logit models with random-effects regression to control for unobserved heterogeneity across countries [12]. To model time dependence in time-series-cross-sectional data with a binary dependent variable, we utilize the cubic polynomial approximation method suggested by Carter and Signorino (2010). Finally, to obtain consistent standard errors, we generate bootstrapped samples with 1,000 time iterations.

Results
For comparison purposes, we first estimated our models without disaggregating FDI into two different types and then another set of models with M&A and greenfield investment as separate variables. Table 1 reports the first group of empirical results, and Table 2 the second group of results. Since we utilized a bootstrapping simulation method, statistical significance of our estimates is represented better by percentile-based confidence intervals than by normality assumption-based confidence intervals (Bak and Moon, 2016) [13].

As the results in Table 1 show, FDI generates strong pacifying effects on intrastate conflict in Model 1. Statistical insignificance of the coefficient of FDI in Models 2 and 3 implies that FDI has only a strong short-term impact on intrastate conflict. The results confirm previous arguments and findings (Barbieri and Reuveny, 2005; Bussmann, 2010; Bussmann and Schneider, 2007). However, these findings and understandings are incomplete, since we overlooked differences in the type of FDI in these models. When we disaggregate FDI into

<table>
<thead>
<tr>
<th>Dep. Var.: Intrastate conflict</th>
<th>Model 1 estimates (S.E.)</th>
<th>Model 2 estimates (S.E.)</th>
<th>Model 3 estimates (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI_1</td>
<td>-4.041*** (0.972)</td>
<td>-0.072 (0.052)</td>
<td>-0.003 (0.049)</td>
</tr>
<tr>
<td>FDI_{(1 + 2)}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI_{(1 + 2 + 3)}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI Stock_1</td>
<td>-0.064 (0.272)</td>
<td>-0.511*** (0.362)</td>
<td>-0.657*** (0.408)</td>
</tr>
<tr>
<td>Trade_1</td>
<td>-0.003 (0.011)</td>
<td>0.001 (0.011)</td>
<td>0.004 (0.012)</td>
</tr>
<tr>
<td>Democracy_1</td>
<td>0.882*** (0.237)</td>
<td>0.777*** (0.252)</td>
<td>0.730*** (0.243)</td>
</tr>
<tr>
<td>Democracy^2_1</td>
<td>-0.040*** (0.010)</td>
<td>-0.037 (0.011)</td>
<td>-0.035*** (0.012)</td>
</tr>
<tr>
<td>Regime Change</td>
<td>-0.283 (0.469)</td>
<td>-0.254 (0.501)</td>
<td>-0.217 (0.521)</td>
</tr>
<tr>
<td>Population_1</td>
<td>1.843*** (0.566)</td>
<td>1.476*** (0.390)</td>
<td>1.452*** (0.426)</td>
</tr>
<tr>
<td>GDP Growth_1</td>
<td>0.021 (0.031)</td>
<td>0.020 (0.030)</td>
<td>0.008 (0.037)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>4.530*** (1.320)</td>
<td>4.501*** (1.222)</td>
<td>4.236*** (1.278)</td>
</tr>
<tr>
<td>Religious Fractionalization</td>
<td>-1.601*** (2.098)</td>
<td>-1.027 (1.636)</td>
<td>-0.742 (1.704)</td>
</tr>
<tr>
<td>Mountains</td>
<td>0.418*** (0.314)</td>
<td>0.452*** (0.244)</td>
<td>0.445*** (0.267)</td>
</tr>
<tr>
<td>West</td>
<td>-4.845*** (2.089)</td>
<td>-5.198 (1.820)</td>
<td>-4.942*** (1.874)</td>
</tr>
<tr>
<td>East Europe</td>
<td>-1.197 (1.280)</td>
<td>-2.133*** (0.979)</td>
<td>-1.542*** (1.084)</td>
</tr>
<tr>
<td>Latin America</td>
<td>-4.725*** (1.763)</td>
<td>-3.680*** (1.315)</td>
<td>-3.438*** (1.377)</td>
</tr>
<tr>
<td>Africa</td>
<td>-2.152 (1.512)</td>
<td>-0.914 (1.120)</td>
<td>-0.914 (1.137)</td>
</tr>
<tr>
<td>Asia</td>
<td>-3.398*** (1.470)</td>
<td>-2.406*** (1.106)</td>
<td>-2.531 (1.167)</td>
</tr>
<tr>
<td>Time</td>
<td>0.694*** (0.155)</td>
<td>0.616*** (0.151)</td>
<td>0.593*** (0.144)</td>
</tr>
<tr>
<td>Time^2</td>
<td>-0.037*** (0.012)</td>
<td>-0.032*** (0.011)</td>
<td>-0.031*** (0.012)</td>
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<tr>
<td>Time^3</td>
<td>0.001*** (0.000)</td>
<td>0.001*** (0.000)</td>
<td>0.001*** (0.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>-29.53*** (4.68)</td>
<td>-25.18*** (4.00)</td>
<td>-25.72*** (5.43)</td>
</tr>
<tr>
<td>N</td>
<td>2,738</td>
<td>2,555</td>
<td>2,434</td>
</tr>
<tr>
<td>2lnL</td>
<td>775.64</td>
<td>719.13</td>
<td>688.64</td>
</tr>
<tr>
<td>(\chi^2)-statistic</td>
<td>78.93***</td>
<td>75.94***</td>
<td>71.79***</td>
</tr>
</tbody>
</table>

Table 1. FDI and the onset of intrastate conflict

Note(s): Random effect logistic regression models with 2SRI; two-tailed tests; Residual terms are not reported here to save space; Bootstrap standard errors in parentheses; Percentile-based confidence intervals, *** \(p \leq 0.01\), ** \(p \leq 0.05\), * \(p \leq 0.10\)
cross-border M&A and greenfield FDI and test their impact on intrastate conflict separately, a different story arises.

As reported in Table 2, cross-border M&A promote the probability of intrastate conflict onset in Models 4 and 5, while greenfield FDI generates significant pacifying effects on it in all three models. These results show that the positive effects of cross-border M&A investment on intrastate conflict onset can be observed more than one year after the investment is made but the magnitude of the effects diminishes over time. In addition, when we disaggregate total FDI into two different types of FDI, both cross-border M&A and greenfield FDI variables in Model 5 and greenfield FDI variable in Model 6 become statistically significant with two opposite signs. This result suggests that the FDI variable in Models 2 and 3 became insignificant, probably because negative and positive effects of greenfield FDI and cross-border M&A canceled out each other. This finding highlights the importance of disaggregating FDI into different types in studies of the peace-through-FDI thesis.

To have a better understanding of the substantive impact of FDI on intrastate conflict onset, we estimated Model 4 with a simulation method (Tomz et al., 2003). Figure 1 reports the results.

When the volume of greenfield FDI inflows takes only 0.1% of GDP of a recipient (fixing cross-border M&A at the value of 3% of GDP), the chance of having intrastate conflict onset is about 34.3%. However, as the volume of greenfield FDI inflows increases to 1, 3, 5 and 10% of its GDP, the predicted probabilities rapidly decrease to about 16, 11, 9 and 6% respectively.
Meanwhile, when the volume of cross-border M&A inflows takes only 0.1% of its GDP (fixing greenfield FDI at the value of 3% of GDP), the probability of intrastate conflict onset is close to zero. However, as the volume of M&A increases to 1, 3, 5 and 10% of its GDP the predicted probabilities of intrastate conflict onset increase to about 0.04, 11, 38 and 68%, respectively. This is a striking finding in that, unlike previous reports on pacifying effects of FDI, cross-border M&A in specific proportions significantly promote the likelihood of intrastate conflict. Simply stated, it is not FDI itself but the type of FDI that matters in explaining intrastate conflict.

In terms of the control variables in both tables, the regime type variable appears to have a curvilinear relationship with intrastate conflict, as expected. Anocratic regimes have a higher probability of engaging in intrastate conflict as compared to fully established democratic or authoritarian regimes. In regards to a state’s internal characteristics, as a state’s population, ethnic fractionalization and percent of mountainous terrain increase, the risk of intrastate conflict increases as well. These results are consistent with previous findings in the literature on intrastate conflict. Regional controls indicate that, in comparison to the Middle East and North Africa, countries in the West or Latin America generally have a lower chance of facing intrastate conflict onset. Other control variables such as trade or FDI stock do not have statistically meaningful or consistent effects on intrastate conflict onset across different models. The statistical significance of the cubic polynomial approximation time variables corroborates the suspicion that time dependence needs to be controlled in our models.

Conclusion

Despite the extensive literature on FDI and the onset of intrastate conflict, many have approached FDI as a singular phenomenon, and have not broken it down into its constituent
parts of greenfield and brownfield investment types. Theorizing that this practice had oversimplified and blurred the relationship of FDI and intrastate conflict onset, we pursued the collection of novel data in order to more completely distinguish between the two types of FDI. With this novel approach dividing FDI into its component parts, we have aimed to break open the black box of FDI to find out the extent of its diverse influence on the onset of intrastate conflict.

Our initial analysis was in line with previous research in that it found total FDI has a significant pacifying effect on the likelihood of intrastate conflict. That being said, when we broke down the FDI data into its constituent parts and ran analyses on this data from the period of 1990–2015, we found strong support for our hypotheses that greenfield and cross-border M&A investment have differing impacts on the likelihood of intrastate conflict onset in recipient states.

Our findings offer at least two significant implications. First and most clearly, is that FDI is a conglomerated concept of two very different approaches to investment in a foreign state’s economy. To treat them in a unified manner in seeking to understand its’ relationship to intrastate conflict is to brush aside these differences. Since cross-border M&A are different from other types of foreign investment by nature, it is necessary to distinguish it from others in the study of the peace-through-FDI thesis. Failure to do so may result in inconclusive or incomplete findings. Understanding the differences between different types of FDI would allow the foreign policy-making community to make better recommendations on how states might reduce the likelihood of intrastate conflict.

Second, our findings are not necessarily rejecting the peace-through-FDI thesis. On the contrary, the findings suggest strong pacifying effects of greenfield FDI on intrastate conflict. By mixing negative effects of greenfield investment on intrastate conflict with positive effects of cross-border M&A, however, we are likely to mistakenly reject or accept the peace-through-FDI thesis. The issue is that M&A have been an important form of foreign investment in many places in developing countries and are likely to be of more importance in the future (Demirbag et al., 2008; Meyer and Estrin, 2001). In this regard, careful attention should be paid to each case in evaluating the peace-through-FDI thesis.

Potential next steps for research include doing similar analyses on the relationship of the constituent parts of FDI to intrastate conflict duration and severity. As the findings of this study suggest, different types of FDI may generate significantly diverse effects on the duration of intrastate conflict or the level of its severity as well as its onset. Future work will also benefit by exploring the bilateral context of cross-border M&A and greenfield FDI. Since the impact of FDI on a recipient could be influenced by the sender’s characteristics such as its human rights standards, examining the origin of foreign investment along with its amount and type will further deconstruct FDI as a black box and offer a clear understanding of the nexus between FDI and intrastate conflict.

Notes
1. Blanton and Blanton (2012) report that total FDI inflows as well as FDI in the services sector negatively affect labor rights. However, they also argue that FDI in the manufacturing sector has a positive impact on labor rights, because unlike investment on primary and service sectors, investment on manufacturing sector increasingly requires high-skilled employees in developing countries.
2. For example, for the countries that received M&A of at least 50% of the total FDI between 1990 and 2015 in the data, the average growth rate was 3.26%, while the growth rate for the countries that received M&A of less than 50% of the total FDI during the same period was 4.19%.
3. For example, after the Asian financial crisis of 1997, while the overall FDI inflow to Indonesia declined significantly from about 6.25 billion US dollars in 1996 to virtually negative investment in
the next six years, its cross-border M&A inflow had continuously increased before and after the crisis. The net value of cross-border M&A was about 196.6 million US dollars (0.095% of its GDP) in 1994, about 365.5 million (0.137% of the GDP) in 1996, about 705.9 million (0.632% of the GDP) in 1998, and about 2.2 billion US dollars (1.28% of the GDP) in 2001. During the period of 1998–2001, due to mass layoffs, deteriorating living conditions and poor economic performance, Indonesia suffered from significant protests, riots, terrorism and political violence. Although it is true that economic hardship and political instability were brought directly by financial crisis itself, cross-border M&A investment worsened the situation.

4. A well-known example is the story of MG Rover, a British carmaker, which was purchased by Phoenix Venture Holdings from BMW in 2000. The five executives of the company took 42 million pounds in pay and pensions before the company collapsed in 2005. In addition, a significant amount of money as consultancy services was paid to persons who had personal connections to one of the executives.

5. This is an arbitrary measure of greenfield investment. Non-cross-border M&A are not always greenfield FDI and there are multiple different types of FDI. However, since the focus of this research is to distinguish cross-border M&A from other types of FDI in terms of their impact on intrastate conflict, this measure serves well for the purpose of this research. In addition, this way of categorizing FDI is not unusual in the literature on FDI (Brakman et al., 2007; UNCTAD, 2017).

6. Like Bussmann (2010), we take the logged forms to address a skewed distribution of the variables. When a net value of M&A or FDI inflows is negative, we first take a logged form of the absolute value and then give a negative sign to it. When the value is zero, we keep the original value without log-transformation.

7. As a robustness test, we also included multiple lags of investment variables in a model to capture both short and midterm effects of investment on the onset of intrastate conflict. The substantive results remained virtually the same. To save space, we do not report them in this paper.

8. Although separately examining the accumulation of both cross-border M&A and greenfield investment is desirable, unfortunately, the data on cross-border M&A stock values is unavailable. For a detailed discussion about the different measurement methods of FDI flows and stock and their associated issues, refer to Kerner (2014).

9. Following Pinto and Zhu (2016), the remoteness variable is calculated by the sum of the inverse of bilateral inter-capital distance between the host country (i) and one of the 20 richest countries (j) multiplied by its GDP per capita (based on purchasing power parity, constant 2011 international dollars):

$$\text{Remoteness}_i = \sum_{j=1}^{20} \frac{1}{\text{distance}_{ij}} \times \text{GDP per capita}_j$$

10. As an alternative instrument, we also utilized the number of bilateral investment treaties (BITs) a host country has in a given year. The empirical findings and their implications remain the same.

11. Staiger and Stock’s (1997) suggest that instruments are weak if the first-stage $F$ statistics is less than 10.

12. Since there are many constant observations in some variables, fixed effects models are not preferred in the equation of intrastate conflict. Nevertheless, as a robustness test, we ran a Hausman test where the null hypothesis is that the preferred model is random effects against fixed effects. We fail to find statistically meaningful evidence that favors fixed effects over random effects models.

13. Nevertheless, there were few differences in statistical significance of most estimates when we examined them based on normality assumption-based confidence intervals.

References


Appendix
Appendix for this article can be found online.

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