

Social capital and entrepreneur resilience: Entrepreneur performance during violent protests in Togo

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Abstract

Research Summary: This study explores how entrepreneurs' social capital affects their resilience to localized shocks. Using a unique longitudinal survey of entrepreneurs during a surge of violent protests in Togo during 2017 and 2018, I explore how different kinds of relationships affect entrepreneurs' performance. Results show that proximity to violent protests caused entrepreneurs' profits to drop by 20%. This decrease, however, was mitigated by entrepreneurs' ties to their local communities and by their non-colocated advice relationships, which were ties to geographically distant advisers. In contrast, colocated advisers, those who were spatially proximate, were harmful to their performance. These findings show that social capital can have conflicting effects on entrepreneurs' resilience, depending on the kinds of relationships they consist of and how those relationships are exposed to the shock.

Managerial Summary: Relationships are critical to entrepreneurs' performance. Yet, during local crises, such as violent protests, it can be difficult to know which relationships to rely on. Studying entrepreneurs in Togo during a sudden surge of violent protests, I found that two kinds of relationships reduced the negative impact of the localized shock: ties to local communities and advisers located outside the crisis area. In contrast, advisers located nearby, who were also affected by the crisis, amplified the protests' negative effects.

These findings suggest that entrepreneurs who can afford to build stronger ties to their local communities and have more distant advisers may be better positioned to minimize losses during localized shocks.

KEYWORDS

advice relationships, entrepreneurship, local communities, resilience, social capital

1 | INTRODUCTION

Local disruptive events, such as riots, armed conflicts, and natural disasters, often have devastating effects on entrepreneurs and their businesses (Meyer, 1982). Understanding entrepreneurs' resilience to such events—their ability to minimize performance losses—has long been a central question in the field of strategy (Levinthal & March, 1981; Thompson, 1967). Existing research has stressed two important sources of resilience: slack resources and adaptability (George, 2005; Levinthal, 1997). For example, firms with larger slack financial reserves are likelier to survive armed conflicts (Dai, Eden, & Beamish, 2017). Similarly, firms that are adaptable enough to implement new activities during disruptive regulatory changes tend to earn higher profits (Haveman, 1992).

Although the importance of slack and adaptability has been well established, less is known about the role of entrepreneurs' social capital as a source of resilience. Social capital consists of relationships to individuals and communities that entrepreneurs rely on to access information and resources (Adler & Kwon, 2002; Putnam, 2000). During periods of stability, entrepreneurs with more social capital tend to perform better and survive longer (Baum, Calabrese, & Silverman, 2000; Cai & Szeidl, 2018; Chatterji, Delecourt, Hasan, & Koning, 2019; Kwon, Heflin, & Ruef, 2013). We might, therefore, expect social capital to also improve entrepreneurs' performance during disruptive times, since access to information and resources are particularly important during shocks (Weick & Sutcliffe, 2011). Yet, in contrast to other sources of resilience, such as slack resources, social capital is itself vulnerable to shocks. During a disruptive event, entrepreneurs' ties may themselves be adversely affected. This could make social capital a source of contagion for the shock, putting entrepreneurs at further risk. There is evidence, for example, that social ties can be channels through which financial crises spread (Glasserman & Young, 2016). As a result, rather than be a source of support, social capital could be an unexpected point of failure for entrepreneurs. We have few insights that help clarify whether social capital is a source of resilience or a liability during local disruptive events.

To address this, I study entrepreneurs during a kind of localized disruptive event that is prevalent and destructive: violent protests. In 2019, it is estimated that there were over 59,000 protests across 75 countries, of which about 25% were violent and resulted in at least 475 documented deaths (ACLED, 2020). Prominent examples of violent protests include the 2018 “Yellow Vest” protests in Paris and the 2019 pro-democracy protests in Hong Kong. To understand how social capital shapes entrepreneurs' resilience I explore the impact of violent protests on entrepreneurs' profits and measure how different kinds of social relationships moderate those effects.

Building on social capital research (Adler & Kwon, 2002), I argue that the effect of social capital on entrepreneurs' resilience depends on the kinds of relationships it consists of and

whether those relationships have been exposed to the shock. In particular, ties to local communities are likely to be sources of support that increase entrepreneurs' resilience, regardless of the community's exposure. In contrast, ties to individuals are sources of resilience depending on their exposure. Non-colocated advice relationships, which are likely unexposed to the shock, are sources of resilience, while colocated advice relationships, those that are spatially proximate to entrepreneurs and likely also exposed to the shock, weaken entrepreneurs' resilience.

To study these effects, I leverage a unique longitudinal survey of entrepreneurs in the city of Lomé, Togo, during a sudden rise in violent protests in 2017 and 2018. During that time, residents of Lomé mobilized to protest the ruling regime and a wave of large political protests swept the city (Besliu, 2017). Many of these protests became violent when government forces intervened (ACLED, 2018). I geolocated the protest paths through the city using news media coverage and combined these data with the geographic coordinates of the entrepreneurs in the survey. Based on the micro-geography of the violent protests I estimated their impact on entrepreneurs' business profits and the moderating effect of entrepreneurs' advice relationships and community ties.

Using a difference-in-differences estimation strategy, I found that entrepreneurs located in direct proximity to violent protests experienced a decrease of approximately 20% in monthly profits. Supplementary analyses and qualitative data suggest that violent protests caused these losses at least in part because they forced entrepreneurs to close their businesses. These losses were mitigated by the extent to which entrepreneurs had ties to their local community and had non-colocated advice relationships. In particular, increasing community ties by one additional civic association meeting per month decreased the drop in profits from violent protests by 5 percentage points. Similarly, each non-colocated advice relationship lowered the negative effect of violent protests by 15 percentage points. In contrast, colocated advice relationships weakened entrepreneurs' resilience, increasing their losses. Each additional colocated advice relationship increased entrepreneurs' profit loss on average by 17 percentage points.

Taken together, these findings show that social capital can have conflicting effects on entrepreneurs' resilience to local shocks. In particular, the impact of social capital on performance depends crucially on the kind of tie and its exposure to the shock. Ties that are unexposed tend to increase resilience, while exposed ones can have differing effects. Specifically, ties to the local community tend to protect entrepreneurs, increasing their resilience, while ties to colocated advisers place additional demands on them, reducing their resilience. Hence, colocated advice relationships not only fail to be a source of support during crises, they become a case of negative social capital (Portes & Landolt, 1996), increasing entrepreneurs' performance losses. This study fills important gaps in strategy research on resilience by introducing social capital as an important antecedent (Sutcliffe & Vogus, 2003; Williams, Gruber, Sutcliffe, Shepherd, & Zhao, 2017). It also contributes to research on entrepreneur social capital (Adler & Kwon, 2002), by showing that relationships that are supportive during stable times can become harmful during shocks and that local community ties have diverging effects from ties to individuals.

2 | VIOLENT PROTESTS AND ENTREPRENEURS' BUSINESS PERFORMANCE

Local disruptive events, such as violent conflicts, natural disasters, and humanitarian crises, cause physical and economic damage. They tend to be sudden, evolve in unpredictable ways, and interfere with entrepreneurs' ability to conduct business (Meyer, Brooks, & Goes, 1990).

Importantly, such events are often localized, which means that their effects are concentrated within a delimited geographic area (Tilcsik & Marquis, 2013).

Among localized disruptive events, violent protests are particularly prevalent and destructive (ACLED, 2020). They involve clashes between groups that may include protesters, counter-protesters, police, military, or other state forces. During violent protests, protesters often draw on tactics such as starting fires, throwing rocks, and erecting barricades, while state and military forces often use rubber bullets, water cannons, tear gas, batons, or other weapons (McAdam & Su, 2002). Such conflicts can turn particularly violent, creating warlike situations that rapidly diffuse in urban neighborhoods (Nassauer, 2018).

Violent protests can reduce entrepreneurs' profits by causing physical damage to their businesses. Tactics such as erecting barricades or deploying water cannons can cause material damages (Luders, 2006). Moreover, violent protests can create a sense of insecurity and disorder that leads to theft and looting (Nassauer, 2018). As a result, protests can cause expensive damages and cut into firms' profitability. During the Los Angeles riots of 1992, approximately 3,100 businesses were damaged by fires, break-ins, or lootings (Pearson & Kirby, 1993). Similarly, in the aftermath of the 2019 "Yellow Vest" protests in France over 1,600 businesses filed insurance claims related to the protests (Associated Press, 2019a).

Even when entrepreneurs' physical property is not damaged, violent protests can force entrepreneurs to shut down their businesses. Closing businesses can lead to spoilage and loss of inventory. It can also cause entrepreneurs to lose their clients and employees to competitors. These forced shutdowns can last longer than the protests themselves because reopening can require significant coordination, calibration of production processes, and training. Accounts of factories in China shutting down due to protests and strikes describe that it can take months for production to reach pre-disruption levels (Lyddon, Cao, Meng, & Lu, 2015). Similarly, in the aftermath of the "Yellow Vest" protests in Paris in 2019, business owners took days to clean the streets surrounding their businesses to enable clients to return (Associated Press, 2019b).

Finally, in addition to the physical damages and the forced closures, violent protests can also stigmatize geographic areas where businesses are located (Rivera, 2008). Violent events often create long-lasting negative perceptions of the places where they occur, making people hesitant to approach them (Morenoff & Sampson, 1997; Sampson & Raudenbush, 2005). Such stigmatization can affect clients' and suppliers' willingness to approach businesses in those areas, thereby harming entrepreneurs' profits. For the above reasons, the more entrepreneurs are exposed to violent protests, the more they will experience losses in profits. Therefore, I hypothesize that:

Hypothesis 1. *Entrepreneurs with more exposure to violent protests will experience larger decreases in profits.*

3 | RESILIENCE AND ENTREPRENEUR SOCIAL CAPITAL

Entrepreneurs who are able to minimize performance losses from extenuating circumstances, such as violent protests, exhibit resilience, defined as firms' ability to minimize decreases in performance caused by disruptive events (Branzei & Abdelnour, 2010; Meyer, 1982; Williams et al., 2017). Research has emphasized two sources of resilience: slack resources and adaptability (Sutcliffe & Vogus, 2003).

Slack resources are the financial reserves, debt, cash, and excess capacity that firms and entrepreneurs stockpile during periods of growth that can be used to maintain performance

during periods of adversity (George, 2005). These resources buffer businesses from disruptions, enabling them to wait out the crisis (Voss, Sirdeshmukh, & Voss, 2008). Similarly, they often provide firms flexibility and time to initiate changes in strategy (Bourgeois, 1981). There is evidence that firms with slack resources are likelier to survive, maintain operations, and take advantage of new opportunities during shocks (Bradley, Shepherd, & Wiklund, 2011).

In addition to slack resources, adaptability is another important source of resilience. Adaptability involves firms' and entrepreneurs' cognitive capacity to notice disruptions, make sense of them, and devise adaptive strategies (Weick, 1993). At the firm level, the ability to adapt is associated with diffuse decision-making processes and practices that enable coordination (Bigley & Roberts, 2001). Firms and entrepreneurs tend to acquire the capacity to adapt by investing in routines and managerial best practices, as well as by having survived past shocks (Williams et al., 2017).

At the entrepreneur level, adaptability can also be associated with certain personality traits and practices. Firms whose entrepreneurs exhibit more resourcefulness, hardiness, and optimism are likelier to grow faster despite extenuating circumstances (Ayala & Manzano, 2014; Chadwick & Raver, 2020). In terms of practices, entrepreneurs who use incremental planning in their businesses, which emphasizes flexible day-to-day planning, are likelier to adapt better and survive in violent environments (Hiatt & Sine, 2014).

3.1 | Entrepreneur social capital

In addition to slack resources and adaptability, I argue that another important antecedent of resilience is entrepreneur social capital. For entrepreneurs, social capital is their portfolio of relationships characterized by trust and reciprocity (Adler & Kwon, 2002). These relationships can be with individuals, such as advisers, investors, and mentors (Stuart & Sorenson, 2007), or with larger collectives, such as local communities or ethnic groups (Putnam, 2000). During periods of stability, these relationships are often sources of information, resources, and knowledge. On average, entrepreneurs with more social capital tend to grow more, survive in the long run, and be more profitable (Baum et al., 2000; Cai & Szeidl, 2018; Chatterji et al., 2019; Kwon et al., 2013).

During periods of disruption, it is less clear how social capital affects performance. Contacts who were previously sources of advice might not be able to provide support. Moreover, some relationships may become liabilities: relationships that are adversely affected by the disruption may place additional demands on entrepreneurs, taking them away from their businesses. I argue that entrepreneurs' relationships will affect their resilience depending on the type of tie they represent. On the one hand, ties to local communities, although exposed to the local shock, are likely to be a source of support because as collectives they are more resilient (Beggs, Haines, & Hurlbert, 1996; Wellman & Wortley, 1990). On the other hand, ties to individual advisers will depend on their exposure. Unexposed advisers will likely be a source of support, while exposed advisers will be a source of demands.

3.2 | Local community ties

Entrepreneurs' ties to their local communities are often conceptualized as participation in local civic associations (Benton, 2016; Kwon et al., 2013). Engagement in local civic associations leads

entrepreneurs to acquaint themselves with large groups of community members and gain a sense of familiarity with them (Putnam, 2000). Civic associations also provide a forum for entrepreneurs to become known to community members and demonstrate their commitment to the community (Ruef & Kwon, 2016). Since civic associations often bring together diverse groups of people they broaden entrepreneurs' recognition in the community (Benton, 2016). Therefore, community ties represent a level of integration into the local community and familiarity with community members at large.

Community ties can be particularly important sources of support during disruptive events. First, entrepreneurs who are known to members of their communities might receive faster and more accurate warnings about disruptions, since community ties often diffuse information rapidly from a broad range of sources (Davis, Renzulli, & Aldrich, 2006). These warnings can be valuable as violent protests unfold rapidly and unpredictably. In addition, members of the local community may actively intervene to shield and protect entrepreneurs' businesses.

Second, protesters may avoid harming businesses whose owners they know. Whether businesses are perceived to have local ties or not can be a critical factor in whether they become targets for protesters. During urban riots in the US between 1965 and 1968 in the inner cities of Newark, Detroit, New York, and Washington, DC, rioters targeted businesses owned by people who were perceived not to be members of those communities (Bean, 2000).

Finally, in the aftermath of violent protests, community members may rally behind those entrepreneurs with whom they are familiar. They may show their support by contributing labor, doing favors, or buying from them. This was the case with many entrepreneurs in the aftermath of the 1992 Los Angeles riots, when entrepreneurs who had been active in their communities before the riots were likelier to receive financial support from community organizations (Pearson & Kirby, 1993). Given these benefits of local community ties during local shocks, I hypothesize that:

Hypothesis 2. *Entrepreneurs with more local community ties will experience smaller decreases in profits from their exposure to violent protests.*

3.3 | Colocated and non-colocated advice relationships

Beyond communities, entrepreneurs' social capital also consists of advice relationships with individuals (Adler & Kwon, 2002). These are ties that entrepreneurs rely on for advice about business matters. In contrast to community ties, advice relationships are built over repeated exchanges with the same individual and tend to be characterized by norms of trust and direct reciprocity (Gargiulo & Benassi, 1999). During periods of stability, interactions between entrepreneurs and their advisers are likely to involve measured requests and be balanced in terms of turn-taking (Portes & Landolt, 1996). As a result, during stable times advice relationships are reliable sources of support that tend to respond positively to requests for assistance.

During periods of disruption, however, the way advisers and entrepreneurs interact is likely to change. On the one hand, advisers that are exposed to the disruption are likely to have a diminished capacity to assist entrepreneurs and are likelier to request help themselves. On the other hand, advisers unaffected by the shock are likely to have capacity to support entrepreneurs and be motivated to offer that support.

Whether advisers are exposed to the disruption or not is likely to be related to their location relative to the focal entrepreneur. Advice relations who are not located in the same

neighborhood, that is, who are non-colocated, are less likely to have been exposed to the same disruption and are likely to remain sources of support. In fact, non-colocated ties that are aware of the disruption may be particularly motivated as bystanders to intervene and provide help in a prosocial and altruistic manner. Witnessing harm befall others during a crisis can trigger prosocial and altruistic responses in those who are unaffected, motivating them to help (Fischer et al., 2011; Von Dawans, Fischbacher, Kirschbaum, Fehr, & Heinrichs, 2012).

Given this, non-colocated advisers are likely to provide access to material resources and advice. The resources they give may include loans, gifts, or free labor and can help entrepreneurs reduce their losses, maintain operations, and rebuild facilities. These may be particularly useful because of the relative scarcity of resources during those times, but also because they might differ from the kinds of resources that entrepreneurs typically have access to through their colocated relations. Responding to unexpected disruptive events frequently requires new kinds of resources or new combinations of resources (Dutta, 2017). Non-colocated advice relationships, who are located in different communities, may be able to provide these new kinds of resources.

In addition to resources, non-colocated advice relationships may also provide useful information and advice that helps entrepreneurs respond quickly and effectively to the disruption. The information may relate to how the crisis is unfolding or what may be coming next, which would help entrepreneurs plan. They may also have advice about practices and techniques that entrepreneurs can use to protect themselves from the conflict.

This information and advice may have the added benefit of being new to entrepreneurs. Non-colocated advisers are likely to have fewer mutual ties with the focal entrepreneur (Rivera, Soderstrom, & Uzzi, 2010). This makes it likelier that the information entrepreneurs receive from them is new or non-redundant (Burt, 1992), which is particularly useful during crises because it enables individuals to better make sense of the situation and respond more effectively (Weick & Sutcliffe, 2011). It would be expected, therefore, that during local shocks non-colocated ties not only have more capacity and motivation to provide advice, but also that they provide advice and information that is non-redundant. I therefore hypothesize that:

Hypothesis 3. *Entrepreneurs with more non-colocated advice relationships will experience smaller decreases in profits from their exposure to violent protests.*

In contrast to unexposed advice relationships, those that have been exposed to the shock are likely to have a diminished capacity to help the focal entrepreneur for at least two reasons. First, exposure to shocks can cause material damages and loss of income, which likely reduces the ability to lend others material support, such as loans, monetary gifts, or lending machinery and tools. Second, exposure to crises can increase levels of stress, anxiety, and threat (Staw, Sandelands, & Dutton, 1981), leading advisers to focus on their own problems (De Dreu & Nijstad, 2008). This narrowing of focus and attention during crises is driven by an effort to be creative and find solutions to problems (D'Aveni & MacMillan, 1990) and is associated with decreases in helping behaviors towards others (Dovidio & Morris, 1975). As a result, advisers exposed to the shock might have less attention to devote to the focal entrepreneur and be less disposed towards helping them. Hence, entrepreneurs' advice ties who are exposed to the disruption are unlikely to have the capacity to offer material support or advice during the shock.

Instead, affected advisers are likely to make their own requests for help from the focal entrepreneur. Individuals exposed to disruptions are likely to activate their social network in search of support (Smith, Menon, & Thompson, 2012). Activation may take the form of reaching out

for loans, information, or even employment. Such requests are particularly likely to be directed to individuals whom they perceive as accomplished, such as entrepreneurs and business owners (Portes & Landolt, 1996). As a result, advice relations who have been exposed to the same shock as the focal entrepreneur are likely to request help from them.

As discussed earlier, in local shocks colocated ties, which are located proximately to the focal entrepreneur, are likely to be exposed to the same shock. Colocated ties are likely to have incurred losses from the disruption, which diminishes their ability to provide material support. Moreover, their exposure is likely to focus their attention on their own problems and motivate them to prioritize those over their contacts' problems (Dovidio & Morris, 1975). As a result, interactions with colocated advisers are likely to be driven by their focus on minimizing their losses and solving their own problems (D'Aveni & MacMillan, 1990; De Dreu & Nijstad, 2008).

Given their state of need, colocated ties are more likely to make requests for assistance from entrepreneurs. Advisers who are affected by violent protests may ask for help rebuilding their businesses and referrals of new clients. They might ask for advice about how to manage their work and businesses. Such requests place pressure on entrepreneurs and take away their time, attention, and resources from managing their own businesses.

Requests from colocated advice relations are not easy for entrepreneurs to ignore. The individuals making those requests are likely to have been helpful in the past, and social obligations place pressure on entrepreneurs to help them (Portes & Landolt, 1996). Moreover, advice relationships are built over time through repeated interactions, making them difficult to end abruptly (Gargiulo & Benassi, 1999). Given that these requests are likely to be urgent and a social obligation, requests for help from colocated advice relations are akin to demands.

As a result, entrepreneurs with more colocated advice relationships are likely to receive more requests for help, straining their resources and attention, making it less likely that their own businesses will be managed well during violent protests. For this reason, I hypothesize that:

Hypothesis 4. *Entrepreneurs with more colocated advice relationships will experience larger decreases in profits from their exposure to violent protests.*

4 | METHODS

4.1 | Empirical setting

Early in the morning of August 19, 2017, a crowd of protesters gathered in a northern suburb of Lomé, Togo. As the mass of people prepared to march into the city center, banners taut and placards held high, police forces arrived en masse (US Department of State, 2019). The police tore into the crowd, firing teargas, and protesters responded by throwing rocks, erecting barricades, and setting tires on fire (ACLED, 2018).

The violence on August 19th catalyzed a series of large mobilizations against the government over the next 9 months in Lomé (Amnesty International, 2018). Figure 1 shows the number of peaceful (gray dotted line) and violent (black dashed line) protests that took place in the city between May 2017 and June 2018, based on the coding of news reports described below. The black vertical lines represent the months when survey waves for this study were conducted. Spikes in violent protests occurred in October 2017 and April 2018.

Togo is a West African country, located between Ghana and Benin, with a population of about 7 million people, 2 million of whom live in the capital, Lomé, and most of whom subsist on an average income of under two dollars per day (World Bank, 2019). Politically, Togo has had one of the longest dictatorships in Africa. The marches and riots in Lomé in 2017 and 2018 expressed citizens' frustration with the ruling regime, their desire for democratic elections, and their demand for presidential term limits (Besliu, 2017).

This is a suitable setting to study the role of social capital in entrepreneur resilience since other sources of resilience, related to slack and adaptive capabilities, are likely to be less prevalent. Entrepreneurs in settings like Togo often do not have financial reserves or managerial training (Schoar, 2010). In contrast, the effects of social capital are likely to be salient, since entrepreneurs in these contexts often rely heavily on relationships (Marquis & Raynard, 2015).

4.2 | Data

Data on entrepreneurs in Lomé during 2017 and 2018 were collected through a longitudinal survey launched by the author. The survey was designed to measure how entrepreneurs managed their businesses and interacted with their social environment. It asked about entrepreneurs' demographics, businesses, portfolios of advice relationships, and involvement in their local communities. Surveyors also tagged the coordinates of entrepreneurs' businesses using GPS devices. The criteria for entrepreneurs to participate in the survey were that their business must have been in operation for at least 1 year. Entrepreneurs were surveyed at 6-month intervals in May 2017, November 2017, and May 2018.

Participants were solicited from two sources. First, three teams of canvassers systematically visited all major commercial districts of Lomé—90 neighborhoods in total—and approached all businesses that met the criteria to participate in the survey within those areas. This process took about 3 months, from March to May 2017. The second source of participants was a business training program that was held in Lomé in April 2017. Entrepreneurs in the program were approached to participate in the survey. In combination, this recruitment process led to 396 participants. Of these, 371 participated in the second wave, and 361 in the third wave. Attrition

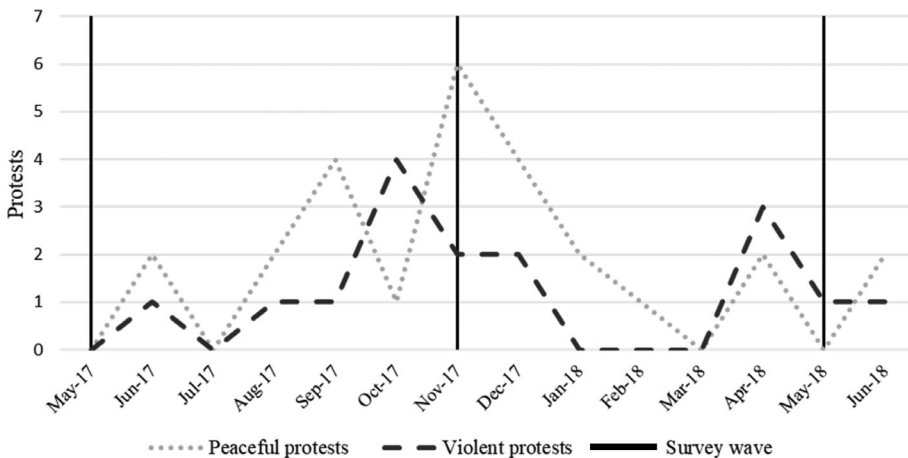


FIGURE 1 Timeline of protests in Lomé

from the sample was primarily due to entrepreneurs' sickness or travel during surveys. Appendix A1 compares this samples' characteristics to a larger survey of entrepreneurs in Lomé conducted by the World Bank, showing that the two samples are similar, which increases confidence in the representativeness of the current sample.

Data on protests were gathered from reports that appeared in newspapers and press releases (McAdam & Su, 2002). To create a dataset of protests, I consulted with informants in Lomé and settled on the following news outlets as sources: *Togo Tribune*, *Jeune Afrique*, *VOA Afrique*, *Togo Top News*, *Togo Top Info*, *Togo Press*, *Ici Lomé*, *Togozine*, *Republic of Togo*, *Lomé Infos*, *27avril.com*, and *RFI*. All of these outlets are francophone, and most are small, local publications based in Lomé. From the archives of each of these outlets I collected all articles that contained references to protests ("manifestation") in Lomé and were written during the period from April 2017 to June 2018, inclusive. This yielded a total of 320 articles. In addition to these articles, I collected all press releases issued by the US Embassy in Togo and the opposition political parties that organized the protests. I coded each article for whether it described a public protest event and whether the event was violent or not. If a public protest event was described and confirmed by at least three separate news outlets, I searched for descriptions of the route that the protest followed in Lomé and the location where the violence broke out.

Each protest event often included multiple routes through the city. I was able to identify the route of the peaceful protests on all but one occasion, and I identified all the locations of the violent clashes. As a precaution, I compared my coding of the protests with data from the Armed Conflict Location & Event Data Project (ACLED, 2020) which publishes daily locational data on protests in Africa. The comparison revealed that I had identified two additional protest events that they had not, but otherwise our coding of the dates and events was the same.

Once the coding was complete, I entered the locations of violent and peaceful protests on a map using the global information system (GIS) software, ArcMap. I drew maps plotting the routes and locations of violent conflicts for each day of protests. Figure 2 shows a map of Lomé with the locations of all the violent clashes documented during the period of observation. The black dots represent the locations of entrepreneurs in the survey and the solid red lines indicate the sections of streets on which violence occurred. Using the same software, I calculated the shortest distance in kilometers between each business in the survey and each point of violence.

Finally, I also gathered qualitative descriptions of entrepreneurs' experiences of the protests. In a series of 11 semi-structured interviews with entrepreneurs in Lomé whose businesses were near protests, I asked how their businesses had been affected and the factors that helped them survive. Details on the interviews, qualitative methods, and quotes are presented in Appendix A2.

4.3 | Dependent variable

The outcome of interest in this study is entrepreneurs' business performance. In developing country contexts, such as Togo, this has been operationalized as log *profits last month*, which is equal to profits during the month prior to the survey (Campos et al., 2017; McKenzie & Woodruff, 2018). Entrepreneurs' reports of profits over the previous month are highly correlated with other long-term measures of performance and tend to be accurate (De Mel, McKenzie, & Woodruff, 2009).

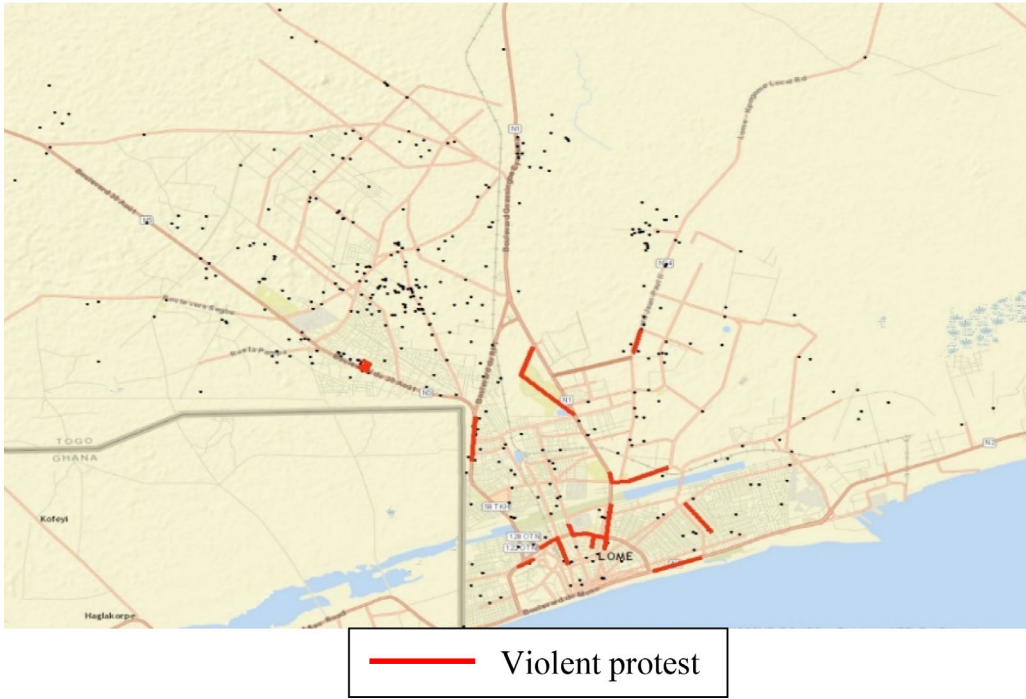


FIGURE 2 Geographic distribution of violent protests in Lomé, June 2017–June 2018

4.4 | Independent variables

The main independent variable of interest is entrepreneurs' *exposure to violent protests*. The first step in creating this measure was to use the shortest distance between each event of violence and each business in a quadratic distance decay function. This converted entrepreneurs' physical proximity to violent protests into a measure of exposure (Downey, 2006). The distance decay function used was:

$$v_{ij} = \begin{cases} 1 - \frac{4}{3}(x_{ij} + x_{ij}^2), & \text{if } 0.5 \geq x_{ij} \geq 0 \\ 0, & \text{if } x_{ij} > 0.5 \end{cases} \quad (1)$$

$$V_{it} = \sum_{j=1}^{J_t} v_{ij} \quad (2)$$

where v_{ij} is the measure of exposure for each entrepreneur i to each violent protest j , and $x_{i,j}$ is the shortest distance in kilometers between entrepreneur i and the violent protest j . The cutoff point after which the protest is assumed not to have an effect is 0.5 km. The measure of *exposure to violent protests*, V_{it} , was calculated as the sum of all exposures, $v_{i,j}$, for each entrepreneur over all events of violence, J_t , over the period of 6 months between survey waves.

The three independent variables that moderate the effect of violent protests on profits are entrepreneurs' ties to the local community, their non-located advice relationships, and their

colocated advice relationships. *Local community ties* was operationalized as the number of local civic association meetings that entrepreneurs attended per month. Research on community social capital has used participation in civic associations to measure the extent to which individuals have ties to a community (Kwon et al., 2013). Civic associations include non-governmental organizations, neighborhood associations, professional associations, and religious groups. For the purposes of this study, the local community was defined as the business's neighborhood, which consists of several city blocks, and civic associations were considered local when the majority of their members were residents of the neighborhood.

To construct measures of non-colocated and colocated advice relationships I asked entrepreneurs to name individuals whom they trusted and whom they reached out to for help and advice about their business (Renzulli, Aldrich, & Moody, 2000). Entrepreneurs could name friends, mentors, family members, or any other individual on whom they relied for advice and help with their business. Entrepreneurs were asked about the profession of their contacts and the neighborhood they worked in. The sum of all advice contacts who worked in different neighborhoods from the focal entrepreneur was the measure of *non-colocated advice relationships*. In contrast, the sum of all advice contacts who worked in the same neighborhood as the focal entrepreneur was the measure of *colocated advice relationships*.

4.5 | Control variables

I included several control variables in the regressions to rule out alternative sources of firm resilience. A significant source of resilience may be the size of the business, smaller businesses might be more flexible during disruptions (Branzei & Abdelnour, 2010). Hence, I included a control variable for the number of *full-time employees*.

The most relevant proxy for entrepreneurs' ability to adapt in developing country contexts was their use of managerial best practices. Firms with better management practices, including financial planning and stock management, are able to gather information about their changing environments and modify internal processes more quickly (Hiatt & Sine, 2014). Therefore, I controlled for entrepreneurs' *management practices score*, which is a score calculated as the proportion of best practices used during the 6 months prior to the survey based on 27 popular best practices related to marketing, financial planning, stock and inventory management, and human resources practices (McKenzie & Woodruff, 2018).

Another source of resilience may be slack resources. The best indication of slack resources in the context of Togo is access to loans. Most small and medium-sized businesses in developing countries operate with very few slack resources and, as a result, their ability to access credit is a significant signal of slack (Marquis & Raynard, 2015). I control for this using the logged number of *loans* received over the past 6 months. There is also evidence that businesses operating without being formally registered with tax authorities may be more adaptable to shocks (Branzei & Abdelnour, 2010). Informal firms do not have employment contracts, enabling them to scale down quickly. I control for the legal registration status of entrepreneurs' businesses using a dummy for whether entrepreneur's business is *formal* or not. Finally, the ability of entrepreneurs to generate slack resources may depend on the competitiveness of the market they operate in. Firms in more competitive markets tend to have lower profit margins and be less able to accumulate slack resources (George, 2005). Therefore, I controlled for the *number of local competitors* in each entrepreneurs' neighborhood, equal to the number of competitors reported by the entrepreneur.

TABLE 1 Summary statistics

		Mean	SD	25th percentile	Median	75th percentile
1	Profits last month (log)	11.046	1.033	10.309	11.002	11.695
2	Exposure to violent protests	0.118	0.349	0	0	0
3	Local community ties ($t = 0$)	1.052	2.669	0	0	1
4	Non-colocated advice relationships ($t = 0$)	1.077	0.891	0	1	1
5	Colocated advice relationships ($t = 0$)	0.665	1.006	0	0	1
6	Full-time employees	0.873	2.484	0	0	1
7	Management practices score	0.609	0.178	0.481	0.667	0.704
8	Loans (log)	0.152	0.291	0	0	0
9	Formal	0.288	0.453	0	0	1
10	Number of local competitors	5.075	6.553	2	4	6
11	Workdays lost	5.203	8.806	0	0	10

Note: $n = 997$, except for workdays lost which has n of 260 because it was measured only in the last survey wave.

Table 1 provides summary statistics, while Table 2 provides the bivariate correlation matrix for these variables. The average business in the survey generated about 200 USD per month in profits, had about 1 employee, and used about 60% of the 27 best practices that make up the management practices score. Only about 15% of the businesses had loans. Most businesses operated as part of the informal sector. Approximately 35% of entrepreneurs in the sample experienced exposure to violent protests. On average, each business owner attended one local civic association meeting per month during the 6 months prior to survey. They also reported on average one advice relationship located outside their neighborhood and one located in their neighborhood. Correlations between independent variables reported in Table 2 are generally low, and the mean vector inflation factor (VIF) is 1.92, which helps allay concerns about multicollinearity in the models (Allison, 1999).

4.6 | Estimation strategy

Leveraging the fact that profits were measured before and after the surge in violent protests, I use a difference-in-differences approach to estimate their effect on business profits. Violent protests began abruptly in June 2017, creating a pre-treatment period consisting of the survey conducted in May 2017 and two post-treatment periods that include the survey waves conducted in November 2017 and May 2018. Violence tended to occur when the police or military intervened to disperse protesters, which was difficult for entrepreneurs to anticipate (ACLED, 2018). One entrepreneur described the unexpectedness: “I was really surprised. I was surprised at the number of injuries. I saw several injured people. People were running, climbing walls, and falling. All this surprised me—the crowds, the police beating the citizens—it was shocking” (11, p 3). As Figure 2 shows, the violence occurred in a variety of neighborhoods across the city, which aligns with existing research on how unpredictable violence during protests can be (Baudains, Braithwaite, & Johnson, 2013).

I estimate the following model of business performance, pre- and post-violent conflict:

TABLE 2 Bivariate correlation matrix

	1	2	3	4	5	6	7	8	9	10
1 Profits last month (log)										
2 Exposure to violent protests	-0.037									
3 Local community ties, $t_i = 0$	-0.002	-0.015								
4 Non-colocated advice relationships, $t_i = 0$	0.163	0.007	-0.021							
5 Colocated advice relationships, $t_i = 0$	0.066	-0.108	-0.023	-0.159						
6 Full-time employees	0.158	0.077	-0.060	0.093	0.023					
7 Management practices score	0.232	-0.096	-0.131	-0.007	0.200	0.273				
8 Loans (log)	0.016	0.000	0.084	-0.034	-0.062	-0.053	-0.067			
9 Formal	0.247	0.028	-0.054	0.027	-0.085	0.263	0.339	0.070		
10 Number of local competitors	0.052	-0.050	0.002	0.070	0.116	-0.070	-0.197	-0.015	-0.105	
11 Workdays lost	-0.010	0.171	-0.014	0.072	-0.184	-0.096	-0.164	0.072	0.071	0.108

Note: $n = 997$, except for workdays lost which has n of 260 because it was measured only in the last survey wave.

$$\ln(Y_{i,t}) = \alpha_i + \lambda_t + \beta V_{it} + \delta V_{it} \times S_{i,t=0} + \theta' X_{it} + \epsilon_{it} \quad (3)$$

In this model, the dependent variable is log profits during the month prior to the survey for firm i in period t . There are three time periods, one for each survey wave. λ_t is an indicator for survey waves, capturing time-period effects; α_i are entrepreneur-level fixed effects; and β captures the effect of exposure to violent protests in the post-baseline period. $S_{i,t=0}$ represents the baseline values of the social capital variables. The model uses baseline, i.e. pre-treatment, values because including post-treatment values can introduce significant biases (Acharya, Blackwell, & Sen, 2016). θ' represents the effect of time-variant controls X_{it} that include firm size, management practices score, loans (log), formal status, and number of local competitors. In all specifications, I use standard errors that are clustered at the entrepreneur level.

Although the outbreak of violent protests was, according to entrepreneurs' accounts, sudden and largely unanticipated, the effectiveness of the difference-in-differences estimation relies on balanced control and treatment groups. To ensure that this is the case I estimated all models using a matched control group (Wing, Simon, & Bello-Gomez, 2018). To do this I used Coarsened Exact Matching (CEM), which is a nonparametric matching strategy (Iacus, King, & Porro, 2012). I matched entrepreneurs according to baseline values of variables that are predictive of business performance: firm age, entrepreneur gender, number of fulltime employees, and management practices score (McKenzie & Woodruff, 2018). This process led to dropping 15 firms from the sample and improved sample balance from $L_1 = 0.506$ to $L_1 = 0.450$, where L_1 is a measure of overall imbalance among covariates. Details about the matching process can be found in Appendix A3. All regression results also hold without applying matching to the sample (see Appendix A11 for these regression results).

An underlying assumption of this empirical design is that outcomes in the control and treatment groups exhibit a common set of period-specific changes, known as the parallel trends assumption. Figure 3 plots the mean of log profits in each survey wave for each treated group (entrepreneurs treated before survey wave 2 or before survey wave 3) and the control group. The plot helps provide visual evidence that firms treated after wave 2 and before wave 3 exhibit a parallel trend in log profits with the control group.

To further explore the parallel trends assumption, I replicated Figure 3 for entrepreneurs at different levels of social capital, splitting the sample into high and low levels of each form of social capital and plotting average profits over time by treatment. These figures, presented in Appendix A4, show that within the sub-samples defined by levels of social capital there were no diverging trends in performance before exposure to violent protests, which helps validate the model's assumptions. Further validation of this assumption is provided by Granger-type tests, described in Appendix A5.

Entrepreneurs who were exposed to the violence in two time periods—the second and third surveys—were dropped from the sample after the first time they were exposed to violence, since this could violate the parallel trends assumption (Goodman-Bacon, 2018). As a result 104 observations were dropped (see Appendix A6 for results without dropping these observations).

5 | RESULTS

To estimate the effect of exposure to violent protests on entrepreneurs' profits, I estimate Equation 3, which leverages the longitudinal data structure and uses a fixed-effects estimator

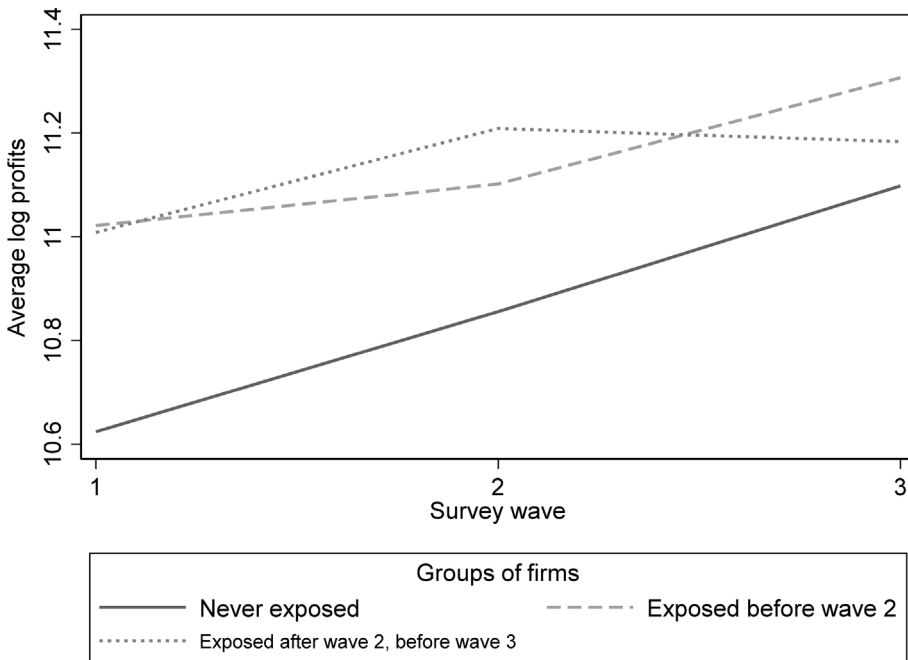


FIGURE 3 Entrepreneurs' average log profits by survey wave and exposure to violent protest

for entrepreneurs. Table 3 reports the coefficient estimates. In Model 1, I find evidence of the effect of violent protests on business profits. In this model, *exposure to violent protests*, which captures the proximity of an entrepreneur's business to events of violence, is negative and statistically significant. A one standard deviation increase in exposure to violent protests causes an approximately 8% decrease in monthly profits. On average, a one standard deviation increase in exposure corresponds to an increase of 200 m in proximity to a violent protest. As a result, entrepreneurs who were located at a proximity of zero meters from the violence experienced a decrease of about 20% in monthly profits from each violent protest. On average, businesses in the sample were approximately 450 m from a violent conflict, which represents a decrease of approximately 2% in profits for the average business. Model 2 introduces control variables and the coefficient estimate for exposure to violence remains negative, statistically significant, and approximately the same in magnitude. These results remain substantively unchanged under a variety of alternative functional forms for measuring exposure to the protests (see results using these alternative measures in Appendix A7).

This approach to estimating of the effect of violent protests uses a radius of exposure of 500 m, that is, entrepreneurs within 500 m of a violent protest are considered exposed. Regressions (presented in Appendix A8) show that as this radius expands, the impact of violence on profits progressively diminishes and becomes statistically nonsignificant at about 2 km. Similarly, results in Models 1 and 2 of Table 3 represent the average impact of all violence that took place during the preceding 6 months. Regressions in Appendix A9 show that the effect of violent protests diminishes over time, to the point that protests that took place four or more months prior have no statistically significant effect on entrepreneurs.

Model 3 in Table 3 introduces entrepreneurs' local community ties, measured at baseline, as a moderator of exposure to violent protest. The coefficient estimate for the interaction between

TABLE 3 The effect of exposure to violent protests on business performance with social capital moderators

	Profits (log)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Exposure to violent protests	-0.225 (0.073)	-0.215 (0.074)	-0.276 (0.083)	-0.410 (0.108)	-0.157 (0.074)	-0.381 (0.118)	-0.355 (0.119)
Exposure to violent protests × local community ties $t = 0$			0.053 (0.024)			0.062 (0.022)	0.063 (0.021)
Exposure to violent protests × non-colocated advice relationships $t = 0$				0.182 (0.068)		0.167 (0.066)	0.160 (0.071)
Exposure to violent protests × Colocated advice relationships $t = 0$					-0.171 (0.072)	-0.183 (0.093)	-0.210 (0.105)
Full-time employees		-0.055 (0.037)					-0.059 (0.036)
Management practices score		0.623 (0.276)					0.616 (0.275)
Loans (log)		0.085 (0.123)					0.082 (0.123)
Formal		0.068 (0.130)					0.081 (0.131)
Number of local competitors		-0.012 (0.014)					-0.013 (0.014)
Observations	977	977	977	977	977	977	977
Number of firms	381	381	381	381	381	381	381
Survey wave FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entrepreneur FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Robust standard errors clustered at the entrepreneur level in parentheses. All models use CEM sample. Local community ties, non-colocated advice relationships, and colocated advice relationships are at baseline values. FE, fixed effects.

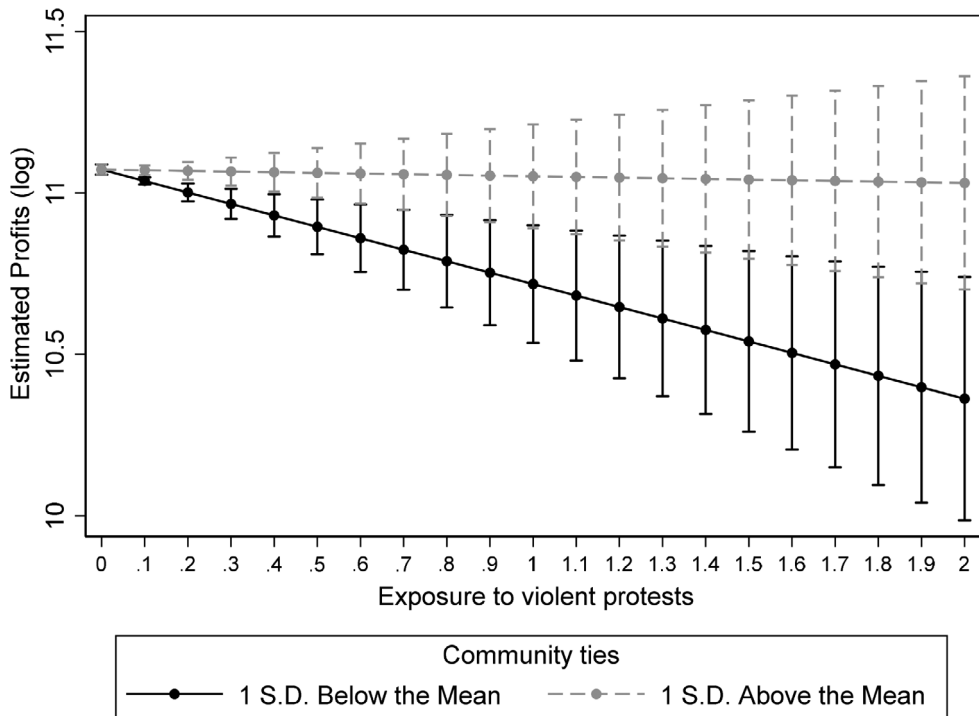


FIGURE 4 The effect of community ties on performance during exposure to violent protests

local community ties and exposure to violent protests is positive and statistically significant, showing that entrepreneurs who had been more engaged in their local communities experienced a smaller decrease in profits from the violence. In particular, a one-unit increase in community engagement decreases the negative effect of violent protests by approximately 5 percentage points. A one-unit increase in local community ties represents an increase in entrepreneurs' attendance at additional civic associations by one meeting per month during the baseline period. Figure 4 plots predicted profits at different levels of violence for entrepreneurs with community ties one standard deviation above and one standard deviation below the mean. This figure shows that entrepreneurs who participated in approximately three civic association meetings per month—one standard deviation above the mean—experienced nearly no losses from exposure to violence.

Model 4 in Table 3 introduces non-colocated advice relationships, which also moderate the main effect of exposure to violent protests. The coefficient for the interaction between entrepreneurs' non-colocated advice relationships and exposure to violent protests is positive and statistically significant, suggesting that the negative effect of violent protests decreases with the number of non-colocated advice relationships that entrepreneurs possess. According to the regression results, each additional non-colocated advice tie decreases the loss in profits from violent protests by approximately 14 percentage points. Figure 5 plots the predicted profits from this model for entrepreneurs with non-colocated advice relationships that are one standard deviation above and one standard deviation below the mean. Entrepreneurs with two non-colocated advice relationships—one standard deviation above the mean—experienced few profit losses from violence.

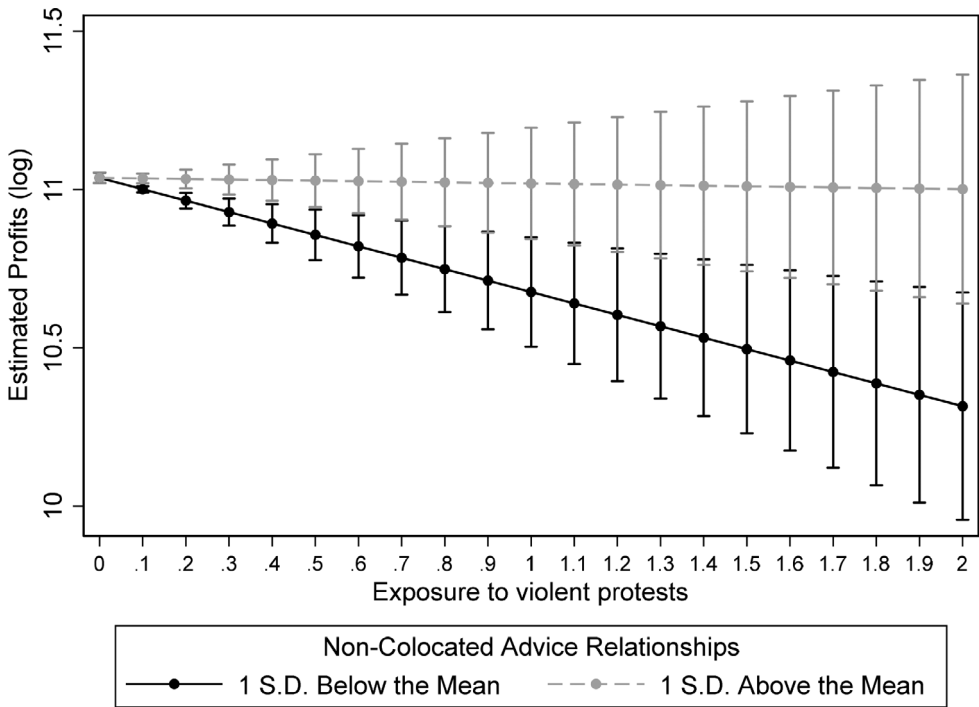


FIGURE 5 The effect of non-located advice relationships on performance during violent protests

Model 5 of Table 3 includes the interaction between colocated advice relationships and exposure to violent protests. Colocated advice relationships are advice relationships that entrepreneurs reported in the baseline period with individuals located in their neighborhood. The coefficient estimate for the interaction term is negative and statistically significant, which indicates that the negative effect of exposure to violence increases as entrepreneurs' colocated advice relationships increase. According to the results in Table 3, an additional colocated advice relationship increases profit losses by an additional 17 percentage points. This effect is represented graphically in Figure 6, which plots predicted log profits over different levels of exposure to violence for entrepreneurs with colocated advice relationships that are one standard deviation above and one standard deviation below the mean. The solid black line corresponds to predicted profits for entrepreneurs with one standard deviation below the mean colocated advice relationships, which corresponds to having no colocated advice relationships. On average, these entrepreneurs experienced a 15% decrease in profits from being directly proximate to each violent event. The gray dashed line in Figure 6 represents the predicted profits for entrepreneurs with colocated relationships one standard deviation above the mean, which amounts to two colocated advice relationships. Having two colocated advice relationships was associated with profit losses, on average, of about 49%. The regression results from Table 3 and their graphical representation in Figure 6 provides support for Hypothesis 4, according to which entrepreneurs with more colocated advice relationships experienced larger decreases in profits from violent protests.

Finally, Model 7 includes entrepreneur-level controls and shows that the coefficient for exposure to violence, as well as the coefficients for the interaction terms, remain statistically significant and substantively unchanged. In particular, the estimated effects of the control

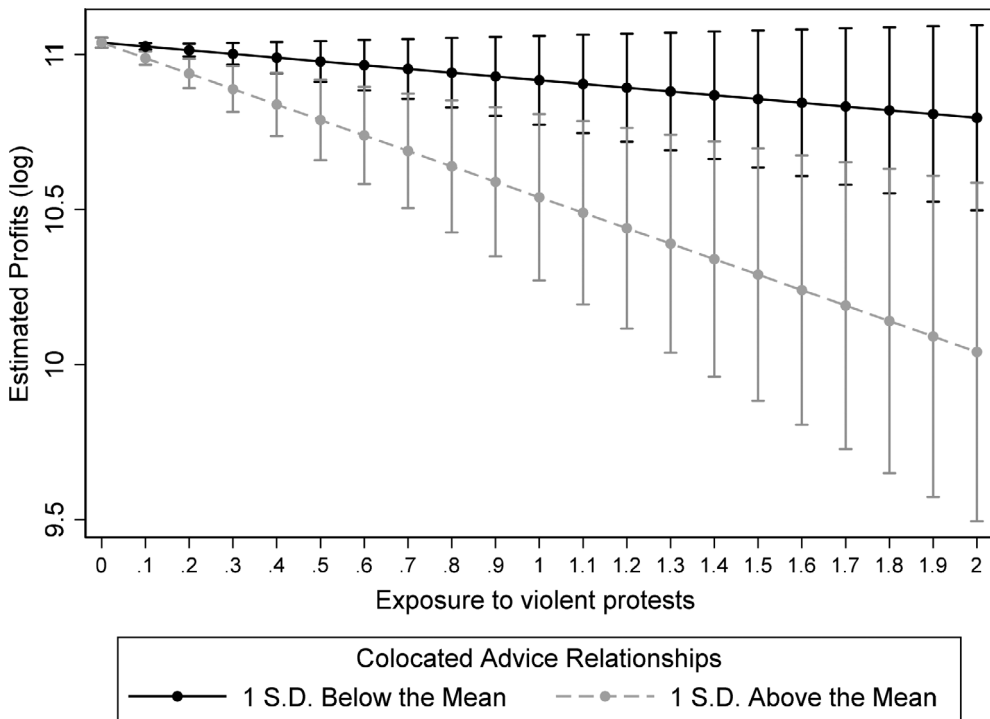


FIGURE 6 The effect of colocated advice relationships on performance during violent protests

variables are consistent with prior research on entrepreneurs in developing countries. Better management practices are associated with higher profits, which aligns with research on management practices (McKenzie & Woodruff, 2018). Also, formal registration status is slightly positively associated with profits, which aligns with research on formality and profits (McKenzie & Sakho, 2010). Local competitors decrease business performance, although this coefficient is not statistically significant.

Additional regressions in Appendix A10 show that these results are robust to different constructions of the control group. Results from Table 3 remain substantively the same when defining the control group as entrepreneurs exposed to peaceful protests, entrepreneurs operating just outside the radius of the violence, and entrepreneurs operating far from the radius of the violence. These alternative control groups help rule out concerns that the exposed and unexposed entrepreneurs operated in different environments that were not comparable.

6 | EXPLORATORY ANALYSES OF MECHANISMS

The theory described three potential ways that violent protests can reduce entrepreneurs' profits: material damages, forced closures, and stigmatization of entrepreneurs' business location. Exploratory analyses and qualitative data suggest that forced closures were a driver of entrepreneurs' losses. Regressions of entrepreneurs' self-reported lost workdays from protests on exposure to violent protests, Models 1 and 2 in Table 4, show that exposure was associated with losing three additional days of work on average. Moreover, if forced shutdowns were an important cause of losses we might expect that entrepreneurs for whom restarting operations is

more expensive and time-consuming, such as those in manufacturing, would suffer more. Models 3 and 4 in Table 4 show that the interaction term between exposure and manufacturing is positive and statistically significant, suggesting that entrepreneurs in manufacturing were more severely impacted by violent protests.

In contrast, there is less evidence that material damages drove losses. For example, entrepreneurs with storefronts, who might have been particularly vulnerable to physical damages, did not seem to suffer significantly more losses. There was also little evidence that entrepreneurs' expenses increased with exposure to violent protests, which we would expect if the violence caused damages (see Table A12.1 in Appendix A12). Similarly, evidence of stigmatization was limited. The effects of protests tended to become statistically non-significant after 4 months (see Appendix A9). Moreover, entrepreneurs whose services were mobile, such as owners of plumbing companies or IT services, who might have been less vulnerable to stigmatization did not perform better (see Table A12.3 in Appendix A12).

These analyses of possible mechanisms are exploratory and offer only indirect tests, which means that they do not conclusively rule out physical damages or stigmatization as possible mechanisms. However, they do provide suggestive evidence that forced closures were likely an

TABLE 4 The effect of violent protests on workdays lost and the moderating effect of manufacturing on profits

	Workdays lost		Profits (log)	
	(1)	(2)	(3)	(4)
Exposure to violent protests	0.460 (0.126)	0.479 (0.140)	-0.202 (0.074)	-0.186 (0.075)
Exposure to violent protests × manufacturing			-0.666 (0.265)	-0.677 (0.240)
Full-time employees		-0.038 (0.058)		-0.053 (0.036)
Management practices score		-0.528 (0.588)		0.659 (0.275)
Loans (log)		0.580 (0.464)		-0.000 (0.000)
Formal		0.426 (0.233)		0.077 (0.123)
Number of local competitors		0.030 (0.009)		-0.012 (0.015)
Observations	260	260	977	977
Number of firms	260	260	381	381
Survey wave FE	No	No	Yes	Yes
Entrepreneur FE	No	No	Yes	Yes

Note: Robust standard errors clustered at the entrepreneur level in parentheses. All models use CEM sample. Models 1 and 2 are estimated using a Poisson regression, while Models 3 and 4 are estimated using OLS. The sample size in Models 1 and 2 is 260 because workdays lost was only measured in the third survey wave. FE, fixed effects.

important factor in entrepreneurs' losses. These analyses along with qualitative data are presented in detail in Appendix A12.

With regard to mechanisms explaining the social capital effects, community ties may increase resilience because community members warn, protect, or help entrepreneurs rebuild. All these factors appeared in entrepreneurs' qualitative accounts. Also, exploratory mediation analyses suggest that receiving favors from neighbors partially mediates the effect of community ties (see Table A13.1 in Appendix A13). Furthermore, non-colocated advisers may increase resilience because they have the capacity and motivation to help. Supplementary analyses suggest that these ties were likelier to be called upon by entrepreneurs, providing some evidence that they may have been more available to help (see Table A13.1 in Appendix A13). Quotes from entrepreneurs also indicate that they were a source of advice. In contrast, references to colocated advisors during interviews suggest that they were a source of requests for financial assistance, which aligns with theoretical expectations (see Appendix A13 for qualitative data).

7 | CONCLUSION

Results from this study show that during local disruptive events the capacity of entrepreneurs' social relationships to help or hurt them depends on the kind of relationship they represent and their exposure to the shock. On the one hand, advisers who are not exposed will likely be supportive and increase entrepreneurs' resilience. On the other hand, among ties exposed to the violence, ties to local communities increase resilience, while ties to co-located advisers decrease resilience.

These findings contribute to three areas in strategy research. First, research in strategy has explored many of the factors that enable firms and entrepreneurs to be resilient in the face of disruptive events (Levinthal & March, 1981; Meyer, 1982; Weick & Sutcliffe, 2011; Williams et al., 2017). Despite significant advances in this literature, research has largely overlooked the role of social capital. This study addresses this gap by showing that entrepreneurs' resilience also depends on their relationships. Entrepreneurs' ties will affect their resilience depending on whether they are at the community or individual level and whether they have been exposed to the shock or not.

The second area of research that this study contributes to is entrepreneur social capital. A large literature has explored the various ways that social capital can affect entrepreneur performance (Adler & Kwon, 2002; Baum et al., 2000; Renzulli et al., 2000; Stuart & Sorenson, 2007). Yet, the majority of this research has studied the effects of social capital during stable times. This study shows that to understand the effect of social capital during disruptions we need to take into account the kinds of relationships that make up entrepreneurs' social capital and whether they were exposed to the disruption. An important implication of these results is that the effects of social relationships change as the environment in which they are embedded changes.

This study also contributes to research on violent conflicts and entrepreneurship (Dai et al., 2017; Hiatt & Sine, 2014). Despite their prevalence globally, we know relatively little about how violent protests disrupt businesses. This study shows that proximity to violent protests causes significant losses in profits. Supplementary analyses also explore the effect of peaceful protests on entrepreneurs and find no statistically significant evidence that they decrease entrepreneurs' profits (see Appendix A14 for results). Moreover, this study uses a novel

micro-geographic methodology that allows for a precise estimation of the performance effects of violent protests.

This study's results have several implications for entrepreneurs and public policy makers. Engaging in community activities and building non-local advice relationships can be costly in terms of the time and effort (Hansen, Podolny, & Pfeffer, 2001). Hence, entrepreneurs for whom these costs are relatively low may benefit from evaluating whether they have sufficiently invested in their community ties and non-colocated relationships, and whether they may have over-invested in colocated ties. Doing so may put them in a better position when localized disruptions, such as violent protests, occur. For those entrepreneurs who face barriers to forming non-local advice relationships and engaging in their local communities, such as members of ethnic minorities or women entrepreneurs, it may be valuable for public policy makers to consider interventions that connect those entrepreneurs with local civic associations or facilitate networking with entrepreneurs from disparate locations. Results from this study suggest that such interventions may help reduce inequality in the ability of entrepreneurs to build social capital that makes them resilient.

There are important limitations with this study. First, it is set in a single institutional context, which happens to be a developing economy. Although exposure to violent protests is likely to have negative effects on entrepreneurs in most contexts, it is unclear what the magnitude of those effects would be in other settings. The violence could take on different forms and the institutional infrastructure to support entrepreneurs may differ. Future research will have to explore the extent to which entrepreneurs in other institutional environments are affected by violent protests and to what extent social capital is a source of resilience for them.

This study has drawn conclusions about entrepreneur resilience from a single type of disruptive event—violent protests—the effects of which are localized. This may limit the extent to which conclusions from this study generalize to other types of shocks that are less local and more diffuse, such as economic recessions or pandemics. Future research should explore shocks whose effects are not localized, such as the COVID-19 pandemic, and how social capital shapes entrepreneurs' resilience in those cases.

Furthermore, although this study found no evidence that family relationships and government ties contribute to resilience, this does not preclude them from being important in other contexts (Luo & Chung, 2005; Marquis & Raynard, 2015). Supplementary analyses find no evidence that ties to government officials or family members contributed to entrepreneurs' resilience in this setting (see Appendix A15). These ties, however, may matter in different kinds of conflicts and in different political settings.

Beyond social capital, future research should also explore other factors that contribute to entrepreneurs' resilience, such as entrepreneurs' psychological traits (Ayala & Manzano, 2014; Chadwick & Raver, 2020). Recent research on entrepreneurs in Togo suggests that self-starting behavior and initiative-taking can increase business performance even more than traditional business skills (Campos et al., 2017). It is possible that such behaviors are particularly valuable during disruptive events.

Violent protests and similar disruptive shocks are common and overwhelmingly negative for entrepreneurs, which is why understanding resilience has been a central concern in strategy research (Thompson, 1967). This study advances our understanding of entrepreneurs' resilience to include social capital and reveals that entrepreneurs' ability to respond to crises depends on the kinds of relationships they have and how those relationships are exposed to the shock.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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