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Finding the Right Security Sector Strategy:  
The Goldilocks Problem in Post-Conflict States

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An abstract of  
A dissertation submitted to the Faculty of the  
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## Abstract

### Finding the Right Security Sector Strategy: The Goldilocks Problem in Post-Conflict States By Sabrina Karim

For over a decade, researchers have been studying how to achieve peace after a civil war. One of the key insights in this literature is that creating functional and effective domestic institutions, such as a reformed security sector, is important for long-term stability. This dissertation builds from this foundation and investigates how institutional reforms in the security sector can achieve “quality” peace by restoring the social contract between citizens and the state. It does so by developing a novel way to categorize security sector reforms along two dimensions—capacity and constraint. It then develops the conditions under which reforms might lead to enhanced legitimacy, specifically suggesting that capacity-increasing and constraint-increasing reforms will be most effective in restoring the social contract, as these help overcome potential “effectiveness-restraint tradeoffs.” It then develops the conditions under which states adopt reforms that increase their legitimacy. The dissertation explores these mechanisms using a field experiment in Liberia, which randomized police patrols to gauge civilians’ perceptions of and support for security sector reforms, and through macro-level, original data collected on security sector reform in conflict and post-conflict countries from 1989-2012. The micro-level findings show that reforms that professionalize the police and that increase women’s representation in the police force, to varying degrees, help enhance perceptions of effectiveness and restraint. The macro-level results show that peacekeeping missions help states adopt capacity and constraint-increasing reforms. The overall results imply that security sector reforms can be a valuable state building tool to help conflict-ridden countries restore legitimacy and achieve “quality peace.”

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# Chapter 1

## Quality Peace, The Social Contract, and Security Sector Reform

### 1.1 Introduction

How can post-conflict states ensure the long-term security in life and dignity of their citizens? This is a fundamental question among scholars and policymakers, as globally, many post-conflict states fail to provide security, governance, and other public goods to their citizens. As Secretary of State, Hillary Clinton repeatedly stated that chaos flows from failed states, and that such states serve as breeding grounds for the worst abuses of human beings and for terrorists. According to Lake (2016), the single most important locus of threat to the United States, its global interests, and its international partners, are ungoverned spaces or states that are not consolidated,

and Fukuyama (2011, 2014) has stated that since the Cold War, weak or failing states are the single-most significant threat to world order. These states could create transnational threats including the spillover of violence across borders (Call and Cousens 2008, Holsti and Holsti 1996), become safe havens for illicit, criminal, and/or terrorist activity (Ghani and Lockhart 2009), facilitate the accidental or purposeful transfer of weapons of mass destruction (WMD), and cause global fluctuation in the price for oil, causing energy insecurity (Patrick 2011). Additionally, failed or weak states have a difficult time handling humanitarian crises, from natural disasters to famine, to disease (Patrick 2011). The 2014 Ebola epidemic in Guinea, Sierra Leone, and Liberia provides a case in point. With an increasingly globalized world, the need to prevent such transnational threats has become an international priority (Duffield 2001).

Recent civil wars and subsequent state failures in places such as Iraq, Afghanistan, Syria, South Sudan, and the Central African Republic, among others, demonstrate that peace is often elusive, not only because these states have repeatedly returned to conflict, but also because they have failed to regain, or in some cases gain for the first time, the loyalty of their citizens. Even in places where violence has ceased and a supposed peace has ensued, such as Liberia, Haiti, El Salvador, and others, “quality peace” may still be intangible as governments do not function, citizens lack public services, and the public is under constant threat of violence. The social contract, whereby society receives some public goods in exchange for loyalty, is fundamentally broken. Long-term stability and order depend on the functioning of this social contract. Most of the focus on restoring the social contract has focused on political

solutions,<sup>1</sup> but in order to fully restore the social contract, institutional reforms associated with the *security sector* are also important as they are what fundamentally create the social contract in the first place (Lake 2016).

The process of fully restoring the social contract may take decades, but sowing the seeds for restoration starts immediately after the conflict ends. In the short-to-medium term, the goal for post-conflict states is to mitigate conflict recurrence, the subject of much of the conflict literature to date. In the longer term, the objective for post-conflict states is to obtain legitimacy or support from the civilians that live within the borders of their territory. These goals are not necessarily competing, but the mechanisms that predict each outcome differ. With respect to peace duration and conflict recurrence, the literature has mostly focused on the bargaining model of war, particularly resolving the commitment problem. With respect to long-term support for the state—legitimacy—the literature has largely focused on the provision of public goods.

Security sector reform or changes made to the security sector—police, military, para-military groups, defense/interior security ministries/departments—are key to both conflict mitigation and longer-term legitimacy. However, the focus of this dissertation is on understanding the conditions under which security sector reform contributes to the long-term security in life and dignity of citizens in post-conflict states. Specifically, this manuscript seeks to understand the conditions under which security sector reforms are important for restoring the social contract, a pre-requisite for ensuring the long-term security in life and dignity of citizens. But not all security

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<sup>1</sup>See, for example, Call (2012).

sector reforms help achieve this goal. In order to assess which reforms are better suited to confer legitimacy, the manuscript first creates a conceptual framework for categorizing security sector reforms along two dimensions: capacity and constraint. Reforms that increase the security sector's capacity increase the security sector's resources and efficiency in using those resources. Reforms that increase the security sector's constraints mitigate the principal-agent and the credible commitment problems. Reforms or some combination of reforms that fall under both categories may increase the security sector's effectiveness in thwarting the aggression of insurgents, rebels, criminals, and terrorists (non-state actors) and could restrain the state and its security sector from engaging in violence against its own citizens. Reforms that increase one dimension and decrease the other or that decrease both may not be as beneficial to reducing overall violence.

These potential outcomes have real consequences for legitimacy, as citizen's perceptions about security sector reform could mimic outcomes. If citizens perceive the security sector as both effective and restrained, then they may confer legitimacy on the state's security sector. Capacity-increasing and constraint-increasing reforms are most likely to influence perceptions in this way, as capacity-increasing reforms could enhance citizens' perceptions of security sector effectiveness and constraint-increasing reforms could influence citizens' perceptions of security sector restraint. Reforms that increase one dimension may mitigate fears of violence by either non-state actors or the state, while exacerbating fears along the other dimension. For example, if a state implements a reform that increases constraints but decreases capacity, citizens could perceive the security sector as restrained, but ineffective. Similarly, if a state imple-



ments a capacity-increasing but constraint-decreasing reform, civilians may perceive the security sector as effective, but abusive. Choosing the “right reforms” entails implementing reforms that enhance perceptions of both effectiveness and restraint. While it is possible to offset the negative consequences of reforms in one dimension with reforms in another, post-conflict states often face the unique problem of having minimal resources to implement multiple reforms. Thus, they may sometimes choose the “wrong” reforms that don’t necessarily lead to positive perceptions of the security forces.

This dissertation tests the relationship between citizens’ exposure to security sector reforms and perceptions and support for the state in post-conflict Liberia, as well as cross-nationally. Liberia presents an ideal case in which to test some of the implications from the theoretical framework because it is a post-conflict state and has at various times teetered on the verge of failure (Brender 2013, Ciment 2013). Moreover, the UN Mission in Liberia (UNMIL), as well as the Government of Liberia, have made security sector reform a priority (Friedman and MacAulay 2011). This means that there is ample opportunity to assess public perceptions and support for the state’s security forces in the country. The Liberian case is not unlike other post-conflict states, as the implementation of various reforms in the post-conflict period is a common theme among weak post-conflict states (Anderlini and Conaway 2004*b*, Toft 2010). Thus, if there is a relationship between some security sector reforms and positive perceptions of and support for the state, it is possible the results could generalize to other post-conflict states.

In order to explore the link between different security sector reforms and percep-

tions of effectiveness and restraint and support for the state, two field experiments were carried out to test the impact of two different reforms—professionalization and female ratio balancing reforms. Professionalization captures elements of both capacity and constraint, and thus constitutes the “right” type of reform, whereas female ratio balance is more ambiguous with regards to its theoretical placement, and could either enhance perceptions or contribute to a perceptual tradeoff.

Professionalized police officers visited randomly selected households in Grand Kru County, one of Liberia’s most remote counties, and spoke to residents for about 20-30 minutes. These households, as well as households that did not receive visits, were then surveyed. The surveys found evidence that members of households visited by police officers were more likely to perceive the police as restrained and effective, thereby providing some support for the idea that professionalization reforms could lead to enhanced perceptions of both effectiveness and restraint.

Female ratio balancing could be considered constraint-increasing but is more of an ambiguous reform with respect to whether it is capacity-increasing or decreasing. As such, it could contribute to an “effectiveness-restraint” tradeoff, whereby it enhances perceptions of restraint but not effectiveness. To assess the impact of female ratio balancing reforms, female and male professionalized police officers were randomly assigned to visit different households. Surveys then compared perceptions of those that were visited by male and female officers. The results demonstrate that female police officers are more effective but perhaps also less effective, depending on the task at hand. Among citizens, female police officers were perceived as less effective in providing protection than their male counterparts, but were perceived as effective

and restrained compared to households that did not receive any visits. Moreover, while they were not perceived as more restrained in using violence against citizens than male police officers, they were perceived as less corrupt and more likable than male police officers. This means that female ratio balancing reforms do lead to some positive perceptual outcomes, but also some perceptual tradeoffs. Consequently, enhancing perceptions of the police force may be best done when both male and female police officers are included in the police force.

If, as demonstrated by professionalization and female ratio balancing, certain reforms yield better perceptual outcomes than others, then it would make sense for all weak, post-conflict states to adopt these reforms. Yet, we see variation in the types of reforms that states adopt. This manuscript utilizes macro-level data, through a novel, original dataset on security sector reforms, to explore the conditions under which states adopt the “right” reforms. It finds that peacekeeping presence, and to a lesser extent democratic regimes, help ensure that states adopt capacity and constraint-increasing reforms.

When it comes to restoring the social contract, security sector reform plays an important role. This dissertation shows that capacity-increasing and constraint-increasing reforms may be best suited to enhance perceptions of the state. These reforms are more likely to be adopted with United Nations peacekeeping presence. This suggests that peacekeeping missions could contribute to “quality” peace in addition to actual peace. With third party involvement, states may make better decisions about the reforms that help improve the image of the state’s security forces. For example, some states, particularly ones that are non-democratic, may be less likely to

implement constraint-increasing reforms because such reforms “tie the state’s hands” from using force, but if third parties are actively involved in the process of state building, these states are more likely to adopt such reforms. With third party help, weak post-conflict states may be better situated to adopt the “right” set of reforms.

### **1.1.1 Contribution**

This manuscript makes five main contributions, three theoretical and two empirical. First, the dissertation makes an important contribution by creating a framework for conceptualizing security sector reform. To date, security sector reforms have been conceptualized narrowly in the literature, and there has been no theoretical way to categorize the myriad changes states make to their security sectors into different categories. This dissertation develops a novel categorization scheme along two dimensions that provides concrete criteria for sorting different changes states make to their security sectors into different categories. This is an important improvement in the way that security sector reform has been studied, because to date, there has been no categorization of reforms based on any criteria. The disaggregation helps develop better theoretical mechanisms through which security sector reforms might affect different outcomes, including legitimacy.

Second, the manuscript focuses on connecting security sector reform to legitimacy rather than to a “negative” peace. Most of the literature on internal conflict focuses on preventing conflict recurrence, and there is very little attention on how the policies states implement to prevent conflict affect citizens’ perceptions of and support for

the state. Instead of focusing on actual outcomes, this dissertation moves beyond existing studies of civil conflict and seeks to understand how reforms related to the security sector affect citizens' perceptions of and support for the state. In doing so, the manuscript provides insight into how states can gain not only stability and order, but also long-term security in the life and dignity of their citizens.

Third, the manuscript places an emphasis on the role of women and gender equality in post-conflict countries in ways that most research on security often dismisses. Most existing studies on civil war recurrence and on peace do not include analysis on the role of women in the security sector. This dissertation includes an entire chapter on the impact of reforms that increase women's representation in the security sector. In addition to considering women's representation in the police force as a type of security sector reform, two chapters assess the effect of the reforms on citizens' value for gender equality. Given that the outcome of interest is "long-term security and dignity of life," such analysis again moves beyond traditional understandings of a "negative peace" to improved quality of life, including for women. Moreover, the dissertation considers gendered violence by incorporating estimates of conflict fatalities and rape in the cross-national analysis. Most studies use fatalities, which undercounts violence experienced by women (Cohen and Nordås 2014). By incorporating "gendered" analysis, this manuscript provides a blueprint for how other studies can "gender mainstream" their research so that analysis of important phenomena does not exclude the role and the experiences of women.

With respect to empirical analysis, the dissertation makes two major contributions. At the micro level, the manuscript uses a randomized controlled trial, widely

considered to be the “gold standard” when it comes to program evaluation (Gerber and Green 2012). The approach allows for more accurate testing of the impact of reforms, because it involves randomization of individuals that receive the “treatment” or exposure to the reform. Randomization of treatment assignment minimizes biases in the statistical analysis thereby improving the internal validity of studies (Gerber and Green 2012).<sup>2</sup> Moreover, to the author’s knowledge, there are no other studies on security sector reform in post-conflict countries that utilize an experimental approach.<sup>3</sup> Thus, this study is the first of its kind to use a randomized controlled trial to understand the effects of security sector reform in a post-conflict country.

At the macro level, the dissertation makes a major contribution by providing a new, original dataset on security sector reform. The Security Sector Reform dataset includes countries from the UCDP/PRIO conflict dataset for the years 1989-2012. It codes various security sector reforms that have been implemented including new operational units, disarmament, demobilization, and reintegration (DDR) programs, civilian oversight bodies, female ratio balancing, and training academies, among others. The data provide much-needed information on changes states make to their security sectors and can be used in the future to explore themes related to state capacity and conflict.

Drawing on background literature on state formation and consolidation, legitimacy, state power, and institutions, the rest of this chapter explores the connection

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<sup>2</sup>See also Karim, Sabrina. “Using Experimental Methods in Post-Conflict Countries to Understand the Effects of Gender Reforms in the Liberian National Police” in *Researching Non-State Actors in International Security*, edited by Andreas Kruck and Andrea Schneiker, forthcoming at Routledge.

<sup>3</sup>The only other possible study is one that involves the author as well.

between between security sector reform and legitimacy. The chapter is broken into three parts. The first part highlights how a research agenda on “quality peace” should include a discussion on restoring the social contract in states. The second part focuses on different elements of the social contract, such as state power and institutions to check state power, as well as the limitations of each element. The final part connects the social contract to legitimacy and demonstrates how security sector reform plays an important role in restoring the social contract.

## **1.2 Quality Peace and Restoring the Social Contract**

Almost all of the literature on civil war in recent decades has focused on ending violence, whether mitigating civilian casualties, conflict duration, peace duration, conflict outcomes, or conflict recurrence. Notably, this body of literature has found that when the commitment problem in the bargaining model of war is resolved either through third party enforcement, power-sharing, or victory by one side, peace is more likely (Hartzell and Hoddie 2007, Quinn, Mason and Gurses 2007, Toft 2010, Walter 2002). In this sense, the focus of peace has been on “negative peace.”

Recently, however, scholars have argued that the literature must move beyond negative peace and instead strive to understand how to achieve “[quality] peace.”<sup>4</sup> Wallensteen (2015) proposes a move toward studying “quality peace,” or the “creation of post-war conditions that make the inhabitants of a society secure in life and dignity

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<sup>4</sup>See, for example, Regan (2014).

now and for the foreseeable future.”<sup>5</sup> Perhaps most obviously, this means addressing the underlying causes of conflict in the first place such as economic and political disparities. As Lake (2016) articulates, “state building is not just a matter of getting the institutions ‘right,’ but is a process of social transformation that, to be successful, must realign the internal cleavages that caused the state to fail in the first place.”<sup>6</sup> The focus, in other words, is on addressing “root causes” of state failure.

When “quality peace” is achieved, conflict and state failure is less likely (Call 2008, Call and Cousens 2008, Ghani and Lockhart 2009, Holsti and Holsti 1996, Wallensteen 2015). A failed state is one that is unsuccessful in providing security and other public goods—there is no public order, the leadership or governance commands no authority or loyalty, and a variety of groups such as gangs, warlords, and factions fight for power (Holsti and Holsti 1996). These states are often plagued by perpetual violence. Call (2008) argues states that have a sustainable mechanism for security and conflict resolution are more legitimate, and that when states function to provide public goods, they reduce the incentive for citizens to seek goods outside of established channels or through violence. When states fail to provide these goods (failed or weak states), they do not create post-war conditions that make the inhabitants of a society secure in life and dignity.

Following in the footsteps of Wallensteen (2015), this manuscript argues that a restoration of the social contract is necessary for both peace in the negative sense and also “quality peace.” The social contract is the contract between society and the

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<sup>5</sup>See pg. 6.

<sup>6</sup>See pg. 8.



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state—society receives public goods in exchange for loyalty. Violence within a state (intra-state conflict) constitutes a breach in the social contract between civilians and the state. One actor has failed to provide its end of the bargain—either the state has not provided services or citizens are non-compliant. If the state failed to provide services, citizens have several options: they could remain loyal, they could exit the state and move to a different one, or they could protest (Hirschman 1970). The latter option sometimes involves violence to achieve demands (Collier and Hoeffler 2004, Gurr 1970). If civilians fail to comply with the rules and regulations of the state, the state may repress the population (Ritter 2014). In response, citizens may again remain loyal, they may exit the state and move to a different one, or they may protest (Hirschman 1970). These scenarios have become a common feature of the modern state system, with many civil wars taking place in a post-Westphalia world.<sup>7</sup> Restoring the social contract thus is the first step toward restoring the status quo to one of “security in life and dignity.”

A study on “quality peace” looks at outcomes related to violence but also moves toward looking at how public goods or the implementation of certain reforms intended to restore the social contract affect the state’s legitimacy. In order to restore the social contract, the focus on post-war reconstruction or state building should be based on the steps states take to restore confidence in their ability to provide public goods. If citizens once again regain confidence in the state’s ability to provide public goods, then the state may regain its *legitimacy*. In this sense, understanding whether reforms elicit legitimacy may be just as important as assessing whether reforms affect actual

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<sup>7</sup>For descriptive data on civil wars from 1946 onward, see Themnér and Wallensteen (2012).

outcomes related to violence.

While the state has a myriad reform options (political, economic, social reforms, etc.), when it comes to taking measures to restore the social contract, reforms related to the security sector may take priority, because the fundamental social contract is based on security as a public good.<sup>8</sup> Trends in state building reflect the prioritization of security over other areas of state building.<sup>9</sup> We return to the importance of security as a prime concern for restoring the social contract below.

### 1.3 The Social Contract and State Power

Social contract theorists advocate a quid pro quo between states and their citizens. This theory assumes that the world is anarchic, and that in this anarchic world, groups band together for protection. This “organization” around the need for security formulates the basis for states. As Boix (2015) notes “states comes to life when those individuals with the incentives and power to loot others, and to whom part of the specialized literature refers as ‘bandits,’ prefer to enforce a peaceful order and to protect a given community permanently—in exchange for some stable transfer

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<sup>8</sup>Security is non-rivalrous and non-excludable.

<sup>9</sup>Most state building initiatives invest heavily in rebuilding the security sector. The United States spends millions of dollars on programs to train national police and militaries of different countries but has not invested the same resources in training doctors and teachers. The 2006 U.S. National Security Strategy stated that the goal of U.S. statecraft is “to help create a world of democratic, well-governed states that can meet the needs of their citizens and conduct themselves responsibly in the international system,” and that one of the first steps to achieve this is security sector reform. European state building follows a similar trend. In Mali, the EU mission has focused almost all of its resources on rebuilding and retraining the national military. The EUCAP Sahel Mali and EUTM-Mali focus on “restoration of security and lasting peace” and “ensure constitutional and democratic order” through the “training of the three internal security forces in Mali, i.e. the police, Gendarmerie and Garde nationale,” and also the military.

of resources from the latter to themselves—over plundering it.”<sup>10</sup> Protection from “bandits” is only possible when a group controls the means to use violence.<sup>11</sup> It is a service provided by the group in exchange for allegiance and compliance to the group (Locke 1689). In more banal terms, a state becomes a state when it has a “monopoly over the legitimate use of force” over a given territory (Weber, Lassman and Speirs 1994). As such, Lake (2016) defines statebuilding as “a process of consolidating the monopoly of legitimate force in all corners of a country’s territorially-defined realm,” and “a successful state is one that can sustain this monopoly against potential challengers.”<sup>12</sup> When groups control the means to use force, they are able to protect the population from outside threats and from rule-breakers within the group. In this sense, the first and perhaps most basic service “the state” provides is that of security. The social contract may extend to other service provision as well, such as infrastructure healthcare, and food—the state provides “x” services in exchange for resources, taxes and more generally loyalty, but security is one of the more primordial needs of the masses.

The social contract enables state formation, while other factors related to the security sector help strengthen the states’ rule. Scholars have, for example, argued that warmaking itself contributes to state consolidation.<sup>13</sup> As groups fight wars, they develop strong internal capacity, which reifies modern statehood. To use another

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<sup>10</sup>See pg. 4.

<sup>11</sup> Boix (2015) critiques institutionalists for not having a theory for institutional change nor an explanation for a plurality of governance structures. Instead he argues that technological innovation is a precursor for institutional formation and development.

<sup>12</sup>See pg. 14.

<sup>13</sup>See Boege et al. (2008) for a critique of this position, mainly, that it can only be applied to Western Europe.

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aphorism, Tilly and Ardant (1975) famously claimed that “war made the state, and the state made war,” implying that the very basis of state consolidation relies on the state’s ability to use coercive force effectively. Preparation for war creates the internal structures for states, specifically processes of extraction, protection, production, and distribution (Tilly and Ardant 1975). Giddens (1987) concurs, stating “it was war and preparation for war that provided the most potent energizing stimulus for the concentration of administrative resources and fiscal reorganization of early modern states.”<sup>14</sup> Furthermore, Besley and Persson (2009) and Gennaioli and Voth (2015) find that state capacity evolved historically over centuries in response to the exigencies of war. Thus, whereas social contract theory explains state formation as a *quid pro quo*, the warmaking theory focuses on building state capacity through the exercise of war. Both theories imply that the state’s coercive force is important for consolidation.

Historically, states that have faltered in holding a comparative advantage in the use of force have failed.<sup>15</sup> Herbst (2004, 2014) notes, for example, that state consolidation has been particularly difficult in some parts of Africa due to a lack of resources for coercive state power. Herbst (2004) starts with the basic premise that states are only viable if they are able to control their territory, which is only possible with military or police forces. A state is unable to keep territory unless it has coercive force, and weak military and police forces lead to less control over territory. Differences in the amount of territory controlled by the state create disparities in the level of state consolidation—strong, weak, fragile, or collapsed states. Thus, state consolidation

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<sup>14</sup>See pg. 112.

<sup>15</sup> McNeill (2013) uses the same idea, but applies it to a need for states to advance their military technology.

may vary based on the strength of the security sector. In sum, in order for the social contract to work, the state must be able to provide security to its people.

### 1.3.1 The Limits of State Power

But how much coercive power does a state need? The social contract suggests that as long as the state provides security, citizens should be compliant. One possibility is that this relationship is monotonic—the more power the state has, the more stable it is. At a first glance, there does appear to be a link between state power and stability. Scholars have found that larger militaries are associated with the lower likelihood of civil war onset (Mason and Fett 1996),<sup>16</sup> shorter duration (Balch-Lindsay and Enterline 2000),<sup>17</sup> and higher likelihood of termination (Karl, Sobek et al. 2004).<sup>18</sup> Additionally, scholars have found that stronger states are better able to “buy off” potential rebels through spending on public goods (Fjelde and De Soysa 2009),<sup>19</sup> prevent civil wars in neighboring states from spilling over their borders (Braithwaite 2010),<sup>20</sup> or “forestall irregular leadership changes that create opportunities for insurgents to mount a violent challenge (Gleditsch and Ruggeri 2010).”<sup>21</sup> Fearon and

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<sup>16</sup>They use the Correlates of War (COW) data for the size of the military’s army.

<sup>17</sup>They measure military capacity by dividing the size of the pre-war regular armed forces in thousands by the pre-war total population in thousands of the civil war state using the Correlates of War (COW) data.

<sup>18</sup>They also use COW data for the size of the military’s army, but also Polity and the State Failure Task Force Data

<sup>19</sup>State power is measured using the Relative Political Capacity (RPC), which is a fiscal measure that assesses the government’s efficiency at extracting resources from the population, compared with other states with similar resource endowments and level of development, government expenditure/GDP as an indicator of the economic capacity of governments, and Contract Intensive Money (CIM) in society. This is a measure of the enforceability of contracts and the security of property rights.

<sup>20</sup>State power is measured using the Relative Political Capacity (RPC).

<sup>21</sup>State power is measured using GDP.

Laitin (2003) argue that strong states—through their ability to detect and suppress potential rebels—maintain the peace by deterring insurgents from taking up arms. Finally, some scholars find that the threat of intra-state violence is high at very low levels of state capacity (Buhaug, Cederman and Rød 2008, Buhaug, Gates and Lujala 2009, Cunningham, Gleditsch and Salehyan 2009). The general direction of this literature suggests that a state with more power is more stable.

Others, however, find no relationship between state power and lower levels of conflict; that state power may increase violence; or that variation in levels of state power contributes to violence. Walter (2006) finds that military personnel per capita is not associated with peace; and Henderson and Singer (2000) argue that greater military spending increases conflict onset. Others have found support for a “U shape” theory—there is more stability at high and low levels of repression. The “U shape” argument predicts that at high and very low levels of repression, the probability of rebellion decreases, because at high levels, civilians are deterred from rebelling, and at low levels, civilians are content. Scholars find that rebellion is more likely when there is moderate repression and less government capacity for control, organization, and mobilization (Gurr 1988, Gurr and Moore 1997). Micro-level studies that use measures of state power also find support for the “U shape” theory. Using sub-national data that measure the number of serving public personnel per capita for each county in South Sudan, De Juan and Pierskalla (2015) find that “at very low levels of state capacity, little fighting takes place because rebel groups have no opportunity to target state institutions, the value of state resources is low, and inter-communal

conflicts are regulated by local informal institutions.”<sup>22</sup> In contrast, at high levels of state capacity, “pacifying effects are realized, because the government is able to effectively co-opt or coerce groups violating local peace.” They find that the state is unable to effectively enforce the monopoly of violence at intermediate levels of state power. This is because there is the most competition at intermediate levels of state power between formal government institutions and informal actors, as they struggle over access to and distribution of public goods, leading to higher levels of violence.

The relationship between state power and peace remains somewhat ambiguous and is fraught with measurement problems. While some studies find positive relationships between state power and peace, others find that the relationships are more complicated. Moreover, expansion of state power may be endogenous to war, which means these studies may not portray an accurate representation of the causal direction of whether state power leads to peace or vice versa.

Additionally, these studies all use different measures of state power, which means there is no consistent way to measure state power. Some use GDP, Relative Political Capacity (RPC), or Correlates of War measures of military personnel. GDP and RPC do not accurately capture state power because they do not measure the security sector’s capabilities. The Correlates of War measure only captures one aspect of the security sector—the military—and neglects other security sector organizations such as the police, paramilitary forces, and state militias. Other studies rely on measures of state power conceptualized as infrastructural (the bureaucratic reach of a state), or as dyadic to rebel capacity. This latter variable is measured based on rebel capacity and

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<sup>22</sup>See pg. 2.

not the state's capacity, which means that state power remains static—the measure rates rebel powers against a constant state power. As such, none of these studies directly measures the capacity of the state's security forces. If the security sector is the entity that influences levels of violence, then it is only appropriate to use measures of the security sector to explore the relationship between its power and the likelihood of violence. Thus, the degree to which state power helps or hinders the social contract remains inconclusive, but the notion that some form of coercive capacity is necessary for stability remains intact.

### **1.3.2 State Institutions to Check State Power**

Reforms that address state power alone may not be enough to restore the social contract. The previous section argued that the premise for the development of a social contract is an anarchic social order. In this anarchic world, states provide security to citizens from threats. However, one of the most common dilemmas to arise from this arrangement is the credible commitment problem: once civilians give their allegiance to the state, there is no guarantee that the state will not abuse civilians to extract resources from them (North and Weingast 1989). In other words, as states gain coercive capacity, what is to prevent them from using this power to oppress the population? Restraining the state in its use of coercive force to extract resources from the population requires a commitment on the part of the state that it will not abuse its power (North and Weingast 1989). Scholars have long argued that political, social, and economic institutional constraints are important to solve



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this credible commitment problem (North 1990, North and Weingast 1989, North, Wallis and Weingast 2009). For example, James Madison's Federalist Paper 51 (1788) outlines the concept of federalism and separation of powers in order to curb a strong central state. A comprehensive system of checks and balances of this sort ensures that no one organization within the state gains too much control and uses the power to break the social contract (Kalyvas, Shapiro and Masoud 2008).<sup>23</sup>

Institutional constraints are most common in fully established democracies.<sup>24</sup> Institutional constraints in democracies ensure that the state is prohibited from repressing its population. As evidence for this point, human rights violations are much less common in democracies (Bueno de Mesquita et al. 2004, Davenport 1995, 1999, Hofferbert and Cingranelli 1996, Poe and Tate 1994).<sup>25</sup> In liberal, democratic states, institutions encourage the creation of rules and regulations that discourage actors from engaging in repression, thus increasing the probability of a state terminating its use of violence against the population (Conrad and Moore 2010). Bargaining and compromise are embedded in mechanisms of democratic decision-making, which provide a non-coercive way to handle conflict, and disagreements often diffuse before they invite violence (Henderson 1991). Davenport (1999) argues that institutional constraints in democracies make them more accountable to citizens, elites, and groups, which means they are less willing to engage in activities that invite repression, and they are able to prevent minority groups from advancing the use of violence. Political institutions,

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<sup>23</sup>See specifically Chapter 2 by Robert Bates.

<sup>24</sup>For a background on institutional constraints and the social contract, see (Locke 1689).

<sup>25</sup>Note that of the many types of democracies, democracies that promote broad-based participation and competition over other characteristics of democratic regimes are less likely to repress the population (Bueno de Mesquita et al. 2005, Keith 2002).

thus, play an important role in ensuring that states keep their side of the bargain. As such, reforms that incorporate institutional constraints are an important part of the process to restore the social contract.

Nevertheless, strategies to restore the social contract that solely rely on institutions may fail. Scholars such as Paris (2004) argue that peace building missions in the 1990s were “guided by a generally unstated but widely accepted theory of conflict management: the notion that promoting ‘liberalization’ in countries that had recently experienced civil war would help to create the conditions for stable and lasting peace.”<sup>26</sup> This model privileged institutions focused on building democracy and free markets. However, the “liberalizing” agenda underestimated the destabilizing effects that resulted from these changes, as many efforts to build peace in this manner led to a return to conflict (Paris 2004).<sup>27</sup> For example, premature electoral reforms or early elections sometimes contribute to increased violence (Snyder and Norton 2000). Lake (2016) argues that the U.S. implemented this form of “liberal state building” during the Cold War. State builders at the time believed that these reforms would improve the legitimacy of institutions in the eyes of the public in war-torn countries. However, the approach was unsuccessful and was abandoned by the U.S. around 2006 (Lake 2016). Instead, Paris (2004) argues that states need a “rudimentary network of domestic institutions” before the introduction of liberal institutions. Such “rudimentary” institutions may take the form of security, administrative control, management of public finances, investment in human capital, creation of citizenship rights through

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<sup>26</sup>See pg. 5-7.

<sup>27</sup>See pg. 5-7.

social policy, formation of a market, management of public assets, and effective public borrowing (Ghani and Lockhart 2009).

Lake (2016) argues that since the wars in Afghanistan and Iraq in 2002 and 2003 respectively, a new theory of state building has focused on providing security to win the hearts and minds of the people—this approach restores the fundamental, primordial social contract mentioned above—security and order in exchange for compliance and loyalty. In this way, Lake (2016) suggests that state builders should move away from “institutionalism” and back to state power.

Nevertheless, while state power or security provision is necessary for restoring the social contract, an overly powerful state may be more likely to breach the social contract. Indeed, there is mixed evidence with regards to whether state power increases or decreases levels of violence. At the same time, while institutions serve to check the state’s power, they, alone, are insufficient. What is necessary is some combination of state power (security) and institutions (constraints), which help restore the social contract and thus maximize legitimacy. This insight is crucial moving forward.

## **1.4 Restoring the Social Contract and Legitimacy: Security Sector Reform**

Legitimacy occurs when there is a restoration of the social contract. Lake (2016) notes that “legitimacy derives from a mutually beneficial exchange in which the state provides social order to society, and society in turn complies with the extractions

(e.g. taxes) and constraints on its behavior (e.g. law) that are necessary to the production of that order.”<sup>28</sup> He claims that the central task for state building is to create a state that is regarded as legitimate by the people over whom it exercises authority.<sup>29</sup> In this way, society confers legitimacy on the state. He goes on to assert that “failed states lose their monopoly, legitimacy, and most often both as they are pulled apart by societal conflicts,” and “statebuilding is the process of restoring—or in some instances, creating for the first time—that monopoly of violence and especially its legitimacy.”<sup>30</sup> Legitimacy is obtained when the state retains “sufficient public support for the monopoly of force (Lake 2016).”<sup>31</sup> Following this idea, legitimacy of or support for the *state’s security forces* is key for overall state legitimacy. Thus, the focus of this manuscript is on developing a framework for restoring legitimacy of the state’s security sector, as a foundation for rebuilding legitimacy of the state.

One way to conceptualize the restoration process is to create a typology of states based on legitimacy and state power. Lake (2016) develops such a typology for states along these two dimensions. Successful, consolidated states are ones with both legitimacy and state power. Failed ones lack both. Predatory states have high levels of state power, but low legitimacy. These are usually autocratic dictatorships. Factionalized states have low state power, but high levels of legitimacy—traditional social formations, civil defense force, and sub-national units retain legitimacy. In Lake’s model, there is a continuum of state consolidation that relies on the use of

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<sup>28</sup>See pg. 25.

<sup>29</sup>While this is certainly the goal of democratic leaders or leaders that are transitioning into a democracy, to some extent, leaders in autocracies are also concerned about legitimacy and public opinion (Geddes and Zaller 1989).

<sup>30</sup>See pg. 8.

<sup>31</sup>See pg. 14.

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force and on legitimacy over the use of that force, and the goal is to obtain the status of a successful, consolidated state with both state power and legitimacy.

But how does a state reach this stage? How do states achieve sufficient “public support for the monopoly of force?” How do states gain legitimacy of their security sectors? Given that part of the social contract process entails the state providing public goods—particularly security—assessing the impact of security provision as a public good is fundamental to answering these questions. Restoration of the social contract occurs when citizens approve and support the changes made to the state’s security sector. In other words, legitimacy ensues when citizens of a state support the state’s security sector reforms. When they do so, they approve of the state having the power and the ability to use coercive force. Citizens believe that the state should be accorded this right and consequently may once again hold up their end of the bargain. By implication, security sector reform is a vital part of legitimizing states.

Security sector reform (SSR) has already been found to be linked to peace. The seminal work on SSR by Toft (2010) argues that SSR resolves the commitment problem and may lead to peace. She argues that both negotiated settlements and military victories are situations where enduring peace is possible, but that the conflict termination type is not sufficient in itself as a determinant for peace.<sup>32</sup> Negotiated settlements provide adversaries with positive incentives for peace (benefits), such as power sharing at the political level, but settlements are not self-enforcing. In other words, negotiated settlements rarely provide punishment for those that renege on

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<sup>32</sup>By conflict termination type, she means whether the conflict terminated in a ceasefire, negotiated settlement, or victory by the government forces or the rebel forces.

the deal. She argues that even with third-party enforcement, defectors do not get punished for renegeing on the peace deal. When the security sector is weak, the state is not strong enough to punish potential rebel groups either, creating “harm.” The potential for “harm” deters rebels from riding up against the state (Toft 2010).<sup>33</sup> The costs of taking up arms remains low, and deterrence may not be credible. Without a strong security sector, resolving the commitment problem is not possible. Moreover, former fighters are not integrated into the state security apparatus as a part of the security solution. The focus in a negotiated settlement is rarely on building a deterrent against future attacks. Thus, Toft (2010) hypothesizes that negotiated settlements are more likely to result in war recurrence when the disposition of the police and military is overlooked in the settlements.

In the case of victory, however, Toft (2010) finds that the military retains capacity as the dominant user of force. The security sector has proven to be strong and powerful. Deterrence is credible. However, when it comes to positive benefits, the winners choose whether or not to provide public goods to the rest of the country. Thus, military victories provide negative incentives to adversaries but lack positive incentives—though rebel victories are the exception, as the new victors tend to provide positive reinforcements after winning. Toft (2010) argues that rebel victors have more of an incentive than government victors to provide benefits, because they must gain legitimacy from the public and from the international system. As such, they are more likely to implement democratizing reforms. Thus, Toft (2010) hypothesizes and finds that victories by rebels lead to enduring peace and more democratization,

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<sup>33</sup>See pg. 42.

whereas government victories lead to peace, but more tyrannical governments.

In order to test her theory, Toft (2010) uses statistical analysis to assess whether types of war termination between 1942–1999—military victory, negotiated settlement, cease-fire/stalemate, military victory by government, and military victory by rebels—affect civil war recurrence.<sup>34</sup> She finds that the military victories have a mitigating influence on civil war recurrence, and that negotiated settlements have a positive influence on recurrence. Specifically, rebel victories appear to prevent recurrence more frequently compared with government victories. She then tests SSR versus third-party enforcement on civil war recurrence<sup>35</sup> and finds that her measure of SSR reduces the likelihood of recurrence of war.<sup>36</sup>

While Toft (2010) provides a very helpful starting place for understanding how SSR may lead to legitimacy, there are a few limitations worth noting. First, the goal of this dissertation is to move beyond traditional understandings of peace to understand “quality peace.” This means a shift away from negative peace to legitimacy as the outcome of interest. Toft (2010) shows us that SSR can lead to (negative) peace, but does not address how SSR affects the public’s support for those reforms, and consequently does not address the connection between SSR and state legitimacy. In this way, Toft (2010) provides a useful point of departure, but more work is needed to unpack SSR’s role in restoring the social contract.

Second, while Toft (2010) provides one indicator for SSR, there are numerous ways in which states reform their security sectors. The analysis does not desegregate

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<sup>34</sup>This is based on indicators in Walter (2002).

<sup>35</sup> This is another variable from the Walter data set.

<sup>36</sup>She also tests her theory on a number of case studies and comes to the same conclusions as her cross-national analysis.

security sector reforms, nor provide a way to conceptualize different forms of SSR. In her cross-national work, Toft (2010) operationalizes SSR by using Walter (2002)'s measure of military pact to restructure the security sector (whether the government forms a new army that requires quotas from each party), and a measure of whether the settlement was implemented. This specifically measures power sharing or ethnic balancing, and while this is an important reform, it is not the only reform that states implement.<sup>37</sup> While power sharing does capture an important element of SSR, solely using the measure overlooks a number of other reforms that may be important for long-term peace such as reforms that provide more oversight of the security forces or ones that make it stronger.

Related, states have different motivations for adopting SSR, and these motivations may affect the types of reforms that they implement. Not all states adopt power sharing or ethnic balancing reforms. Toft (2010) does not provide insight into the different motivations behind SSR adoption, nor on why states adopt certain types of reforms and not others. In assessing the impact of SSR on different outcomes, it may first be important to explore motivations for selecting reforms.

Moreover, while Toft (2010) conceptualizes the security sector broadly,<sup>38</sup> measurement of the security sector only includes the military. This could be problematic

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<sup>37</sup>Power sharing may not be an accurate measure for Toft (2010)'s "benefits and harm theory," as her theory is predicated on the power and strength of the security sector. Power sharing measures a concession on behalf of one or both sides; it is more a costly signal than a credible deterrent. Thus, the measure may demonstrate the benefit that can come from peace (both sides can have a piece of the pie), but may not demonstrate how one side can threaten to punish the other for renegeing on the deal.

<sup>38</sup>Toft (2010) starts with the United Nations Development Program (UNDP) definition of the security sector: "institutions that have the authority to order the threat of force or use force to protect the state and civilians" (see pg. 12).



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because, in many countries, the military is only mandated to protect civilians from external threats. Domestic internal security services are responsible for internal threats, which, in most cases, are the types of threats that may lead to civil war. The exceptions may be cases where rebels from the country organize in a neighboring country and then invade across the border. In this case, countries may send their militaries to protect the border. Nevertheless, a combination of security services are involved in the security of the state, and reforms to military, police and other security sector apparatus warrant further investigation.

Toft (2010) is not the only author to limit the scope of SSR. The policymaking world has also conceptualized SSR narrowly. In general, it has conceptualized reforms as checks to the state's coercive power—the “liberal institutionalist” approach. The focus of reforms has been on constraining the security sector and making it more transparent and accountable (Anderlini and Conaway 2004*b*, Brzoska 2006, Brzoska and Law 2013). The United Nations defines SSR as “a process of assessment, review and implementation, as well as monitoring and evaluation led by national authorities that has, as its goal, the enhancement of effective and accountable security for the State and its peoples, without discrimination and with full respect for human rights and the rule of law.”<sup>39</sup> Examples include disarmament, demobilization, and reintegration (DDR) programs, civilian oversight, and other mechanisms to promote good governance (Anderlini and Conaway 2004*b*, Brzoska 2006, Brzoska and Law 2013). The UN states that these reforms are necessary for “sustainable peace and

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<sup>39</sup>See: “The United Nations SSR Perspective” [http://www.un.org/en/peacekeeping/publications/ssr/ssr\\_perspective\\_2012.pdf](http://www.un.org/en/peacekeeping/publications/ssr/ssr_perspective_2012.pdf).

development so that people feel safe and secure, and have confidence in their State.” While the policymaking communities bring much-needed attention to “constraining” reforms, they may overlook the importance of reforms that focus on building capacity or state power, which, as noted by Toft (2010), may be important for long-term stability.

In addition to Toft (2010), there is a growing body of literature that assesses the impact of individual security sector reforms, but this literature does not categorize the reforms under the broad heading of security sector reforms. These studies tend to be at the country level and focus on either ethnic-balancing (power sharing) or reintegration programs for ex-combatants. In Burundi, with respect to power sharing, Samii (2013) finds that ethnic-balancing reforms in the military lead to decreases in prejudicial behavior between soldiers. In Liberia, Blair et al. (2016) find that power-sharing (ethnic-balancing reforms) in the police leads to more discrimination by minority ethnic police officers of their minority ethnic community members. In Burundi, reintegration programs for soldiers appear to increase economic well-being but not political reconciliation (Gilligan, Mvukiyehe and Samii 2013). Blattman, Jamison and Sheridan (2015) find that, in Liberia, reintegration of soldiers is best done with rehabilitative programs, followed by cash incentives. In Colombia, Nussio and Oppenheim (2013) find that for reintegrating ex-combatants, participation in civic programs has no effect in increasing trust in the state, but that continuing connection between former fighters has a neutral to positive impact on trust, as does effective performance by the state. Kaplan and Nussio (2015) note that reintegration of soldiers works best when the community is cohesive and accepting; thus, reintegra-

tion programs should include community outreach. In Uganda, female soldiers may be more adept at reintegration than their male counterparts, but female soldiers lack the same employment opportunities as their male counterparts upon reintegration (Annan et al. 2011).

Scholars have also focused on other individual security sector reforms. In Colombia, Oppenheim and Weintraub (2015) show that political training and programs to encourage discipline in armed groups reduce civilian killings. Gordon (2016) uncovers how civilian monitoring of the armed forces in Sudan may sometimes have had unintended consequences. And Karim et al. (2013) find that gender reforms in the police lead to backlash when male police officers are outnumbered by female police officers, but Karim (2016) shows that gender reforms can also be useful for increasing perceptions of the overall police force in ex-combatant communities in Monrovia. Though perhaps not exhaustive, these studies show a trend to look at the effects of individual security sector reforms.

The current literature demonstrates that there is no consensus on how to conceptualize SSR and that measurement of SSR is fraught with problems. Most importantly, the literature does not disaggregate among the myriad security sector reforms. States implement a variety of reforms, ranging from power sharing, DDR, civilian control, new training programs and academies, to the development of specialized units. While there is an attempt by scholars to study some of these reforms individually, they do not integrate these studies into a broader understanding of security sector reform. At present, there is no way to organize these reforms into meaningful groups that could then provide insight into which types of reforms states are more likely to adopt and

which types of reforms contribute to legitimacy. Moving forward, this is the objective of this manuscript. The manuscript builds from the important work of Toft (2010) and others by acknowledging that SSR is important for peace but moves beyond this connection to establish the conditions under which certain types of SSR contribute to security sector legitimacy.

## 1.5 Conclusion

This chapter has demonstrated the importance of moving beyond studying “negative peace” by looking at the determinants of “quality peace,” or the “creation of post-war conditions that make the inhabitants of a society secure in life and dignity now and for the foreseeable future (Wallensteen 2015).” A part of this new research agenda involves understanding how to restore the social contract. The social contract implies a quid pro quo whereby the state provides protection and security (and other public goods) in exchange for loyalty. Restoring the social contract means providing security such that the security provision generates support for the state. However, too much state power may lead to a return to conflict, and while institutions may check this power, they too, if implemented alone, are insufficient to prevent violence. Thus, if legitimacy is derived from restoring the social contract, the implementation of reforms that help restore the social contract must be done in a way that draws public support. Toft (2010) and other scholars and policymakers have provided important insight on the connection between SSR and peace, but a larger framework is necessary for understanding the connections between SSR and state legitimacy. The focus of

the rest of the dissertation is on developing such a framework.

Chapter 2 develops a framework to categorize reforms, as well as the conditions under which some reforms could help legitimize the state's security sector. The chapter begins by categorizing security sector reforms along two dimensions: capacity, which aids in preventing and stopping violence by non-state actors; and constraint, which limits the state from inflicting violence on its own citizens. It then develops expectations for how reforms along the two dimensions interact. It concludes by highlighting how to measure legitimacy and the conditions under which certain reforms may lead to security sector legitimacy.

Chapter 3 turns to micro-level analysis on security sector reform and perceptions of and support for state security forces. The goal of this chapter is to test some of the theoretical implications from Chapter 2 using a security sector reform that is established as both capacity-increasing and constraint-increasing. It uses data from a field experiment conducted in Liberia in 2015, which randomized police patrols in Grand Kru County, a rural county with very little security sector presence.

Chapter 4 investigates whether exposure to another reform—female ratio balancing—affects civilians' perceptions of effectiveness and restraint and support for the state's security forces. The chapter uses the same field experiment from Chapter 3, but disaggregates the treatment based on sex. It specifically tests whether contact with female police officers leads civilians to perceive the security sector as effective and restrained when compared to male police officers.

Chapters 3 and 4 establish that some reforms lead to enhanced perceptions more than others, which means that it becomes important to assess the conditions under

which states adopt the “right” reforms. Consequently, Chapter 5 explores whether states redress past grievances, whether the presence of external actors, regime type or threats affect the adoption of constraint-increasing and capacity-increasing reforms. The chapter begins by highlighting different factors that may affect state choices in reform adoption. The chapter then introduces a new, cross-national dataset on security sector reforms (The Security Sector Reform Dataset). Then it provides the research design and the results from the empirical analysis.

The final chapter brings all the chapters together to underscore the main findings and provides a discussion of the implications of the findings. It then highlights limitations and avenues for future research.

## Chapter 2

# Conceptualizing Security Sector Reform

As demonstrated in the previous chapter, security sector reform is defined narrowly in the literature, and currently, there is no overarching way to categorize security sector reforms. In order to understand how security sector reforms influence state legitimacy, it is first important to develop a conceptual framework or a way to categorize different types of reforms. Additionally, not all reforms help restore the social contract. As states choose which reforms to implement from a portfolio of options, a set of conditions is needed to understand which types of reforms are more likely to help legitimize the state's security forces.

This chapter develops a framework to categorize reforms, as well as the conditions under which some reforms may increase support for the state's security sector. The chapter begins by categorizing security sector reforms along two dimensions: capacity, which aids in preventing and stopping violence by non-state actors; and constraint,

which limits the state and its security forces from inflicting violence on its own citizens. This is an improvement from the way institutional changes in the security sector have been traditionally conceptualized as it incorporates two dimensions that address violence by different actors. The chapter then develops expectations for how reforms along the two dimensions interact with each other. It concludes by highlighting how to measure legitimacy and the conditions under which certain reforms positively affect perceptions of and support for the state's security sector.

## **2.1 Categorizing Reforms Along Capacity and Constraint Dimensions**

The security sector is defined as “organizations and entities that have the authority, capacity and/or orders to use force or the threat of force to protect the state and civilians (Anderlini and Conaway 2004b).”<sup>1</sup> This includes the military, police, militias, special forces, and other state-sponsored armed groups, and it also includes civilian organizations responsible for the oversight of the organizations that are authorized to use force such as intelligence agencies, Ministries of Defense, or oversight bodies that have direct control over the functions of armed sectors.

A reform is defined broadly as an institutional change that occurs to the security sector. This definition is much broader than ones used by Toft (2010) and policymakers. Using a more inclusive definition of the security sector and security sector reforms ensures that the types of changes mentioned in the state power literature,

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<sup>1</sup>See pg. 1.



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civil-military relations literature, policy world, and other institutional changes not specifically mentioned in the literature are categorized into an overarching structure for classifying security sector reforms.

Toft (2010) argues that the purpose of security sector reform is to “restore order and to neutralize non-legal, non-statutory insurgents; rebuild the security forces such that these forces can take responsibility for the maintenance of public order; and to build security related institutions that monitor and support the security forces.”<sup>2</sup> The United Nations defines security sector reform as “a process of assessment, review and implementation as well as monitoring and evaluation led by national authorities that has as its goal the enhancement of effective and accountable security for the state and its peoples without discrimination and with full respect for human rights and the rule of law.”<sup>3</sup> The International Monetary Fund and the World Bank define it as a process whereby the institutions of the security sector—from the police to the military to the judiciary, are transformed to promote greater democratic (i.e. civilian) control, and increased transparency and accountability; and the key objective of SSR is to convert defense and police sector personnel into providers of legitimate security and to install accountable, professional, appropriately sized and affordable security sectors (Ball 2001, Collier 1994).

Within these statements, there are two different roles for the security sector that are worth separating. One role for the security sector is to “maintain public order” and “neutralize” non-state actors, or as the UN states, to provide “effective” security. The

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<sup>2</sup>See page 12.

<sup>3</sup>See: “The United Nations SSR Perspective” [http://www.un.org/en/peacekeeping/publications/ssr/ssr\\_perspective\\_2012.pdf](http://www.un.org/en/peacekeeping/publications/ssr/ssr_perspective_2012.pdf).

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focus of reforms is outward, toward preventing violence by non-state actors. Another part of security sector reform is on “monitoring” the security forces, to ensure that they do not obstruct the rule of law or violate human rights. The focus of the reform is inward, toward preventing violence by the state security forces themselves. There are, thus, two sources of violence that security sector reforms seek to mitigate: non-state and state-perpetrated violence.<sup>4</sup>

If the long-term objective for states is security in life and dignity of their citizens, minimizing violence that occurs within the state is key to that goal. Non-state actor violence is carried out by insurgents, rebels, terrorists, and/or criminals. State-perpetrated violence is carried out in two ways: states sometimes sanction violence against their own citizens (Davenport 2007, Ritter 2014).<sup>5</sup> Or, states’ security forces sometimes engage in perpetrating *non-sanctioned* violence against the population. This “state-perpetrated” violence is carried out by the state’s security forces who engage in violence and other “bad behavior” for the security sector’s own gain, and not because the state ordered them to abuse the population.

In order to mitigate both these types of violence, states take measures to prevent attacks by both non-state and state perpetrators. States can implement security sector reforms that build the security sector’s *capacity* so that it is effective in preventing and responding to violence by rebels, insurgents, criminals, and/or terrorists. Additionally, states can implement reforms to *constrain* their ability to use violence against their own citizens as well as the security sector’s ability to use violence against

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<sup>4</sup>Violence here is defined broadly, to include political violence, sexual violence, torture, kidnappings, among other types, as well as crimes related to property, corruption, and discrimination (Galtung 1996).

<sup>5</sup>Recall that this is the fundamental commitment problem mentioned in the previous chapter.

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the population. The criteria for classification in each are described below.

### 2.1.1 Capacity

In conceptualizing security sector capacity, one place to start is the literature on state power. Mann (1984) argues that both despotic and infrastructural power constitute strong states, where despotic power refers to the repressive capacities of a state, while infrastructural power refers to the state's ability to penetrate society and actually implement its decisions. Infrastructural power refers to the bureaucratic reach of the state through governance, norms, or institutions. Infrastructural power has less to do with the state's coercive capacity (the security sector) and more to do with the extent of its bureaucracy. Despotic power refers to the "range of actions which the elite is empowered to undertake without routine, institutionalized negotiation with civil society groups (Mann 1984)."<sup>6</sup> In this sense, despotic power is about the regime's autonomy to act. Some scholars argue that state infrastructural power is more important for state capacity than despotic power (Soifer and Vom Hau 2008). Hendrix (2010) finds that the most important characteristics of state power are bureaucratic/administrative capacity and the quality and coherence of political institutions. Nonetheless, neither of these forms of state power focuses purely on the strength of the security forces.

Another way to conceptualize capacity that more directly ties to the security forces is through military capabilities or balance when fighting an inter-state war (Huth

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<sup>6</sup>See pg. 113.

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1988, Mearsheimer 1983).<sup>7</sup> Huth (1988) specifically uses four measures for the balance of capabilities: overall military and industrial capability (often measured as GDP, percent of GDP on military spending, or manpower), ability to mobilize troops in the short term, ratio of forces between the two sides, and the nuclear status of a country. These measures are useful for understanding state power with respect to inter-state conflict, but some of the measures are not relevant for capacity when it comes to preventing violence by non-state actors within a state (i.e. nuclear capability is less important, as states are unlikely to use nuclear weapons on themselves). However, other factors such as military spending, quickness of mobilization, and GDP may be useful for measuring states' capability to prevent violence within their borders.

Scholars of civil war have used GDP, mountainous terrain, and even tax capacity as measures for state capacity, applying the more conventional understanding of Mann's "infrastructural state power" concept (Buhaug, Cederman and Rød 2008, Buhaug, Gates and Lujala 2009, Fearon and Laitin 2003, Hendrix 2011). Additionally, measuring infrastructural power through development has been one common way to assess state power in the insurgency literature (Beath, Christia and Enikolopov 2013, Berman, Shapiro and Felter 2011). Other scholars analyze insurgencies in developing countries and find that when states have, large, well-equipped military, tax revenue, and bureaucratic organizations, they are more successful at defeating insurgent groups (Goodwin 2001).

Despite the preference in these literatures for using "infrastructural," "bureaucratic," or "development-oriented" indicators, the indicators do not get at the state's

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<sup>7</sup>See also Biddle and Long (2004).

coercive abilities, albeit they may be important for other service provision by the state. Fearon and Laitin (2003) emphasize the state's coercive capacity as the decisive factor for preventing civil wars: "most important for the prospects of a nascent insurgency, however, are the government's police and military capabilities and the reach of government institutions into rural areas,"<sup>8</sup> but they do not test the impact of military/police size, military/police spending, instead, they use GDP as a proxy. Thus, most of these studies, conceptually or through measurement, conflate different indicators of state power and capacity, and none of the studies has direct measures for the state's capacity for coercive force as it relates to the security sector.

Strictly focusing on a state's coercive capability, capacity is conceptualized as any reform that helps prevent violence by non-state actors or that helps defeat non-state actors if violence does erupt. The reform refers to the process of transformation that the security sector undergoes, and the outcome is preventing or suppressing violence by non-state actors. Reforms, then, affect the state's effectiveness in using perceived or actual force against non-state actors. Perceived force is important for deterrence (preventing violence), and actual force may be important for defeating insurgents.

Capacity conceptualized in this way is similar to military effectiveness. Millett, Murray and Watman (1986) and Millett and Murray (1988) define military effectiveness as "the process by which armed forces convert resources into fighting power," where "a fully effective military is one that derives maximum combat power from the resources physically and politically available."<sup>9</sup> Millett and Murray (1988) go further

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<sup>8</sup>See page 80.

<sup>9</sup>See pg. 2

and define related terms. During war, fighting power means “the ability to destroy the enemy while limiting the damage that he can inflict in return,”<sup>10</sup> and resources “represent the spectrum of assets important to military organizations: human and natural resources, money, technical prowess, industrial base, government structure, sociological characteristics, political capital, the intellectual qualities of military leaders, and morale.”<sup>11</sup> Similarly, Biddle (2010) defines military capacity as “the capacity to destroy the largest possible defensive force over the largest possible territory for the smallest attacker casualties in the least time.”<sup>12</sup> Thus the definition of military effectiveness has two parts: 1) increasing resources, and 2) using those resources efficiently to achieve maximum “fighting power.”

Millett and Murray (1988) also argue that military effectiveness must be evaluated at the political, strategic, operational, and tactical levels. The ability of the military to acquire resources from the government to maintain and expand itself constitutes political effectiveness. The ability to secure national goals defined by political leadership constitutes strategic effectiveness. The ability to achieve strategic war objectives via the development and use of concepts and doctrine constitutes operational effectiveness. And the use of techniques by combat units to secure operational objectives constitutes tactical effectiveness (Millett, Murray and Watman 1986, Millett and Murray 1988).<sup>13</sup>

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<sup>10</sup>Millett and Murray (1988) argue that victory is not a demonstration of military effectiveness.

<sup>11</sup>See pg. 2

<sup>12</sup>See pg. 6.

<sup>13</sup> The goals at each level are often conflicting. For example, Millett and Murray (1988) give the example of American military forces in South Vietnam. The forces increased their tactical effectiveness by approaching the enemy more closely rather than relying on indirect fire power. However, this led to higher American casualties, which reduced political effectiveness.

The above-mentioned definition of military effectiveness refers exclusively to the military as an organization and to effectiveness in fighting inter-state wars. However, unlike (Huth 1988), Millett and Murray (1988)'s definition of military effectiveness can be applied broadly to establish the security sector's overall capacity. Using the same definition, capacity refers to 1) increasing resources, where resources refers to assets that are important to security organizations such as human and natural resources, money, technical prowess, industrial base, sociological characteristics, political capital, the qualities of leaders, and morale; and 2) using those resources efficiently, where efficiency means achieving the desired outcome using as few resources as possible. But, instead of limiting the objective to "fighting capacity" or "the ability to destroy the enemy while limiting the damage that he can inflict in return," the overall objective of the security sector is to prevent and protect civilians from non-state-actor-perpetrated violence. During wartime, this may mean "fighting capacity" in civil conflicts, as fighting power is important not only for inter-state wars, but also for fighting domestic insurgencies (Cunningham, Gleditsch and Salehyan 2009, Fearon and Laitin 2003, Hendrix 2011). In peacetime, the objective is security of life, body, and property, which has less to do with "destroying enemies" and more to do with deterrence, violence prevention, the dismantling of potential threats, and catching and legally punishing those that violate the law. Capacity or the ability to use resources efficiently is also important for such activity (Bedford and Mazerolle 2014, Hill, Beger and Zanetti 2007).

Similar to military effectiveness, security sector effectiveness or the ability to achieve desired outcomes may be measured at each level—political, strategic, op-

erational, and tactical. At the political and strategic level, effectiveness means the same as above—acquiring resources from the state and securing national objectives. At the operational and tactical level, effectiveness may mean something different, because the security sector is not necessarily operating in the theatre of war. Operational effectiveness means the ability to achieve the goals of each organization within the security sector. This will vary based on the organization. For example, the function of the police department is generally to to ensure community safety; in addition to providing security, the goal of the gendarmerie or other paramilitary forces may be to provide surveillance to the state (Emsley 1999); and the goal of the military, as stated above, is fighting capacity. Thus, fulfilling each organization’s goals constitutes operational effectiveness.

Tactical effectiveness refers to techniques used by security organizations’ units to secure operational objectives. For instance, in order to achieve public security, the police force needs information about criminal activity, which requires community policing efforts. In this sense, the successful gathering of information constitutes tactical effectiveness, as this information helps with the operational goal of public security.

In this dissertation, political effectiveness is not considered; instead, the focus is on strategic, operational, and tactical effectiveness. If the overall stated goal for the state is quality peace, which includes preventing violence by non-state actors, at the strategic level, effectiveness means ensuring order. At the operational level, this means the provision of security and the prevention of violence by non-state actors. At the tactical level, this means engaging in efforts on the ground to deter non-state



activity, to prevent violence, to dismantle potential threats, and to catch and legally punish those that violate the law. Thus, increases in security sector capacity should lead to effectiveness or successful outcomes at these levels.

Using the above definition of capacity, security sector reforms that 1) increase resources and/or that 2) ensure the efficient use of resources are reforms that are capacity-increasing, and security sector reforms that decrease resources or that reduce efficiency are capacity-decreasing reforms. Examples of capacity-increasing reforms could include increasing personnel size (military, police, and other security forces), increasing the number of security organizations, increasing the number of weapons or developing new weapons technology, increasing the presence of security personnel in the rural periphery of states, or increasing professionalization and training. Examples of capacity-decreasing reforms could include disarmament, demobilization, and reintegration (DDR) policies, downsizing personnel, abolishing particular weapons or weapons technology, or abolishing entire security sector organizations such as the military or paramilitary groups.

*Assumption 1: Security sector reforms that increase capacity are ones that augment resources and/or make the security forces efficient in the use of their resources, and reforms that decrease capacity are ones that do the opposite.*

### 2.1.2 Constraint

The second dimension has less to do with resources and efficiency and more to do with the security sector's behavior toward civilians. The current literature has conceptualized this as the relationship between the military and civilian leaders. One of the first scholars to look at this relationship is Huntington (1957). His work draws three main conclusions: there is a difference between civilian and military roles; the key to civilian control is professionalism; and the key to professionalism is military autonomy. According to Huntington (1957), objective control—maximizing military professionalism—and subjective civilian control—maximizing civilian power vis a vis the military's—are affected by variation in external threat, constitutional structure of states, and the ideological make-up of society.<sup>14</sup> Under this rubric, ideal civil-military relations entail objective control, which weakens the military politically without weakening it militarily. The optimal control mechanism involves an “autonomous military professionalism,” with minimal civilian meddling, as Huntington (1957) argued that civilian meddling undermines objective control.<sup>15</sup> In this way, he asserts that professionalization is more effective in controlling the military than using subjective control mechanisms, which involve placing legal and institutional restrictions on the military's autonomy.

Similar to Huntington (1957), but taking a sociological approach,<sup>16</sup> Janowitz (1961) argues that professionalism affects civil-military relations. He posits that

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<sup>14</sup>See pg. 80-85

<sup>15</sup>See pg. 83-85

<sup>16</sup>Feaver (2009) argues that the approaches by Huntington (1957) and Janowitz (1961) are similar (see pg.8-9).

changes in the military, including a shift from authoritarian domination in military authority to greater reliance on manipulation, persuasion, and group consensus, enhancing skills development to include civilian-oriented tasks (i.e. engineers, logistics, leadership training etc.), broadening recruitment efforts, creation of career trajectories, and politicization of military leadership, contribute to a convergence between the military and civilian spheres.<sup>17</sup>

In another body of work, Janowitz (1964) develops five forms of civil-military relationships: authoritarian-personal control, authoritarian-mass party, democratic competitive and semi-competitive systems, civil-military coalition, and military oligarchy. He then explores the characteristics of the military establishment in new nations and the military's capacity to govern, and finds that in weak states, the military is able to penetrate the political arena, leading to less convergence between civilian and military life (Janowitz 1964). Once in power, the military tends to rule in an authoritarian manner, as they are inexperienced in developing civilian coalitions, which leads to violence. Thus, too much military involvement in politics may lead to repression of the population.

While some find professionalization to be important for controlling the military, Desch (2001) finds that despite professionalism, civilian authorities have not been able to exert greater control over military policies and decision-making even during peacetime, when civilian leaders are less interested in military affairs, and therefore often surrender them to the military. He argues that the strength of civilian control is determined by structural factors, particularly threat. One consequence is that

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<sup>17</sup>see pg. 8-16.

expansion of the military's power and authority over civilian governments may occur during peace time because threat levels are lower and civilians have less of a vested interest in the military's affairs, which allows the military more autonomy.

Alongside Desch (2001), others have also argued that professionalism is not the only factor that constrains the military. In response and in contrast to Huntington (1957), Feaver (1999, 2009) treats civil-military relations as a principal-agent problem, with the civilian, executive principal monitoring the actions of military agents. Using examples from the post-Cold War, he finds that military professionalism did not by itself ensure unchallenged civilian authority. In particular he shows empirical evidence contrary to Huntington's predictions—during the Cold War, a shift from liberalism to a military conservative ethic, which would have facilitated objective control, did not occur. Feaver (2009) shows that Americans did not become more conservative and that there was no shift to objective control. Instead, he argues that the principal-agent framework better explains Cold War activities.

Feaver (2009) starts out with a paradox similar to the one stated in this dissertation: “the very institution created to protect the polity is given sufficient power to become a threat to the polity.”<sup>18</sup> At the heart of the paradox are concerns related to the credible commitment problem brought up in the previous chapter, but this time the “contract” is applied between the state and the military, as opposed to the citizens and the state. The state contracts the military to provide security, but the military has coercive power. This coercive power gives the military the capability to break the contract. Thus, “the civil-military challenge is to reconcile a military

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<sup>18</sup>See pg. 4

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strong enough to do anything the civilians ask with a military subordinate enough to do only what civilians authorize.”<sup>19</sup> Feaver (2009) uses a principal-agent framework to analyze this dilemma.

This manuscript builds from insights related to the principal-agent framework developed by Feaver (1999, 2009). In the model, the “principal” (the state) hires an “agent” (security forces) to carry out activities on the principal’s behalf.<sup>20</sup> The state contracts the security sector to provide security to the state and in doing so arms them. The principal and the agent, however, may have divergent interests, which leads to two problems: either a “moral hazard problem,” in which the agent behaves differently from what is expected in the contract, or an “adverse selection” problem, in which the principal finds it difficult to observe the behavior of the agent. Principals prefer to contract “good types,” or those that are competent and compliant, but “bad types” often mimic the behavior of “good types” in order to gain the contract, and principals must find a way to distinguish the “good” types from the “bad” types. In the former—the moral hazard problem—security forces shirk because they see individual gains or have alternative beliefs from that of the state, which result in harming civilians. In the latter—the adverse selection problem—there are competent and incompetent personnel, but the state cannot distinguish between the two.

Shirking happens when one of the two problems occur, as the agent’s actions diverge from the principal’s preferences. Feaver (2009)’s description of shirking differs slightly from how it has been conceptualized in the economics literature.<sup>21</sup> Feaver

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<sup>19</sup>See pg. 2

<sup>20</sup>For extensive discussion of the principal-agent theory, see (Miller 2005).

<sup>21</sup>Feaver (2009) highlights how shirking is different compared to how it has traditionally been conceptualized.<sup>22</sup> For example, one of the main differences is that civilians and the military may

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(2009) defines shirking in broad terms as, “when the military does not work as civilians direct.”<sup>23</sup> His version of shirking includes a broad range of military activities—instigating coups (and coup attempts), inflicting violence on the population, draining the state of its resources, engaging society in unnecessary conflicts, or disobeying civilian leaders.

Whereas Feaver (2009) uses an all-encompassing definition, shirking in this manuscript takes on a more specific definition—shirking occurs when the agent perpetrates violence against the population without authority from the principal. Milder forms of this “violence” may be discrimination, corruption, theft, or extortion (Galtung 1996). In extreme circumstances, unrestrained security forces violate human rights, heighten levels of violence, or even commit genocide (Carey, Colaresi and Mitchell 2015*a*, Carey, Mitchell and Lowe 2013, Cohen and Nordås 2015, Mitchell, Carey and Butler 2014). The application of the principal-agent problem here differs from that of Feaver (2009) in that it encompasses more than just the military. It applies to all parts of the security sector—police, militias, paramilitary forces, defense departments, and others.

Shirking or inflicting violence on the local population may occur for a variety of reasons. First, different organizations of the security forces or individuals within them have varying motivations to extract resources from the population. This could take the form of regular bribes or the use of violence to profit from the population.

Whether the personnel are not paid sufficiently or are simply greedy, this is a common

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have similar preferences.

<sup>23</sup>See pg. 59. Additionally, see Albrecht and Ohl (2016), who define shirking as when the agent exits the regime or joins a resistance.

problem in many security forces around the world.<sup>24</sup> Second, discriminatory preferences or individual stereotypes may be another factor for why security forces shirk (Boushey 2016, Browning et al. 1994).<sup>25</sup> Private beliefs about different groups may manifest themselves into actions. Third, organizational practices in security bodies may deliberately incorporate violence into their practices. One example of this is the use of sexual violence as a way to create unit cohesion, especially among groups of militias with little prior bonding (Cohen 2013, Cohen and Nordås 2015).<sup>26</sup> Fourth, at the individual level, the security forces draw a certain type of individual who is attracted to violence. As Feaver (2009) puts it, “the peculiar mission of the military—to kill people and blow things up—attracts a special kind of person, one who may make the principal-agent relationships particularly problematic.”<sup>27</sup> Some of the qualities necessary for joining the security forces—a sense of adventure, risk, aggression and so on—may also be the same characteristics that make some people more violent in general. For example researchers have found higher levels of aggression among military families compared to civilian families (Heyman and Neidig 1999). Finally, general incompetence among personnel could be correlated with heightened levels of violence. In the Liberian National Police, researchers have found, for example, that incompetence is related to discrimination (Karim et al. 2013). It may also be related to other negative behavior.

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<sup>24</sup>See for example, “Transparency International: Defense and Security,” [https://www.transparency.org/topic/detail/defence\\_security/](https://www.transparency.org/topic/detail/defence_security/).

<sup>25</sup>For an overview of discrimination in the security forces, see Blair et al. (2016). For an overview of different forms of discrimination, see Pincus (2000) and Jones (2000).

<sup>26</sup>While Cohen (2013) focuses on rebel organizations, the same theory may be applied to government militias (Cohen and Nordås 2015).

<sup>27</sup>See pg. 73.

Regardless of the mechanism, a shared common trait is that they all tend to be private beliefs. That is, the state, when contracting organizations or individuals for security organizations, does not know about these private preferences. The adverse selection problem occurs when the state knows that some random proportion of the population of security agencies and/or personnel holds these beliefs, but it cannot distinguish which ones hold such preferences and which ones do not. The moral hazard problem occurs when the security body and/or its personnel have acquired a contract and then engage in behavior that reflects their privately held beliefs.

Feaver (2009) and others have suggested a number of mechanisms states could take to mitigate the principal-agent problem. First, the security forces could be monitored. This is one of the more common methods to prevent shirking (Banks and Weingast 1992, Cowen and Glazer 1996, McCubbins, Noll and Weingast 1987, McCubbins and Schwartz 1984, Morrow 2007). Monitoring the security forces puts a “leash” on them, and depending on circumstances, the leash can be slackened or shortened. Feaver (2009), Banks and Weingast (1992), and Morrow (2007) point to screening and selection mechanisms. These are set procedures for hiring personnel to become part of the security forces. For example, moving from a conscription army to a voluntary one would provide a better screening mechanism and perhaps mitigate the adverse selection problem. Feaver (2009) also mentions “alarms” or the use of third parties to watch agents and report on them. These may be autonomous bodies such as civilian oversight bodies or ombudsmen. Additionally, he mentions punishment as a possible way to mitigate the principal-agent problem. This may mean firing or discharging “bad apples,” or even getting rid of entire divisions that have behaved



poorly.

Brehm and Gates (1997) suggest that improving the quality of the agent and aligning the agent's preferences more closely to that of the principal's better resolves the principal-agent problem. In other words, the focus of the reform is to change beliefs and preferences held by the agent to ones that more closely align with that of the state. This can be done through professionalization, such as creating an officer corps (as suggested by Huntington (1957)), but also through training academies. Thus, reforms that focus on selection, monitoring, training, instilling professional values, and holding agents accountable may all contribute to mitigating the principal-agent problem and thereby increase constraints placed on the security sector.

Yet, while the principal-agent problem explains the extent to which the state controls the security forces from committing unsanctioned violence against the population, it does not explain how to mitigate *state-sponsored repression*. Recall that there are two ways states and their security forces abuse citizens. The first is resolved by mitigating the principal-agent problem—controlling security forces so that they are less likely to commit unsanctioned violence against the population. The second way is through state-sanctioned violence against the population, where the security forces are used as agents to carry out this violence. This is not a principal-agent problem, because the principal-agent problem assumes fixed preferences on the part of the principal. In the above description, the principal is assumed to be a “good” type of state, which always prefers non-violence. But, what if states are “bad types?” What if states violate the social contract and abuse citizens?

When states are “bad types,” they violate the social contract, which leads to

the credible commitment problem mentioned in the previous chapter. One of the most common dilemmas that arise from the social contract between the state and its citizens is the credible commitment problem: once civilians give their allegiance to a state, there is no guarantee that the state refrains from forcibly extracting resources from citizens (North and Weingast 1989). The social contract between the population and rulers suggests that the state will provide protection to its people in exchange for compliance (Fukuyama 2011, 2014, Lake 2016, Tilly and Ardant 1975, Weber, Lassman and Speirs 1994). In order to fulfill the social contract, the state must be able to subdue populations so that it can enforce contracts internally and fight off aggressors externally—its security sector must have the capacity to be effective in preventing violence. However, the increased capacity for force, if unchecked, may be used against the population excessively. Restraining the state in its use of coercive force to extract resources from the population requires a commitment on the part of the state that it will not abuse its power (North and Weingast 1989). While the focus of much of these constraints has been on political and economic institutions (North 1990, North and Weingast 1989, North, Wallis and Weingast 2009), much less focus has been paid to the development of institutions that check the state's security sector directly. States can design institutional agreements in a way that limits the powers of the security forces. These may take the form of constitutional arrangements that restrict certain eligibilities (i.e. military personnel are constitutionally banned from participating in a political party). Thus, whereas mechanisms to address the principal-agent problem affect security force non-compliance, mechanisms to address the credible commitment problem impact state non-compliance.

*Assumption 2: Security sector reforms that mitigate the principal-agent problem and/or that solve the credible commitment problem increase constraints, and reforms that exacerbate the principal-agent problem and/or the credible commitment problem decrease constraints.*

### **2.1.3 Combining the Capacity and Constraint Dimensions**

While the above two sections described criteria for categorizing security sector reforms into either capacity or constraint dimensions, this section combines these dimensions to show how different reforms can be categorized. In order to develop a parsimonious framework for understanding how the two dimensions interact and affect categorization of reforms, several simplifications are necessary. First, increases or decreases in capacity affect effectiveness but do not affect outcomes related to restraint; and increases or decreases in constraint affect restraint, but not outcomes related to effectiveness. In other words, changes in the security sector's resources and efficiency (capacity) affect non-state-perpetrated violence, but not violence perpetrated by the state; and reforms implemented to prevent shirking and the credible commitment problem (constraint) are directed at mitigating violence conducted by the state security forces.

This condition, however, does not preclude reforms from having elements of both dimensions. Rather, it means that if a reform has both dimensions, for example,

capacity-increasing and constraint-decreasing elements, the capacity-increasing dimension affects efforts to address violence by non-state actors (effectiveness) whereas the constraint-decreasing dimension affects efforts to address state-perpetrated violence (restraint). It does not mean that the capacity-increasing element affects security sector restraint, nor that the constraint-increasing element impacts security sector effectiveness.

This condition is reflective of reality, as the purpose of reforms is usually to achieve one goal or the other—prevent violence by non-state actors (effectiveness) or violence by state actors (restraint). For example, reforms that create new operational units or expand the presence of the security forces are not necessarily implemented to mitigate the principal-agent/credible commitment problems, but rather enhance resources and efficiency; and civilian oversight reforms are not implemented to enhance resources or efficiency, but rather to mitigate the principal-agent/credible commitment problems.

The reason for this simplification, in addition to its being mostly reflective of reality, is that it becomes difficult to parcel out the potential effect each dimension has on different outcomes if the dimensions are conflated. For example, if a reform is hypothetically capacity-increasing, it increases resources and efficiency and should theoretically impact the security sector's effectiveness. But if we include the possibility that the same reform also minimizes violence by the state (restraint), it is not possible to then assess any effects from the reform's *constraint* dimension, which also has an effect on enhancing restraint. By separating the dimensions, we are better able to gauge each dimension's effect on potential outcomes.

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*Assumption 3: “Capacity” reforms impact security sector effectiveness or non-state actors’ ability to inflict harm on citizens of the state, whereas “constraint” reforms impact restraint or make it more difficult for the security sector to inflict harm on citizens.*

Security sector reforms can be categorized based on these two dimensions. Figure 2.1 shows how the two dimensions interact. Reforms can be placed in any part of the shaded areas, including the x and y-axis. Quadrant A includes reforms that either increase capacity or constraints or that increase both dimensions. Quadrant B includes reforms that either decrease constraints or increase capacity or that do both. Quadrant C includes reforms that decrease capacity, increase constraints, or do both. Quadrant D includes reforms that decrease capacity, or decrease constraints, or do both. Unless reforms are placed exactly in the middle of the shaded quadrants, they have a “dominant” dimension. Thus, even if reforms are both capacity-increasing and constraint-increasing, which means they would be placed in Quadrant A, one dimension can dominate depending on its placement in the Quadrant.

It is important to note that placement of reforms in Figure 2.1 depends on whether reforms theoretically increase capacity and/or constraints and not whether they lead to outcomes of effectiveness/restraint or perceptions of effectiveness/restraint. That is, in order to categorize reforms, potential capacity-increasing reforms should be evaluated based on how well they increase security sector resources and/or efficiency. Potential constraint-increasing reforms should be evaluated based on how well they mitigate the principal-agent problem and/or credible commitment problem.

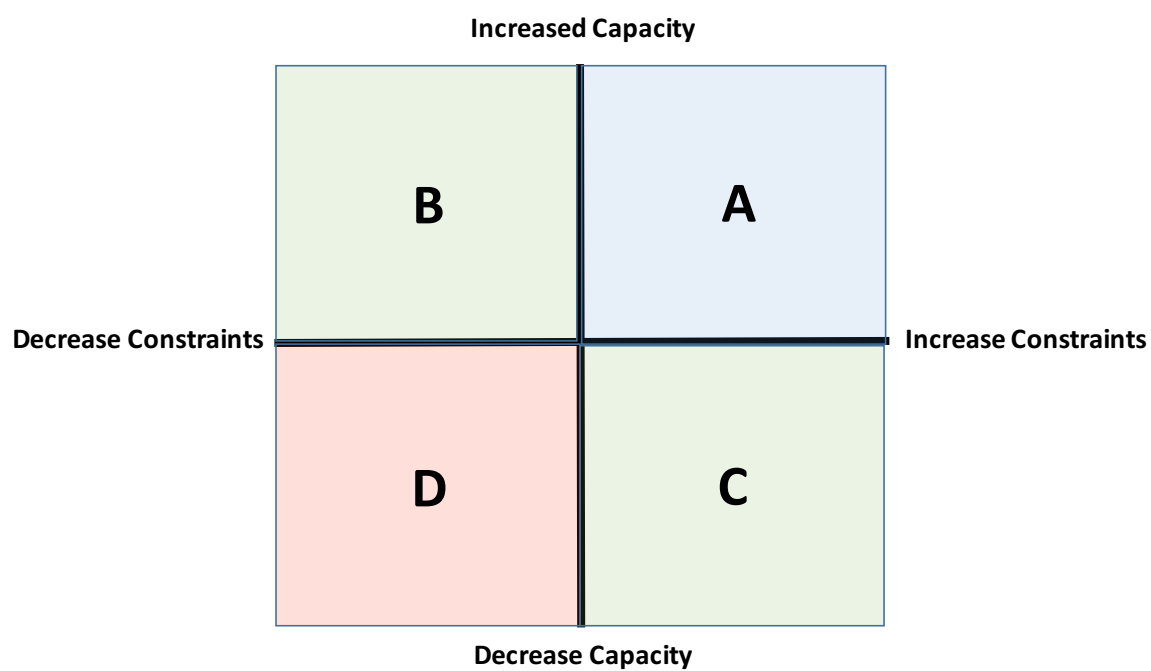


Figure 2.1: Capacity and Constraint Dimensions

This figure shows how the two dimensions of capacity and constraints create different categories of reforms.

The placement of the reforms in Figure 2.1 is based on marginal increases or decreases in capacity or constraint from the status quo and do not speak to the magnitude of the marginal change. If a reform is placed in Quadrant A, it could increase capacity and/or constraints from the status quo, but the theoretical framework here does not specify by how much. The magnitude of that change would vary based on a state's existing baseline level of resources/efficiency and principal-agent/credible commitment problems. For example, let us assume that a very weak state such as Liberia implements a new tactical operational unit. This increases capacity, but it is possible that the increase in resources and efficiency would be greater for a country such as Liberia, where the status quo does not include existing paramilitary groups, than for a country such as the UK, which already has several tactical units, and thus the increase in the security sector's resources and efficiency is perhaps marginal. But here, only the increase or decrease matters, not the size of that change, so an additional tactical unit, whether in Liberia or in the UK, is assumed to increase capacity in both countries.

Making this assumption may be a problematic simplification because larger marginal changes in constraint or capacity could lead to larger increases in the effects from the change. For example, in the UK, the baseline levels of capacity and constraints are already high, which suggests that the marginal effects of change on outcomes of interest should be smaller, but still potentially relevant. In contrast, in a country such as Liberia, where the baseline levels of capacity and constraints are likely to be much lower, the marginal effects on outcomes of interest may be greater. Whether it is or not is up to empirical tests; it does not discredit the overarching

argument. The simplification allows the argument to be more generalizable, and it allows the argument to be more applicable in a variety of contexts depending on particular scope conditions.

### **Reform Examples and Effects based on their Categorization**

Reforms that decrease capacity and constraints (Quadrant D) could exacerbate both state-perpetrated and non-state-perpetrated violence. This is because they decrease the security sector's effectiveness, and states have less control over the actions of their security sectors. An example reform is the creation of parallel security institutions, particularly state-sponsored militias. Carey, Mitchell and Lowe (2013) define them as groups "that (1) are identified as pro-government or sponsored by the government (national or subnational), (2) are identified as not being part of the regular security forces, (3) are armed, and (4) have some level of organization."<sup>28</sup> Others define them as "armed groups that operate alongside state security forces or independently of the state, aiming to shield local populations from rebel demands or depredations and seeking to acquire its loyalty or collaboration (Jentzsch, Kalyvas and Schubiger 2015)."<sup>29</sup> The creation of these groups decreases the state's effectiveness in providing security (Howe 2001, Quinlivan 1999).<sup>30</sup> They decrease effectiveness by being

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<sup>28</sup>See pg. 250. Examples of such groups include the Arkan's Tigers in Serbia, the Rwandan Interahamwe, the paramilitaries in Colombia, the hunter militias and civil defense forces (Kamajors) in Sierra Leone, and the autodefensas in Peru (Alvarez 2006, Jentzsch, Kalyvas and Schubiger 2015).

<sup>29</sup>See pg. 756.

<sup>30</sup>However, for exceptions to this, see Peic (2014) who finds that civilian defense forces (CDFs) providing local security, leverage their superior local knowledge, and provoke insurgent reprisals against civilians. In doing so, they provide the state with valuable counterinsurgency tactics. The results from the cross-national analysis reveal that a state is 53% more likely to defeat a guerrilla threat if the incumbent deploys CDFs. Additionally, see Carey, Colaresi and Mitchell (2015*b*) and Jentzsch, Kalyvas and Schubiger (2015).



less efficient: the more security organizations with parallel mandates, the less likely they are to coordinate. They also increase the likelihood of human rights violations (Carey, Colaresi and Mitchell 2015*a*, Forney 2015, Mitchell, Carey and Butler 2014). The very creation of such entities precludes their training, screening procedures, professionalism, and compensation (Alvarez 2006). As a result, they are more likely to shirk and states may create or support them in order to repress the population (Carey, Colaresi and Mitchell 2015*a*, Carey, Mitchell and Lowe 2013, Mitchell, Carey and Butler 2014).

Reforms in Quadrants B and C could exacerbate an “effectiveness-restraint trade-off.” The tradeoff occurs when increases in one dimension and decreases in the other dimension lead to optimal outcomes for one dimension but suboptimal outcomes for the other. When a reform increases capacity, it increases effectiveness, but if the reform also has some element that decreases constraint, then the resources and efficiency could be used for nefarious purposes. Increased resources and the efficient use of these resources enable the security forces to better gather intelligence, conduct operations, and locate targets, among other goals. But if the same reform gives the security forces more autonomy, or is implemented in conjunction with reforms that give the security forces more autonomy, the resources and efficiency could be used for the security sector’s own gains. Moreover, if the state enacts reforms that make it easier to repress the population, the security sector’s technical skills could repress the population more effectively.

To illustrate the point, let us take a hypothetical reform into consideration—the creation of a new elite tactical unit or police paramilitary unit. The reform could

be placed in Quadrant B. The reform makes the security forces more effective, as such units are an efficient use of resources. At the same time, with a higher degree of autonomy, personnel in the unit are able to use their new-found status, training, vehicles, and weapons off duty to intimidate the population and gain more resources. For example, in Liberia, Human Rights Watch reports, “The ERU [Emergency Response Unit], with an estimated 321 active officers, is a ‘quick reaction force’ that the government established after the war to respond to major internal security breaches, and the PSU [Police Support Unit], numbering about 681 officers, was formed for riot control and to respond to violent crime. Most of the theft or robbery cases reported to Human Rights Watch involved one of these two units and frequently involved the victims being beaten before their belongings were stolen (Brender 2013).”<sup>31</sup> Thus, while the state may be more effective in protecting the population with the creation of these units or other reforms in Quadrant B, they may also open the door to more state-security-force-perpetrated abuse, when the reform also decreases constraints or is coupled with constraint-decreasing reforms.

Reforms in Quadrant C also face a tradeoff. When a reform is “dominant” in decreasing capacity, it is less effective in providing protection from non-state actors. However, it could have some elements of “constraint,” which help mitigate state-perpetrated violence. To demonstrate the potential tradeoff, we can use the example of another reform: Disarmament, Demobilization, and Reintegration (DDR). These programs reduce the size of the state security forces and remove them from combat. The objective of reintegration is to rehabilitate former soldiers so that they

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<sup>31</sup>See pg. 29.

can return to civilian life (Annan et al. 2011). The main goal of DDR is to reduce the capacity of the security forces, but it also mitigates the principal-agent problem, because the program removes personnel that are more likely to shirk, thus ensuring that those who stay in the security forces have beliefs more closely in alignment with those of the state. Additionally, it also punishes the security sector by removing elements of it. Collier (1994) traced demobilized Ugandan soldiers in the 1990s, and found that, before their demobilization, soldiers significantly raised district-level crime rates—statistically they were 100 times more likely to commit a crime than the average citizen. By contrast, however, district-level crime rates did not escalate after the return of those properly demobilized (Collier 1994). Another effect from DDR, nonetheless, is heightened insecurity (Knight et al. 2004, Muggah 2005). Muggah (2005) and Knight et al. (2004) argue that demobilization creates a new class of non-state actors that may perpetuate violence in society—“if former combatants cannot see a role for themselves in the postwar order, they may turn to banditry.”<sup>32</sup> In this sense, DDR can lead to an increase in violence, as was the case in Angola, Mozambique, El Salvador, Cambodia, Eritrea/Ethiopia, and Kosovo (Knight et al. 2004, Özerdem 2002). While the state’s security forces may be more restrained from committing violence against civilians, they may also be less equipped to handle the security situation. This is especially the case because demobilization creates a new group of non-state actors that could engage in violence.<sup>33</sup>

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<sup>32</sup>See Knight et al. (2004), pg. 506.

<sup>33</sup>For example, Kaplan and Nussio (2016) find that recidivism of ex-combatants (or a return to crime) is high, especially when they demonstrate antisocial personality traits, have weak family ties, and lack educational attainment. Additionally, the presence of criminal groups is highly correlated with various kinds of recidivism.

One way to conceive of the tradeoff is through the literature on military offensive and defensive capabilities. Jervis (1978) argues that a state's offensive advantage means "it is easier to destroy the other's army and take its territory than it is to defend one's own."<sup>34</sup> Defensive technology, however, "is keeping the other side out of your territory." A purely defensive weapon is one that can do this without being able to penetrate the enemy's land."<sup>35</sup> A defensive advantage means "it is easier to protect and hold than it is to move forward, destroy, and take."<sup>36</sup> Defensive technology protects without threatening. While, scholars have argued about whether offensive or defensive technology is more likely to lead to war, the basic premise of the argument is that as states display more offensive capability or as the offense has more of an advantage, other states become fearful of the offensive state and take preventative action against it (the security dilemma), arms race becomes more intense, and war becomes more likely (Jervis 1978). On one hand, a focus on offensive technology may create a security dilemma between states. On the other hand, however, an offensive advantage may be a stronger deterrent (Gilpin 1983). Just like reforms in Quadrants B and C, the creation of certain types of capabilities leads to advantages on one level and disadvantages on another.

States can alleviate the tradeoff by implementing reforms that balance the negative aspects of reforms in Quadrants B and C with reforms in Quadrants A, B, or C.<sup>37</sup> For example, states can create new operational tactical units, but also implement

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<sup>34</sup>See pg. 187.

<sup>35</sup>See pg. 203.

<sup>36</sup>See pg. 187.

<sup>37</sup>This approach is similar to Hartzell and Hoddie (2007) who find that multiple forms of power-sharing lead to longer-term peace. The more the different power-sharing institutions overlap, the more there is accountability.

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a civilian oversight or ombudsman program alongside the creation of the new unit. Thus, the civilian oversight agency or the ombudsman ensures that the increased resources and efficiency from the newly created unit are not used for nefarious purposes. This is similar to Lange and Balian (2008) who elaborate on decisions states face related to state capacity more broadly defined than just in the security sector. They argue that according to the “containment” theory, states possess different military, bureaucratic, and institutional capacities to prevent the outbreak of civil war, and that when capacity of all three is high, the state’s institutional resources and territorial reach deter mass rebellion and violence by allowing the state to arrest insurgents, cut off resources to rebel groups, and maintain law and order. However, according to the “instigation” theory, the growing presence of the state (such as taxation, conscription, surveillance) in the peripheral regions and its greater interference in local affairs instigates violence against the state because state expansion is seen as threatening (Lange and Balian 2008). The instigation and containment theories offer different and opposing explanations for conflict onset. The implication is that for states to minimize internal violence they must manage maintenance of a deterrent capability while also maintaining citizen loyalty. Or, applied here, states must offset the negative side effects from constraint-decreasing and capacity-decreasing reforms by balancing them out with capacity-increasing and constraint-increasing reforms.

While this is a likely strategy among many states, many post-conflict states simply do not have the resources to implement policies to increase public goods (Call 2008, Call and Cousens 2008, Ghani and Lockhart 2009, Paris 2004). They do not have resources to adopt multiple security sector policy reforms simultaneously. This means

that there is a particularly acute opportunity cost for reform implementation among post-conflict states. If a state decides to focus on reforms that decrease the state's capacity for force, then it forgoes spending those resources on policies that increase the state's capacity for force and vice versa. The same goes for implementing reforms that increase constraints. If the state decides to focus on reforms that increase the state's capacity for force/decrease constraints, then it forgoes spending those resources on policies that increase the state's constraints/decrease its capacity for force. Thus, many post-conflict states must choose between a domestic security sector that deters violence, but that also potentially reduces trust among citizens, and a security sector that focuses on restraint, but that may not serve as a deterrent against potential belligerents.

Ideal reforms would mitigate state-sponsored violence, but also effectively prevent and respond to non-state-actor-perpetrated violence and be cost-efficient. Reforms that build the security sector's capacity so that it is effective in preventing and responding to violence by non-state actors, but also reforms that constrain the state's security sector from using violence against civilians exemplify the "right" set of reforms for the state to achieve its goals. These reforms are placed in Quadrant A. One example of this type of reform is professionalization. Professionalization, either through the creation of a formal military corps or through the development of [new] training academies, ensures that the security forces will be both restrained and effective (Huntington 1957, Janowitz 1961, 1964).<sup>38</sup> Thus, to avoid tradeoffs, the

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<sup>38</sup>For examples of the evolution and merits of professionalization and training in policing, see Denys (2010), Uildriks (2009), Riccio, Meirelles de Miranda and Müller (2013). It should be noted, however, that if the goal of the state is repression then professionalization may sometimes help the state be more repressive if it is combined with constraint-decreasing reforms (Lin 1992, Smallman

optimal strategy for post-conflict states would be to implement reforms in Quadrant A, because they “get more bang for their buck.” They are able to implement reforms that increase capacity, and therefore effectiveness and constraints and consequently restraint.

*Assumption 4: Depending on their placement in Figure 2.1, security sector reforms could lead to an “effectiveness-restraint tradeoff.” Reforms that increase capacity and constraints could minimize the “effectiveness-restraint tradeoff.”*

### **Problems with Testing the Effect of Security Sector Reforms on Outcomes related to Violence**

The placement of the reforms in different quadrants is based on assumptions about the reforms’ influence on resources, efficiency, and the principal-agent/credible commitment problems. However, the reforms’ impacts on effectiveness and restraint are untested expectations. There are several problems with testing these expectations. The first problem is that the causal direction is difficult to pin down. Violence during conflict (and in the post-conflict phase) is a function of existing capacity and constraint. Thus, reforms could either be responses to conflict or determinants of order. States are not assigned reforms randomly, which means that selection bias presents a problem in any analysis.

Additionally, up until this point, the outcomes associated with state security sec-  


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 2000). Thus, whether the state excels in restraint or repression after professionalization depends on the type of professionalization and whether there are also constraint-decreasing reforms in place.

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tor reforms have only considered a monadic approach, but both states' decisions to implement reforms and any ensuing violence must take into consideration the response by non-state actors. In other words, the onset of violence is affected by the state's security sector capacity and constraint, as well as the relative capacity and constraints of the non-state actors at hand.

Furthermore, the security sector reforms affect the bargaining range of state and non-state actors. Werner (1999) argues that the demands of both sides are endogenous and that demands are a function of the threat environment (each side's relative coercive abilities).<sup>39</sup> This means that a change in the status quo is always possible, but that actors can only credibly demand such a change when they have the resources to back up their claim. When resources change, this could alter the bargaining range. This implies that reforms affect the outcome of bargains, not the probability of bargaining failure (conflict onset). As Gartzke (1999) notes,

“The presence of tools [reforms] alone is not sufficient to account for the act.

A shortcoming with power or capabilities as an explanation for war is that it is not clear why having power yields war as a consequence. Because war is costly, states must have some motive for using force. Traditional theories assume uniform motives for war or other costly contests associated with egoistic actors, competition, or international anarchy. However, uniform motives cannot explain differentiation in behavior among actors with similar power or capabilities.”<sup>40</sup>

Thus, the expectations about outcomes may not be as straightforward as they have

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<sup>39</sup>Her paper is on conflict between states, but the approach can easily be applied within states.

<sup>40</sup>See pg. 570.



been laid out above, and without considering how security sector reforms affect the bargaining environment it is not possible to develop and test concrete hypotheses on outcomes related to violence.

Another problem has to do with the measurement of outcomes. Measurement requires a level of precision that does not yet exist in the data. The measurement problems occur most acutely when testing shirking. Data on the death toll of civilians by government forces, and any other indicators of repression such as human rights violations in the post-conflict period, assume that the state ordered such violence, not that the security sector acted autonomously. In other words, the measures all capture state preference (which is pro-violence) and do not capture when the security forces actually shirk—when the security forces commit non-sanctioned violence. Thus, it is difficult to construct a compelling theoretical story about a direct link between reforms and outcomes, and it is difficult to measure outcomes at a precise enough level to be able to test the theoretical implications and to rule out alternative explanations.

Finally, when it comes to long-term stability and state legitimacy, whether security sector reforms actually lead to certain outcomes, perhaps, matters less than whether the public *perceives* the security sector reforms as having these intended outcomes. Toft (2010) has already discovered a link between security sector reform and violence, but the effect of reforms on legitimacy requires more attention. Public perception and the way the different security sector reforms affect support for the state lay the foundation for restoring the social contract. Thus, for now, we leave these predictions on violence as untested expectations and focus on how different security sector reforms affect perceptions of and support for the state's security sector.

## 2.2 Security Sector Reforms and Legitimacy

The goal of this manuscript is to assess the effect of security sector reform on state legitimacy. This means assessing the impact of the implementation of security sector reforms in Quadrants A, B, C, and D on the security sector's legitimacy. If capacity-increasing reforms increase effectiveness and reduce violence by non-state actors, and if constraint-increasing reforms increase restraint and reduce violence by state security forces, then it is important to assess whether citizens see these connections. Thus, this section first explores measurement of legitimacy and then develops expectations about how different types of reforms affect legitimacy.

### 2.2.1 Measuring Legitimacy

Legitimacy constitutes a “disposition to obey” authority even in times of crisis (Weber, Lassman and Speirs 1994).<sup>41</sup> It means that individuals are willing to “defer to the [states'] institution's decisions and rules and follow them voluntarily out of obligation rather than out of fear of punishment or anticipation of reward” (Tyler 2006).<sup>42</sup> It is a normative belief by actors that the rules and regulations of an institution ought to be obeyed (Hurd 1999). In this sense, there is a distinction between forcing people to obey and inducing voluntary compliance. Legitimacy is based on the latter; it is a “power without force,” where citizens comply in ways against their self-interests and without rewards or punishments, and it means “obeying a law because one feels the law is just” (Tyler 2006).<sup>43</sup> Such a definition of legitimacy means that states

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<sup>41</sup>See pg. 313.

<sup>42</sup>See pg. 375.

<sup>43</sup>See pg. 378.

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do not necessarily have to be strong or have repressive capacity in order to induce compliance (Tyler 2006). Instead, people obey the rules of the state because they are willing to do so. In the context of institutions, this means that civilians comply with institutional rules and regulations. In the context of the overall state, it means that individuals comply with state laws and regulations. Moreover, states are not legitimate if autonomous spheres of authority (i.e. traditional chiefs, patronage networks, clan loyalties) exist in competition with formal institutions, and if individuals comply with those institutions rather than state ones (Sandefur and Siddiqi 2013).<sup>44</sup>

One of the main ways to measure legitimacy is through public opinion about public policies or about the state itself (George 1980, Habermas 1975). Polling citizens about their views on certain public policies is an important way for states to know about the popularity of their reforms. Habermas (1975) argues that assessing public attitudes is one of the predominant ways of measuring a legitimation crisis—a decline in the confidence in administrative functions, institutions, or leadership. Such methods can also be used to assess when legitimation crises reverse course.<sup>45</sup> Sometimes, public policies are shaped by public opinion. For example, Hartley and Russett (1992) find evidence that changes in public opinion consistently affect military spending. Nevertheless, despite the advantages from assessing attitudes about public policy and the state, public approval may not be enough to constitute legitimacy, as there is generally no behavioral change. Citizens may hold positive beliefs about the state,

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<sup>44</sup>For a counterargument, see Baldwin (2015).

<sup>45</sup>Additionally, public opinion polls facilitate a democratic process—for the state, public opinion provides information about which policies have approval from the public and which policies do not, and for citizens, polling gives them a way to voice their beliefs about the state and its policies (Fishkin 1997).

but be unwilling to comply with rules or provide any service to the state. In addition to measuring public opinion, measures of *behavioral* changes are needed to measure legitimacy.

Using the above definition from Tyler (2006), Blair (2013) argues and finds that legitimacy is measurable and distinct from other concepts such as coercion, persuasion, self-interest, personal morality, and social control, all of which may induce citizen compliance. Through a series of lab-in-the-field experiments in Liberia, he finds that when a legitimate authority instructs citizens to make costly contributions to a public good even in the absence of incentives or sanctions, and even when they know others will not do the same, they do so. Based on this thorough evaluation of legitimacy, the key takeaway is that costly compliance is a key component of measuring legitimacy. That is, states augment their legitimacy as more of their citizens make costly concessions to the state voluntarily.

Following this idea, measuring legitimacy may be achieved through indicators of voluntary costly citizen compliance. Costly compliance may take different forms. At the most basic level, it means that people follow the rules of the state; they do not rebel. Individuals buy into the political processes and accept outcomes contrary to individual interest and do not contest them violently (Sabet 2012, Tyler 2006). In other words, when individuals find states legitimate, violent rebellion is less likely. This is the traditional measure used in most studies.

However, compliance may extend beyond simply obeying the law and respecting authority. A more proactive form of compliance could mean that individuals incur costs on behalf of the state or its institutions. This may be demonstrated through

providing some form of support to the state. Counterinsurgency scholars have suggested that support for the state and its institutions occurs through resource provision (Beath, Christia and Enikolopov 2013, Crost, Felter and Johnston 2014), information provision (Berman, Shapiro and Felter 2011, Berman et al. 2011, Condra and Shapiro 2012, Kalyvas 2006), and the provision of recruits to the state (Berman et al. 2011, Condra and Shapiro 2012); but, in general, counterinsurgency scholars have not measured support in this way.

The counterinsurgency literature has generally used perceptual indicators to measure the concept of support. Matanock and Garcia-Sanchez (2014) measure support by asking individuals whether the military should have more autonomy to conduct counterinsurgency. However, they note that there are other ways to measure the perception of support such as asking questions about trust in the military or sympathy for it, or even whether the military should carry out a coup or not. Beath, Christia and Enikolopov (2013) use perceptual measures that include whether certain government institutions “act for the benefit of all villagers,” and whether respondents feel safer now than two years before. Shapiro and Fair (2010) ask about the extent to which different groups pose a threat to “the vital interests of Pakistan in the next ten years.” If individuals support terrorist groups, the assumption is that they do not support the state. Bullock, Imai and Shapiro (2011) use item response modeling to measure support based on endorsement experiments, but the measure of support is of particular policies such as whether the World Health Organization (WHO) plans to provide universal polio vaccinations (Blair et al. 2013). Support is measured on a scale from 1 to 5. Lyall, Blair and Imai (2013) also use an endorsement experiment

to measure support. For them, support means when individuals choose or endorse a reform when they know that it is attributed to different actors. In this literature, while there appears to be novel development in ways to measure sensitive questions pertaining to support, there does not seem to be much consensus on support as a concept nor on how to measure it.

Although perceptual indicators are helpful in gauging individuals' valence toward the state, they do not capture whether individuals' behavior changes. That is, support is an action, not a belief. To gain a better measure for support, we return to Blair (2013) and Sabet (2012), who suggest that individuals support the state when they are willing to voluntarily incur costs on behalf of the state. This may take the form of monetary or social costs. For example, Sabet (2012) argues that in policing, support means that civilians provide information and report crimes; they provide the state with taxes; and they vote or file complaints regarding state institutions. Monetary costs mean that individuals are willing to forgo some portion of their income for the state whether in the form of cash (such as taxes) or other resources. Social costs suggest that individuals are willing to incur community exclusion for performing some activity that benefits the state. Individuals could provide intelligence or information to the state so that it is more effective in its duties despite community perceptions of disloyalty (Huo and Tyler 2002, Sunshine and Tyler 2003, Tyler 2005). While there are other costly forms of compliance, monetary and social costs demonstrate clear, observational behavioral changes that can be used to measure support for the state and its institutions.

These types of indicators of support represent a higher bar than simple compliance

that is measured through the absence of rebellion because they demonstrate that individuals are taking some positive, proactive, costly action in support of the state, instead of just abiding by its laws and rules. Moreover, they are an improvement on the traditional, perceptual measures much of the counterinsurgency literature has used to measure support.

Recall from the previous chapter that restoring the social contract means restoring legitimacy in the security sector first. Lake (2016) asserts that legitimacy is obtained when the state retains sufficient public support for the monopoly of force (Lake 2016). This means that not only should there be positive perceptions of the security forces with respect to perceptions of effectiveness and restraint, but also that citizens should be willing to incur costs on behalf of the security forces. Such legitimacy of the state security forces is the first step towards restoring the social contract between citizens and the post-conflict state.

### **2.2.2 Expectations about Security Sector Reform and Legitimacy**

Institutional changes and reforms could translate to individual-level perceptual changes through daily interaction with the reformed state institutions, or at the very least, information about reforms. Much of the work on state building is played out in daily interactions with the state, especially related to the security forces (Blair 2013, Mazerolle, Bennett, Davis, Sargeant and Manning 2013). As the state builds new institutions and creates new policies, individuals may come to find state institutions

more credible and trustworthy as they have more experience with the reformed institutions. Several studies corroborate this intuition and find that in post-conflict states, policy changes, especially related to service provision, have an impact on generating trust in the state (Bakke et al. 2014, De Juan and Pierskalla 2014, Gates and Justesen 2016, Hutchison and Johnson 2011, Sacks and Larizza 2012). In theory, then, state building that focuses on institutional reforms should lead to changes in perception one person at a time—as individuals receive service and goods provision from state institutions, such actions could alter their perceptions and behavior toward the state and its institutions in a more positive direction.

In the policing literature, there has been some material devoted to understanding how to enhance the public perceptions of the police, and much of it shows that police interactions that demonstrate competency and/or abuse (procedural justice) affect perceptions. In the U.S, Weitzer and Tuch (2005) find that personal safety in one's neighborhood, perception that crime is not a serious problem in one's neighborhood, and the existence of community policing all increase satisfaction. However, the exposure to media coverage of incidents of police misconduct and the perception that police misconduct is widespread both decrease satisfaction. Haberman et al. (2015) find that perceiving higher procedural injustice, higher social disorder, or being more fearful of crime, all link to lower satisfaction with police in violent crime hot spots. Lytle and Randa (2015) show that in the rural U.S., police satisfaction and fear of crime are related and that lower levels of police satisfaction are associated with higher levels of fear. In Europe, confidence in the police is related to perceptions of higher crime, higher property crime rates (Sindall, Sturgis and Jennings 2012), and crime



victimhood (Kääriäinen 2007). In Finland, Kääriäinen (2008) suggests that fear of crime has a negative relationship with attitudes toward the police. The same is found to be true in Russia—an increase in the level of fear of crime results in a decrease in trust in the criminal justice system (Reynolds, Semukhina and Demidov 2008). In Ghana, Tankebe (2009a) finds that public cooperation with the police is shaped by perceptions of current police effectiveness in fighting crime. In China, Sun, Wu and Hu (2013) suggest that enhanced perceptions of the police are significantly linked to urban areas, trust in neighborhood committees, participation in conflict resolution, perceived law and order, and quality of life; and Wu and Sun (2009) suggest that Chinese attitudes toward police are influenced by satisfaction with public safety, governmental capability of dealing with crime, quality of life, and corruption among government officials. Boateng (2016) found that Ghanaians who live in neighborhoods with higher rates of disorder expressed lower trust and confidence in the police, but, contrary to most other studies, that residents who lived in neighborhoods where fear of crime was high tended to have greater confidence in the police. After a review of the literature, Zhao, Schneider and Thurman (2002) contend that a decline in fear of crime ultimately leads to an increase in police confidence.

Studies have also concluded that individuals' perceptions of how well they are treated by the police influence their subjective evaluation of the police (Gau et al. 2012, Hinds and Murphy 2007, Mazerolle, Antrobus, Bennett and Tyler 2013, Mazerolle et al. 2012, Tyler and Wakslak 2004). Compared to police effectiveness, police misconduct toward citizens greatly affects confidence in the police (Miller and Davis 2008). In Romania and Bulgaria, negative public attitudes toward the police appear

to be related to residents' fears of police abuse (Andreescu and Keeling 2012). In Turkey, Özaşçılar, Ziyalar and Yenisey (2015) show that a strong relationship exists between competence and reliability, and that the police-citizen relationship affects perceptions of the police. In Slovenia, procedural justice judgments significantly shape individual perceptions of police legitimacy (Reisig, Tankebe and Mesko 2014). In Jamaica, Reisig and Lloyd (2009) find that high school students who rate police practices more favorably in terms of procedural justice also report a greater willingness to help the police fight crime (i.e., report suspicious activity to the police) in their community.

Although, much of the literature is based on data from the U.S. and other “Western” countries, we can conclude that the police’s effectiveness in reducing crime and the way they treat citizens strongly affect perceptions about the police institution as a whole, and that positive police-citizen interactions are key to improvements in police perceptions. As such, it could follow that citizens’ exposure to reforms that heighten police ability to address crime or that affect their likelihood of abuse also affect citizens’ perceptions and behavior. Indeed, there is evidence that such exposure and contact with police leads to different perceptual outcomes—Mazerolle, Bennett, Davis, Sargeant and Manning (2013) find that the dialogue component of front-line police-led interventions is an important vehicle for promoting citizen satisfaction, confidence, compliance and, cooperation with the police, and for enhancing perceptions of procedural justice.

If reforms have an impact on effectiveness and restraint, then using the two-dimensional categorization system, reforms that increase security sector capacity

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could enhance civilians' perceptions of effectiveness of the security sector, because these reforms may help prevent non-state-actor violence (reduce crime and perhaps perceptions of higher crime rates). Reforms that increase security sector constraint could enhance civilians' perceptions of security sector restraint because these reforms may help ensure that the state security sector is restrained from using violence against the population. Similarly, reforms that decrease the state's capacity may lead to civilians perceiving the security sector as ineffective, and reforms that decrease constraints may lead to civilians perceiving the security sector as abusive.

Implementing the "right" type of security sector reforms to maximize positive perceptions may depend on whether or not reforms address the security needs of the public. In a post-conflict country, many individuals have experienced high levels of violence, from rebels, insurgent groups, terrorists, or criminals (non-state actors) and state forces. This means that citizens' fears may be driven by the potential for violence by either or both state security forces and non-state actors. It could also mean that the same effectiveness-restraint tradeoff mentioned above applies to developing expectations about how security sector reforms affect public opinion and support.

Just as before, reforms in Quadrants B and C could lead to an effectiveness-restraint tradeoff concerning perceptions of the security sector. Reforms in Quadrant B, which increase the security sector's capacity but also decrease constraints (or some combination of both types of reforms), may instill fear in the population because the security forces have more autonomy to shirk or the state has more leeway to repress. However, they may be more effective in providing protection against non-state actors, which means that the population may still perceive them as effective.

Using the same example from above—the development of a new security tactical unit, the “dominant” dimension is capacity-increasing, which means that in the context of a post-conflict country, the unit has received new arms, vehicles, training, and other resources. Nevertheless, the reform also could decrease constraints, because such tactical units usually have more autonomy (Taylor, Torpy and Das 2012).<sup>46</sup> In this case, these tactical units may enhance perceptions of effectiveness but also elicit fear of abuse.<sup>47</sup>

Reforms in Quadrant C, which decrease capacity, but increase constraints (or some combination of both) may alleviate fear of an abusive security sector, but citizens may perceive the security sector as ineffective in providing protection against non-state actor threats. For example, one study in the UK found that the number of police deployed has an impact on public confidence through its direct effect on visibility, and that by implication, reducing police numbers is likely to erode public confidence in the police, even if frontline visibility is maintained (Sindall and Stur-

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<sup>46</sup>See also: Kraska and Kappeler (1997), Kraska and Paulsenb (1997), and Balko (2013).

<sup>47</sup> As another example we could assess the presence of the security forces in the rural periphery that fits in Quadrant B. Security forces are often concentrated in the capital or major cities, but state presence is particularly important in the peripheries, as these are the areas where insurgents are most likely to gain an advantage and form an alternative identity distinct from the nation (Cederman 2008). Thus, the reform may be considered dominant in increasing capacity. In the absence of security forces, non-state actors have more leeway to organize and to attack civilians. Scholars have shown that in areas where there is already strong state presence and where the state has control, violence is less likely (Kalyvas 2006, Kalyvas and Kocher 2009). However, such reforms may increase perceptions of effectiveness but also perceptions of abuse among citizens who see the increased presence as a threat to their own safety, as state actors are sometimes the perpetrators of violence. The further away the security personnel are from central command, the less oversight they may have, which enables security forces in the periphery to break rules without getting caught. In some cases, this may mean harming the local population, whether through inflicting violence or other negative externalities. For example, Enloe (1989) and Moon (1997) suggest that sexual exploitation and sexual and gender-based violence is a problem around military bases. The same types of problems could apply to domestic security forces when they are deployed long-term in rural areas, away from home. The further security forces are from their “home,” the more likely they may be to become involved in transactional sex, sexual exploitation and abuse, and perhaps other illicit behavior.

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gis 2013). Moreover, using the example from above—disarmament, demobilization, and reintegration programs—the dominant “dimension” is capacity-decreasing, which means that the dismantling of the security forces could lead to perceptions of ineffectiveness. At the same time, getting rid of the security forces constrains the state in its ability to use force against the population and could reduce shirking. This could lead to enhanced perceptions of security sector restraint.

Optimally, states would like to increase perceptions of effectiveness without eliciting fear. To do so, states could implement reforms that fall in Quadrant A or reforms that increase both capacity and constraints. This idea is supported by Tankebe (2008), who finds that building public trust in the police requires democratic reforms that simultaneously improve the capacity of the police to achieve both effectiveness and procedural fairness (better police behavior). Implementing these types of reforms is a cost-efficient approach for post-conflict states that lack resources.

The implementation of certain reforms could have an effect on costly compliance or support for the state’s security forces via changed perceptions. If reforms alleviate fear of violence by non-state actors and/or violence by the state security forces, individuals may be more willing to support the state’s security forces and find it legitimate. When state institutions such as the police are perceived to be incompetent, citizens turn to vigilantism (Tankebe 2009*b*). Thus, similar to the literature, which suggests that changes in perceptions are necessary for reporting crimes to the police,<sup>48</sup> the argument here is that perceptual change is needed for support. Only

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<sup>48</sup>See Tankebe (2010), who finds that satisfaction with reform measures explains assessments of police trustworthiness, procedural justice and effectiveness. Moreover, Reisig, Tankebe and Mesko (2014) find that perceived police legitimacy explains self-reported compliance with the law.

when reforms are perceived to address violence in post-conflict states will citizens be likely to support the state, as addressing grievances is fundamental to restoring the social contract.

It is possible that “ideal” reforms or combinations of reforms may not exist or states may not be able to implement them for various reasons. First, there may not be a unified consensus on perceptions of security sector reform. Some parts of the population may be affected by the effectiveness-restraint tradeoff, while others are not. In this scenario, it is not possible to implement reforms that appease all parts of the population. Second, states may not have information about which types of reforms mitigate this tradeoff. It is not possible to assess how the public perceives every public policy or reform that is implemented. Third, even if there was consensus on the “right” reform(s), the state may not be able to enact such reforms due to the cost—whether economic, political, or social. Nonetheless, the best that states can do is try to implement the right set of reforms, which may be those that fall in Quadrant A.

### **Exposure to Violence and Civilian Perceptions**

Post-conflict countries represent a unique set of states, because of a heightened probability that civilians have been exposed to wartime violence and post-war violence. During civil wars, both state and non-state actors commit violence. Violence against civilians may be extreme in some cases, including mass killings (Valentino, Huth and Balch-Lindsay 2004). The type of violence may take different forms, including sexual violence, torture, indiscriminate violence, and mass killings (Leiby 2009). Ad-

ditionally, different actors, including the state, rebels, insurgents, and criminals target civilians (Eck and Hultman 2007). Eck and Hultman (2007) find that rebel forces commit more violence against civilians than state forces, but that regime type may condition violence used by state actors.<sup>49</sup> However, with respect to sexual violence, Cohen and Nordås (2014) find that state militaries are more likely to be reported as perpetrators of sexual violence than either rebel groups or militias. Moreover, states commit sexual violence concurrently with other forms of violence (Cohen and Nordås 2015, Leiby 2009). Thus, even though rebels may perpetrate more “traditional” forms of violence at a higher rate than state forces, state parties are likely to participate in forms of violence that may not normally be counted in some studies.<sup>50</sup> The implication is that in most civil wars, both state and non-state actors perpetrate violence in different forms that affect civilians, and that people’s past exposure to violence during the war may affect their future perceptions and behavior toward the state.

In addition to wartime violence, many post-conflict countries also experience high levels of crime after a war ends (Kaplan and Nussio 2016).<sup>51</sup> Though much of the evidence for this is currently anecdotal, there are many cases where violence in the form of crime has escalated in the post-conflict period, such as in El Salvador, and other cases where reports of rape continue to be high in the post-conflict period, such as in Liberia and the Democratic Republic of the Congo.<sup>52</sup>

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<sup>49</sup>In their dataset, they find that one-third of conflicts involved violence by both sides. See also Fjelde and Hultman (2013), who find that the number of civilians killed by both governments and rebel groups is higher in areas inhabited by the enemy’s ethnic constituency.

<sup>50</sup>Such as sexual humiliation and torture (Leiby 2009).

<sup>51</sup>Wartime violence is not the only form of violence. Places where there are high rates of crime such as Honduras or Mexico may also face the tradeoff mentioned in the above section. However, this manuscript is focused on post-conflict countries.

<sup>52</sup>See for example, the website “Women Under Siege,” <http://www.womenundersiegeproject>.

In general, legacies of conflict and victimization shape the lens through which individuals perceive others and interpret events (Bar-Tal et al. 2012). However, there is mixed evidence about whether previous exposure to wartime violence affects trust and social capital within communities. In Sierra Leone, Bellows and Miguel (2009) show that individuals whose households directly experienced more intense war are more likely to attend community meetings and join local political and community groups. In other words exposure to violence may enhance social capital. Similarly, Blattman (2009) finds that child abduction leads to substantial increases in voting and community leadership, largely due to elevated levels of violence witnessed. Gilligan, Pasquale and Samii (2014) find that members of communities with greater exposure to violence during Nepal's civil war are more likely to contribute to public goods and are significantly more trusting. However, in Tajikistan, Cassar, Grosjean and Whitt (2011) find that self-reported victimization is negatively associated with trust in people within the same village and positively with trust in citizens from distant regions. In Uganda, De Luca and Verpoorten (2015) find a decrease in social capital in districts exposed to battle events. Collier and Rohner (2008) also find negative effects of violence on generalized trust. Using survey data from northern Afghanistan, Weidmann and Zürcher (2013) do not find evidence for the hypothesis that wartime violence leads to an increase in social cohesion. These studies, however, mostly focus on trust and social capital in general and not necessarily toward the state.

Fewer studies look at the connection between exposure to wartime violence and state and institutional legitimacy. In Sierra Leone, Sacks and Larizza (2012) find



that respondents who live in areas particularly affected by war are more likely to view their local government councilors as trustworthy and that when citizens receive direct service provision, trust is likely to increase.<sup>53</sup> Bakke et al. (2014), studying the Abkhazian society, find a positive and significant association both between victimization and internal legitimacy and between service provision and internal legitimacy.<sup>54</sup> However, in Africa, Hutchison and Johnson (2011) find significant detrimental effects of political violence on political trust, but find that higher institutional capacity is associated with increased levels of individual trust in government.<sup>55</sup> Similarly, a recent study by Gates and Justesen (2016) finds that political violence by Tuaregs against the Malian state had negative effects on people's trust in the national president.<sup>56</sup> Finally, in Nepal, De Juan and Pierskalla (2014) find that observing civil war violence and the state's inability to end it exerts negative effects on people's trust in the state.<sup>57</sup>

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<sup>53</sup>Specifically, they ask: "In your opinion, do you believe local councilors or do you have to be careful dealing with them?"

<sup>54</sup>To assess regime legitimacy, they ask the respondents whether they trust the ruling regime (the president and parliament). For institutional legitimacy, they rely on questions that inquire about people's trust in more permanent institutions, specifically the police and judiciary. The survey includes several questions that capture people's feeling of postwar security and safety, in terms of both criminal and political violence. The study reveals that people's concerns about the provision of public goods such as democracy, economic development, and health services are, in addition to perceptions of safety and security (or lack thereof), important determinants for internal legitimacy. They find that people's perceptions of corruption are likely to have negative effects for all forms of internal legitimacy. They also found that women were more likely than men to trust the judiciary.

<sup>55</sup>In this study, for each question, respondents were asked the degree to which they placed trust in the particular sector of government (executive, the courts, the police, the armed forces, electoral commissions, and government-run media) along a four-point scale (0-3). After combining these scores into an additive trust index for each respondent, the dependent variable ranges from 0 (least trusting) to 18 (most trusting). They find that predictors, including overall assessment of government performance, democratic and economic satisfaction, and political efficacy are strongly and positively associated with political trust, while media exposure, education, and economic hardship tend to decrease political trust.

<sup>56</sup>The study asks, "Do you approve or disapprove of the way the following people have performed their jobs over the past twelve months, or haven't you heard enough about them to say: President Amadou Toumani Tour," Respondent answers are given by the four categories strongly disapprove, disapprove, approve, strongly approve.

<sup>57</sup>They asked the question: "How much of the time do you think you can trust the National government to do what is right?" The answers were never, hardly ever, some of the time, most of

While the findings differ with regards to how exposure to violence affects support for the state, many of these studies show that this mistrust can be overturned with state policy changes and reforms, especially related to service provision. These studies do not explore whether changes in the domestic security sector mediate perceptions and behavior toward the state based on individual experience with violence.

Violence experienced in the post-conflict period may also influence perceptions of the security sector. Victimization by both criminals and the police force itself leads to negative perceptions of the police (Koenig 1980, Lasley 1994, Smith and Hawkins 1973). Rusinko, Johnson and Hornung (1978) find that positive contact with police predicts positive attitudes, and negative contact predicts negative attitudes toward police. Koenig (1980) finds that attitudes toward the police are generally favorable across all subpopulations but tend to be lower than average among people who have experienced a household criminal victimization during the preceding year. Positive interactions with police lead to more trust and legitimacy in the state (Mastrofski, Snipes and Supina 1996). Recently, however, Bateson (2012) finds that crime victimization ranks among the most influential predictors of political participation. This may mean that negative institutional perceptions do not necessarily translate into less compliance or support for the state. Nevertheless, the studies indicate that victimization by non-state or state actors conditions perceptions of the state security forces.

Prior victimization may affect the public's reception of reforms in different ways. First, previous exposure to violence by certain types of actors may condition people's

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the time, and always.

perceptions of the state when they are exposed to state reforms. If the reforms implemented by the state remedy past grievances, individuals may be more likely to perceive the security sector positively. The goods states provide should benefit the public in such a way as to enhance public opinion of the state.

For post-conflict states, the type of reforms that states implement in order to restore support may be determined by whether they address the types of grievances that occurred during the war, which usually takes the form of addressing the type and perpetrator of violence committed. Correcting for past grievances entails addressing violence during the war and also violence in the post-conflict period. If individuals experienced violence by state security forces, they may be afraid of state forces. If individuals were exposed to violence by non-state actors, they may be afraid of non-state actors. These fears may condition how individuals perceive institutional changes in the security sector. If individuals experienced violence by non-state actors, and the state implements reforms that decrease capacity, those individuals may be more likely to perceive the security sector as ineffective; but if the state implements reforms that increase capacity, those individuals may be more likely to perceive the security sector as effective. Similarly, if individuals experienced violence by the state, and the state implements reforms that decrease constraint, those individuals may be more likely to perceive the security sector as abusive; but if the state implements reforms that increase constraints, those individuals may be more likely to perceive the security sector as restrained.

Alternatively, security sector reforms may instead remind an aggrieved public of the ineptitude of the security forces. There is a large body of evidence that suggests

that trauma from violence has long-term effects and cannot easily be remedied (Scharf 2007, Shmotkin, Blumstein and Modan 2003, Steel et al. 2002, Wright, Master and Hubbard 1997). For such people, reforms may not have a restorative effect and may even exacerbate perceptions, because the exposure to reforms only serves to remind them of how the security forces failed them. Thus, regardless of whether states implement reforms that increase capacity, victims of non-state aggression may continue to perceive the security sector as ineffective. Additionally, regardless of whether the state implements reforms that increase constraints, victims of state-perpetrated violence may continue to perceive the security sector as abusive.

## **2.3 Conclusion**

The chapter has developed a conceptual framework for understanding how states recovering from civil war can restore the social contract and regain legitimate authority after a conflict through the implementation of different security sector reforms. It started by providing a way to categorize security sector reforms along two dimensions. The dimension of capacity involves resources and efficiency, whereas the dimension of constraints involves mitigating the principal-agent/credible commitment problems. Security sector reforms fall into different quadrants, and their placement may have implications for violence—capacity-increasing reforms increase security sector effectiveness and therefore mitigate non-state actors violence, and constraint-increasing reforms decrease security sector abuse and therefore mitigate state-security-force-perpetrated violence. Reforms that increase one dimension but decrease the other

may exacerbate the restraint-effectiveness tradeoff. Reforms may also have similar effects on public opinion. Individuals may perceive reforms that increase capacity as more effective, and may perceive reforms that increase constraints as more restraining, and reforms that increase one dimension but decrease the other may lead to an “effectiveness-restraint” tradeoff in perceptions and perhaps decreased support for the state.

Whether reforms lead to this tradeoff in perceptions or not is important when selecting reforms, as it suggests that not all reforms help restore the social contract. If citizens are fearful of the security sector, or if they do not find the security sector effective, then they may not find it legitimate. The chapter suggests that reforms that fall in Quadrant A—capacity and constraint-increasing—or a combination of reforms that increase capacity and constraints may have the best chance of avoiding the tradeoff.

The next two chapters test some of the theoretical implications from this chapter. They assess whether two reforms, one that is unambiguously constraint-increasing and capacity-increasing (though ambiguous with respect to which dimension is dominant) (Quadrant A), and one that is more ambiguous with respect to whether it is constraint and capacity-increasing (Quadrant A), as it could also be constraint-increasing, but capacity-decreasing (Quadrant C), affect perceptions of effectiveness and restraint. The former reform is not predicted to induce a perceptual “effectiveness-restraint” tradeoff, whereas the latter reform may affect the tradeoff.

# Chapter 3

## Micro-Level Analysis:

## Professionalization of the Security

## Forces

This chapter turns to the micro-level analysis of security sector reform and perceptions of and support for state security forces. The goal of this chapter is to test some of the theoretical relationships between security sector reform and state legitimacy from Chapter 2 using a security sector reform that is established as both capacity and constraint-increasing. The following chapter evaluates female ratio balancing, a security sector reform that is more ambiguous with regards to whether it is both capacity and constraint-increasing. Both chapters use data from a field experiment conducted in Liberia in 2015, which randomized police patrols in Grand Kru County, a rural county with very little security sector presence.

### 3.1 Citizen Exposure to Police Professionalization

Testing how security sector reforms impact citizens' perceptions and behavior requires exposing the public to the security sector reform. This can be done through exposing the public to a reformed security body, whether police, military, or other organization. Police, perhaps more so than other state actors, have the ability to change perceptions through their daily interactions with the public (Mazerolle, Antrobus, Bennett and Tyler 2013). The police interact directly with people, as they have to solve everyday problems and inquiries, and in doing so they perform a socialization role by teaching people about how the system works and how fairly it responds to public requests (Rothstein and Stolle 2008).

This citizen-police engagement occurs in two ways. "Reactive" exposure occurs when there is some sort of emergency or when citizens have committed a crime. Police are called to respond to incidents and thus citizens are exposed to them, or citizens have committed a crime and police arrest and hold them. In contrast, "proactive" police exposure involves community policing and outreach programs that expose the public to the police when there is no emergency. Proactive exposure to the police may be used to deliver information to communities, or to improve police-community relationships (Cordner 2014).

Proactive police exposure provides a way to communicate police reforms to the public. Outreach by "reformed" police officers may lead to reduced violence and therefore enhanced perceptions of effectiveness (Mazerolle, Antrobus, Bennett and Tyler 2013, Ratcliffe et al. 2011, Sherman and Weisburd 1995). In the U.S., outreach

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programs in which police take a “proactive” approach to informing communities about reforms or other public service announcements have sometimes been successful in preventing crime (Cordner 2014). In post-conflict countries, outreach by police is important particularly in the rural periphery, where there is very little state/police presence. In such places, citizens are unlikely to know about reforms unless they have received information about them. Community policing presents a way for post-conflict states to display their newly reformed police force to the public. Visits by reformed police officers are likely to have more of an effect than information campaigns, because with community policing, citizens receive a public goods, whereas with information campaigns citizens don’t actually experience the reform first hand.<sup>1</sup> Thus, exposure to reforms can be achieved through community policing programs whereby police conduct outreach through household visits.

Moreover, this contact or exposure from proactive outreach with the local population may translate into increased empathy by the local population for police officers (Tropp 2012). Empathizing with members of a different group can enhance the support on the part of the empathizers (in this case, the rural communities and villages) for the welfare of the other group (the police) (Mallett et al. 2008, Motyl et al. 2011), which means that contact between groups can improve intergroup attitudes through reducing threat and enhancing empathy between the groups (Pettigrew and Tropp 2013). When the police have more contact with civilians, it leads to better community level outcomes (Diamond and Lobitz 1973, Hawdon, Ryan and Griffin 2003,

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<sup>1</sup>Preliminary analysis from an informational treatment arm in Grand Kru County shows that information about police reforms from fellow citizens has no effect on enhancing perceptions. These results are not included in this manuscript.



Roth et al. 2004, Sims 1988). These positive interactions can be institutionalized through community outreach, civil military projects, or community policing, as the basic foundation of such activities relies on more proactive police presence in communities (Friedmann 1992, Skogan and Hartnett 1997). In the absence of proactive, formal programs to promote positive interactions between locals and security forces, there may be high levels of mistrust and fear (Dinnen and Peake 2015).

In this chapter, the focus is not on exposure to reforms through “reactive policing,” but rather, exposure to reforms is operationalized through proactive policing. The police outreach program exhibits and highlights reforms that the police have undergone with respect to professionalization, including participation in the training academy and the implementation of standards for recruitment.<sup>2</sup> The outreach efforts also display the outward appearance of professional police officers through the utilization of uniforms and badges.

### **3.1.1 Perceptual Expectations about Police Professionalization**

States professionalize their police force as a way to increase its capacity and constrain it from abusing the population. Reforms that professionalize the security sector fall in Quadrant A of Figure 2.1 (Chapter 2). Professionalization increases capacity because it transforms a “rag tag” group of militarized personnel into a better/highly trained group. The professionalism [in the military], according to Huntington (1957),

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<sup>2</sup>See Chapter Appendix for a script of the police visits that included an explanation of the Liberian National Police’s professionalization.

requires a high degree of expertise, responsibility, and corporateness. Professionalism is achieved when there are standards for entry, a system of rank, training, a staff system, and a “general esprit and competence (Huntington 1957).”<sup>3</sup> Most of this is achieved through academies and training.<sup>4</sup> For the military, Huntington (1957) suggests that officers in the officer corps should devote one-third of their careers to schooling. In addition to academy training, Janowitz (1961) highlights the importance of discipline, hierarchy, an elite nucleus, protocol, honor, and doctrine, among other factors, as components necessary for “the professional soldier.” These practices ensure an improvement in the quality of security and protection provided by the security sector.

The same insight from the military can be applied in the context of policing. Professionalization of many modern-day police forces (mostly in Europe) included full-time occupation, fixed payment, formalized rules, and requirement of higher competence (Denys 2010). Without a professional police force, or one that includes standards for recruitment, training, rank, and competency, security provision is likely to be less effective.

*H1a: Compared to individuals that do not experience household visits from professionalized police officers, individuals that experience household visits from professionalized police officers are more likely to perceive the security sector as effective.*

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<sup>3</sup>See pg. 21.

<sup>4</sup>In Chapter 5, professionalization is operationalized as the development of a new training academy for the security forces, which occurred in 14% of conflict and post-conflict years between 1989-2012.

Professionalization increases constraints because it mitigates the principal-agent problem in at least two ways. It addresses the adverse selection problem by creating standards or eligibility criteria for admission into academies or into the organization. Another way of monitoring the behavior of the security forces or mitigating the principal-agent problem is through changing the beliefs of security sector agents so that they more closely align with that of the principal. Training academies also indoctrinate personnel to have likeminded beliefs. As Janowitz (1961) states, “the academies set the standards of behavior for the whole military profession,” and “the officer candidate finds that the full cycle of his daily existence come under the control of this single authority, for military [police] life is institutional life.”<sup>5</sup> In this way, academies serve as a socialization device so that recruits develop values that are dictated by the state. As recruits are screened and as they are indoctrinated, they may be less likely to shirk. Consequently, they may also be perceived as less likely to be abusive. In addition to mitigating the principal-agent problem, professionalization may also minimize the credible commitment problem, as professionalization ensures that the security forces are trained in the rules for using violence such as “rules of engagement,” or “use of force” guidelines (Desmedt 1984, Martins 1994).

*H1b: Compared to individuals that do not experience household visits from professionalized police officers, individuals that experience household visits from professionalized police officers are more likely to perceive the security sector as restrained.*

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<sup>5</sup>See pg. 127.

While household visits by professionalized police forces are expected to enhance perceptions of both effectiveness and restraint, they may have more of an effect on restraint, due to the “proactive nature” of household visits, and less of an effect on perceptions of effectiveness. When the police respond to an incident or emergency in a way that solves the problem at hand, they may be perceived as effective, but if they are unable to respond or do so in a way that does not solve the problem, they may be perceived as ineffective. While professionalized police officers should be more likely to respond effectively, the actual display of effective policing is necessary to change perceptions (Brown and Reed Benedict 2002). A study by Mazerolle, Antrobus, Bennett and Tyler (2013) shows that a “procedurally just traffic encounter with police [the experimental condition] can shape citizens’ views about the actual encounter directly and general orientations toward the police relative to “business-as-usual traffic stops” in the control group. Such positive responses are important for public confidence, particularly if locals in rural areas have little prior contact with security institutions (Dinnen and Allen 2013). In this sense, reactive policing, if done effectively, may be more successful in generating perceptions of effectiveness.

Although effectiveness is displayed by police response, a reactive demonstration of police effectiveness is perhaps unnecessary for enhancing perceptions of restraint. In contrast, proactive policing through household visits actively demonstrates that police are not abusive, though it does not necessarily demonstrate that the police are effective, because the police are not demonstrating their capability to respond to incidents through these visits. The interactions may elicit perceptions of restraint

more so than perceptions of effectiveness. In this chapter and manuscript, reactive police response is not tested. Instead, the chapter focuses on the effects of proactive community outreach by professionalized police. Thus, we may expect that proactive policing has more of an effect on perceptions of restraint than on perceptions of effectiveness.

This study does not compare exposure to professionalized police and unprofessional security organizations directly but assumes that, in the absence of proactive policing by professional police officers, villages in remote parts of the state rely on informal security or have been exposed to unprofessional security forces during the war. Ideally, in order to assess whether professionalization leads to enhanced perceptions of effectiveness and restraint, we would compare citizen exposure to unprofessional versus professional police forces. Unfortunately, this is not possible for several reasons. First, all the police in Liberia have been professionalized since the end of the war. Second, while there are civilian defense groups in different villages, it is not feasible to randomize visits by such forces, as the groups are village specific. Moreover, it may not have been ethical to randomize such visits, as the civilian defense groups' actions during visits would be unpredictable. Instead of comparing unprofessional and professional forces, the assumption made here is that most people in the villages have been exposed to unprofessional security forces during the war. Additionally, many villages rely on informal security, because the police are not present in such rural areas. This means that comparing visits by professionalized police officers with those that did not receive visits *de facto* means that we are comparing exposure to professional versus unprofessional forces. This is the best research design possible,

given the constraints.

### **3.1.2 Previous Exposure to Violence and Police Professionalization**

When it comes to developing or redefining perceptions of the security forces, individual priors play a major role. Past experience with the security forces may influence the degree to which current interactions with police affect perceptions. Positive perceptions of the police enhance confidence in the police, whereas negative ones lead to less confidence (Brown and Reed Benedict 2002, Nofziger and Williams 2005). Similarly, if the security forces were unable to provide protection and safeguard the population in the past, this could lead to negative perceptions of the police (Payne and Gainey 2007). Individuals may perceive the police negatively when there is more crime (Bailey and Dammert 2005), and crime and violence can undermine the course of police reform by eroding credibility even when the reform efforts contribute to broader governing processes (Marenin 1996). Thus, prior victimization is an important consideration in evaluating how reforms affect perceptions of effectiveness and restraint.

There may be two ways that past negative experiences interact with present-day exposure to reforms to change perceptions. First, if present-day interactions are positive, the reform may have a restorative effect on negative past experiences whereby the reform corrects for past grievances. The positive present-day interaction overshadows the past negative experience. If reforms have a restorative effect, then

present day interactions between victims and the security force may yield perceptions of effectiveness and restraint.

*H2a: Compared to individuals that did not experience visits by police officers, individuals that experienced household visits from police officers and that were exposed to previous violence are more likely to perceive the security sector as effective.*

*H2b: Compared to individuals that did not experience visits by police officers, individuals that experienced household visits from police officers and that were exposed to previous violence are more likely to perceive the security sector as restrained.*

In contrast, present-day interactions with the security forces may remind civilians of past failures, particularly failures that led to traumatic outcomes such as violence during a war *despite the implementation of professionalization reforms*. In a post-conflict context, this might mean that if state forces were involved in violence, then citizens may be reluctant to trust security forces even if they are professionalized. Similarly, if non-state actors committed violence, it demonstrates that the state was unable to contain the conflict and prevent violence, which means that individuals who were exposed to violence by non-state actors may be more reluctant to find the state effective in providing security despite professionalization. Instead, the visits may serve as a reminder of these past negative experiences.

*H2c: Compared to individuals that did not experience visits by police officers,*

*individuals that experienced household visits from police officers and that were exposed to previous violence are less likely to perceive the security sector as effective.*

*H2d: Compared to individuals that did not experience visits by police officers, individuals that experienced household visits from police officers and that were exposed to previous violence are less likely to perceive the security sector as restrained.*

### **3.1.3 Police Professionalism and Support for the State Security Forces**

Chapter 2 suggested that institutional reforms may not only affect individuals' perceptions of the state but also their support for the state's security forces. Support may be mediated through positive or negative perceptions of state institutions. If individuals have positive perceptions of the state, they may be more likely to give the state resources, and if they have negative perceptions of the state, they may be less likely to give the state resources. Thus, if professionalizing the police increases perceptions of effectiveness and restraint, it may also increase support for the state's security sector. If there is a relationship between perceptions and support for the state's security forces, then reforms that enhance perceptions of effectiveness and/or restraint should also lead to support for them.

*H3a: If individuals perceive the security sector to be effective, they are more*



*likely to support the state's security forces*

*H3b: If individuals perceive the security sector to be abusive, they are less likely to support the state's security forces.*

If the reforms led to positive perceptions of the police force, then it is possible that for this subset of people for whom reforms enhanced positive perceptions, they are more likely to support the state. When citizens perceive that the reforms provide a public good (security from both state and non-state threats), they may be more likely to find the security forces legitimate. In the traditional social contract sense, citizens provide resources to the state's security forces in exchange for protection. This simple bargain is tested directly here.

*H4a: Compared to individuals that did not receive visits by police officers, individuals that experience household visits from police officers and that subsequently perceived the security forces as more effective or less abusive are more likely to support the state's security forces.*

It is also possible that reforms have an independent effect on support for the state's security forces, without being mediated by perceptions of the security sector.

*H4b: Compared to individuals that do not experience household visits from professionalized police officers, individuals that experience household visits from*

*professionalized police officers are more likely to support the state's security forces.*

## **3.2 Case Selection: Grand Kru, Liberia**

In order to evaluate how police professionalization affects perceptions and support for the state's security forces, community outreach by a professionalized police force must be compared to a status quo where there is no exposure to or outreach by a professionalized police force. States may not be able to fully professionalize all parts of their police force or deploy professionalized police forces to all parts of the state due to resource constraints. In some countries or areas within countries, there may be minimal presence of professionalized police forces. These areas may rely on unprofessional security forces such as civilian defense groups (Jentzsch, Kalyvas and Schubiger 2015). Such conditions are the reality or the status quo in many countries that are weak, fragile, or collapsed, because the state or state institutions are not present in vast swaths of territory (Soifer and Vom Hau 2008). In countries such as Liberia, South Sudan, Haiti, and Somalia, and other such post-conflict countries, entire security forces were destroyed by the war, which means that the state often starts out with no security force. It is in these contexts where capacity is low that civilians are likely to perceive the state security sector as ineffective, and thus reforms that professionalize the security sector may yield significant effects because changes will be noticeable and more salient to the population. Thus, in choosing a case, significant variation in terms of security sector presence is necessary.

Liberia is a post-conflict country with weak state institutions. The civil war ended

in 2003, after nearly two decades of fighting. The UN Mission in Liberia (UNMIL) arrived in 2003, and there has been peace since the mission's arrival. However, Liberia is currently one of the poorest post-conflict countries in the world (Ciment 2013), and by the end of the war, Liberia had fifteen different security agencies with overlapping functions; many police stations had been abandoned, destroyed, or taken over by rebel forces; the state lacked basic equipment, vehicles, fuel, and communications systems; and, many police officers and other government officials had fled the country (Friedman and MacAulay 2011). In short, the security forces were in dire need of restructuring and professionalization.

Another important consideration is variation in exposure to violence during the civil war. Most Liberians were exposed to violence during the war. Table 3.1 represents different levels of violence perpetrated by different actors. The mean fatality estimate is calculated using the UCDP one-sided violence database from 1989-2013 (Eck and Hultman 2007). It represents the average number of fatalities committed by the actor if they engaged in violence. State forces in Liberia engaged in violence during six years (1990, 1999, 2000, 2001, 2002, and 2003). The average level of violence by the state was lower than the average for all conflict states (701 versus 2210, which is the mean for all conflict states). Rebel forces in Liberia also engaged in violence during six years (1990, 1993, 1994, 1995, 1996, 2003). Rebel forces included five different groups (NPFL, INPFL, LURD, LPC, and ULIMO). The mean level of violence committed by non-state actors was higher than that of all conflict states (676 compared to the mean for all conflict states of 320).<sup>6</sup>

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<sup>6</sup>The difference between government and rebel mean fatality estimates is not statistically signif-

Moreover, the mean rape prevalence score is calculated using the SVAC dataset (Cohen and Nordås 2014).<sup>7</sup> The data suggest that for conflict active years in Liberia, the prevalence of rape by both actors was minimal, but was higher than the average rape prevalence score for all conflict countries for both state and non-state actors (for state actors, the mean for all conflict states was 0.3 and for non-state actors, the mean for all conflict states was 0.15).<sup>8</sup> Moreover, according to Human Rights Watch and Amnesty International reports for Liberia, both sides reached a level where rape was described as “widespread,” “common,” “commonplace,” “extensive,” “frequent,” “often,” “persistent,” “recurring,” a “pattern,” a “common pattern,” or a “spree.”

Table 3.1: State and Non-State Actor Violence in Liberia during the Civil War

<b>Actor</b>	<b>Mean Fatality Estimate</b>	<b>Mean Rape Prevalence</b>
State Actors	701	0.38
Non-State Actors	676	0.42

Within Liberia, Grand Kru County was chosen for testing the hypotheses. The county is one of the most isolated in the country. Nevertheless, the county experienced violence during the war, which has led many to fear both the government and non-state actors. In Grand Kru, 33% of the population experienced abuse due to the civil war, 38% were attacked with a weapon, 69% lost family, and 70% witnessed someone being tortured during the war (Vinck, Pham and Kreutzer 2011). It has also received very little attention from the state, which means that local inhabitants have mostly

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icant.

<sup>7</sup>The SVAC dataset covers all conflicts active in the years 1989-2009, as defined by the UCDP/PRIO Armed Conflict Database. Data is collected for all years of active conflict (defined by 25 battle deaths or more per year). For post-conflict years, rape scores were lower for both actors. The score ranges from 0-4, with 4 being the highest level of sexual violence.

<sup>8</sup>The difference between government and rebel mean rape prevalence score is not statistically significant.

relied on non-state institutions for governance and security. In 2014, there were only nineteen Liberian National Police (LNP) officers assigned to the county, which has a population of 57,106 people. In 2011, only 16% of the population of the county had interacted with a police officer, which was one of the lowest percentages out of all the counties. About 54% of residents said that no one provided security, which was one of the highest percentages out of all the counties, and only 22% said police provide security, which was one of the lowest out of all the counties (Vinck, Pham and Kreutzer 2011). Most people in the county have minimal interactions with the police, which means that interacting with them may have more of an impact on changing perceptions and behavior, because the interactions are relatively novel and rare.

Many counties in Liberia have been studied, but Grand Kru County is one that has not received much scholarly attention. Additionally, given that the presence of the UN Mission in Liberia (UNMIL) may be a factor that inhibits generalization, Grand Kru County has historically had very minimal UN presence and did not have any UN contingents stationed in the county during the time of the study.

Chapter 2 suggested that expectations might differ based on variation in state baseline levels of capacity and constraint. That is, states may have had high capacity and constraint before the war, in which case reforms may not make as much of an impact on perceptions, as in a state that started out with low capacity and constraint. For this reason, the arguments are tested on a weak post-conflict state, because the effects may be easier to detect. This “most likely” case selection does not preclude the fact that the arguments apply in states (or counties in Liberia) with higher capacity and constraints. Rather, it means that if the effects are going to be detectable, they

should be detectable in Liberia, and in particular Grand Kru County.

Liberia (and Grand Kru county) is not unlike other post-conflict countries or territories. The DRC, Haiti, Timor-Leste, to name a few, are also considered post-conflict countries where there was a lot of violence committed by both state and non-state actors, and where the state is considered weak or fragile. Moreover, it is safe to assume that populations in most post-conflict countries highly mistrust the state but also fear violence by non-state actors. Thus, the arguments tested here may be applicable to other countries or parts of countries that resemble Liberia and Grand Kru County.

### **3.3 Field Experiment: Research Design**

The field experiment involved randomizing police patrols in Grand Kru County, Liberia.<sup>9</sup> The study draws from the population of Grand Kru County, Liberia, of individuals (18 and older) that live in villages with more than 80 households. In total, fifteen villages were randomly selected. Using the 2008 census data from Liberia, there were 42 villages in Grand Kru County that had 80 households or more.

#### **3.3.1 Treatment**

The treatment included a scripted visit by two LNP officers to households in the villages, and occurred at the quarter level.<sup>10</sup> When the team, which included four

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<sup>9</sup>All parts of the study (including the following chapter) underwent an Internal Review Board process. On May 12, 2015, the Emory University IRB approved the project. The IRB is filed under IRB00073869.

<sup>10</sup>The LNP script is found in the Chapter Appendix.

police officers and three enumerators, arrived in the villages, they asked for a list of the quarters in the village.<sup>11</sup> Quarters are considered organized neighborhoods within villages. On average in the fifteen villages selected for treatment, each village included four quarters, and each quarter contained about 56 households. Quarters were randomly assigned to treatment and control, with at least two quarters randomly selected for treatment. Using a random walk technique, the officers visited fifty households in the selected quarters. This means that on average, overall, half the quarters in each village were treated, and half of the households in each quarter were treated. The total sample size for the treatment consisted of 750 households. Table 3.2 provides the details of the experimental research design.

Table 3.2: Research Design for Treatment

<b>Group</b>	<b>Number of Villages</b>	<b>Households per village</b>	<b>Total Households</b>
Control: No Visit	15	15	225
Visit by Police Officers	15	50	750
Total	15	65	975

One enumerator accompanied the officers during the household visits but did not interact with the residents. The enumerator was introduced as a civilian working with the LNP but not a part of the police force.<sup>12</sup> Both officers memorized the script and alternated in delivering it to the households. The script included a description of reforms related to professionalization—mainly academy training and recruitment standards. At the end of the visit, the officers gave the household cards with phone

<sup>11</sup>For photos of the meetings with village members to discuss community entry, see Figure 3.7, Figure 3.8, and Figure 3.9.

<sup>12</sup>In some cases, civilians do accompany police officers into the field. Thus, the presence of an enumerator accompanying the police was not especially abnormal in the context of regular patrols.

numbers of the local police. These cards were later used to identify whether individuals within the households had been treated. The officers and enumerators spent between 1-3 days in each village.

Officers for the project were chosen based on similarity in their personalities. This was done to ensure that the personality type of the officer did not drive the treatment effect. Or, in other words, this ensured that officers' personality type was controlled for in the experiment. The LNP in Monrovia provided fifteen Kru-speaking officers for the study. Each of the fifteen officers was then filmed speaking to an audience about the role of the LNP. The videos were then shown to a group of Kru people in Monrovia who rated the officers on different characteristics.<sup>13</sup> Based on the similarity of scores, four officers were chosen (two female and two male). In each group of two—female and male—one of the officers was a regular LNP officer, and the other one was a member of a specialized unit, the Police Support Unit (PSU).<sup>14</sup> While in reality, officers for community policing are not chosen based on the similarity of their personality, this procedure ensured the internal validity of the experiment. In addition to “controlling” for personality type, two officers were sent to each household to ensure that one officer would not drive the results.

It is possible that spillover took place, as community members not assigned to

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<sup>13</sup>After watching the video of each officer, they were asked: Do you want this officer to be your friend? Do you think the officer knows his or her work good? Are you afraid of the officer? Does the officer make you feel tired? Would you follow the officer's instructions? Do you like this officer? Would you talk to this officer if they came to your home? Would you feel fine asking the officer questions? Would you feel fine reporting a crime to the officer? Should the officer be sent to Kru-speaking communities to promote the LNP? List some words to describe the officer. The suggestions for the questions and their wording came from the Liberian enumeration team.

<sup>14</sup>The PSU are a tactical unit responsible for responding to larger-scale security threats such as riots.



treatment may have seen or even interacted with police officers. However, to the extent that spillover occurred, it is likely to be in the form of attenuation bias. That is, if spillover occurred—individuals that were not treated experienced some form of interaction with police officers—then this should minimize the treatment effect. Additionally, treatment was assigned at the quarter level precisely to avoid spillover. Quarters are generally far apart, which means it is unlikely that those in one quarter would interact with police officers in another quarter. Moreover, control surveys were done at the time of the treatment, so that other types of spillover such as community members talking to their neighbors did not affect results. In other words, had surveys been conducted three weeks later (as was done for the treated households), then there would have been ample time for treated household members to speak about the visits to those in the control group.

### 3.3.2 Outcomes

Three weeks after the officer visits, The Center for Applied Research and Training (CART) surveyed the treated households. The enumeration team surveyed the exact same households as those that were visited by police officers. They were able to recognize the households based on maps that were drawn by the enumerators that were part of the police team and by a code that was written discreetly adjacent to the household. All treated households were located.<sup>15</sup>

The survey included questions that ranged from maternal health care and Ebola,

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<sup>15</sup>Thus, attrition was not a problem in the study, as the enumerators were able to locate all of the treated households.

as well as a section on security. The enumerators presented themselves as an independent agency doing a survey on health and security in the county. Specific to this study, the survey included questions directed at understanding perceptions of effectiveness and abuse (restraint). The questions were asked in statement form and respondents were asked whether they strongly agree, agree, disagree, or strongly disagree. The strongly agree and agree answers were grouped together and the strongly disagree and disagree answers were grouped together to create dichotomous variables.<sup>16</sup>

The questions about police effectiveness aimed to capture different dimensions of effectiveness including deterrence, the ability to apprehend criminals, and provision of assistance.<sup>17</sup>

### **Effectiveness**

- No rogue will come into the village if the LNP stay here: this measure captures whether respondents perceive the police as a deterrent for potential criminals or other non-state actors.
- There will be less crime in the community if the LNP comes to the village: this measure also captures whether respondents perceive the police as a deterrent for crime.
- I am afraid that the LNP will arrest me some day if I commit a crime: this is a measure about whether individuals perceive the LNP as a deterrent for the

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<sup>16</sup>All models below drop “refuse to answer” (of which there were very few) and “I don’t know” answers. Future analysis will unpack whether there were fewer “I don’t know” answers in the treated group.

<sup>17</sup>The questions were asked in Liberian English and are presented below as they were asked.

respondents themselves.

- The LNP are good at catching criminals: this measure captures whether respondents perceive the police as able to make arrests.
- It is easy to get help from the LNP: this measures the respondents' perception about being able to get assistance from the police.

The questions capture different elements of effectiveness, but some measures do not correlate well with one another. Table 3.3 includes the correlation coefficients with the corresponding p-values in parentheses. The table shows that beliefs about the police arresting you if you commit a crime are negatively correlated with believing that no rogue (criminal) will come into the community if the police are there. Additionally, when individuals thought the police would help them, this did not correlate well with perceptions of being arrested by the police. The lack of strong correlation among the measures suggests that grouped together, the questions do not necessarily capture the concept of effectiveness. Nevertheless, the questions are meant to capture different components of what effectiveness may mean theoretically, including deterrence, the security force's ability to apprehend criminals and insurgents, and their likelihood of helping the population. These are all different elements of effectiveness that are important but that are not necessarily related to one another.

Table 3.3: Cross-Correlation Table: Effectiveness

Variables	Catch Criminal	Less Crime	No Rogue	Arrest Me	Help Me
Catch Criminal	1.00				
Less Crime	0.16 (0.00)	1.00			
No Rogue	0.18 (0.00)	0.06 (0.05)	1.00		
Arrest Me	0.20 (0.00)	0.25 (0.00)	-0.10 (0.00)	1.00	
Help Me	0.06 (0.07)	0.03 (0.28)	0.07 (0.03)	0.04 (0.19)	1.00

The questions about respondents' perceptions of police-force abuse are also captured through different dimensions. These questions aim to understand perceptions of restraint, but by asking the questions in the negative. The questions capture whether the police would beat community members, steal their items, and about their behavior toward citizens. Unlike the questions for effectiveness, the questions about abuse correlate better with one another, suggesting they measure a similar concept. Together, they capture different aspects of how the population perceives the police as being abusive (See Table 3.4).<sup>18</sup>

### Abuse

- If the LNP comes to your village, the LNP will beat community members: this measure captures whether individuals perceive the security sector as physically abusive.
- The police can sometimes steal things from me: this measure captures whether

<sup>18</sup>The questions below are presented in Liberian English—the way they were asked by enumerators.

individuals perceive the police as violating their property rights.

- The LNP are causing problems (shouting, yelling, etc.) when they come into the community: this measure captures the degree to which community members perceive the police as problematic in the community.
- When the LNP arrest someone, they treat them badly: this measure captures perceptions of how respectfully the police handle criminals.
- The LNP sometimes behave like criminals: this measure directly captures whether individuals perceive the police as criminals.

Table 3.4: Cross-Correlation Table: Abusive

Variables	Steal	Abusive Arrest	Like Criminal	Cause Problems	Beat
Steal	1.00				
Abusive Arrest	0.29 (0.00)	1.00			
Like Criminal	0.53 (0.00)	0.54 (0.00)	1.00		
Cause Problems	0.54 (0.00)	0.36 (0.00)	0.48 (0.00)	1.00	
Beat	0.48 (0.00)	0.40 (0.00)	0.38 (0.00)	0.45 (0.00)	1.00

To test hypotheses 3a, 3b, 4a, and 4b, the survey measured support for the state's security forces. This means exploring whether respondents were willing to incur some cost for the police force. At the most basic level, personal costs include giving monetary resources to the state. This is analogous to the state earning revenue through taxation.<sup>19</sup> While the donations may not be the same as compliance to a tax, they do indicate a willingness to incur a cost on behalf of the police. Thus, at the most basic level, if community members give a portion of their earnings to the police force, this may indicate that they may support the state. To test whether individuals are willing to support the state in the form of a tax, all individuals (control groups included) were given 80 Liberian Dollars (approximately 1 USD, which is half a day's worth of compensation as most people live on 2 USD per day) for their participation in the survey. At the end of the survey, the enumerator asked the individual whether the person wanted to donate some portion of their money to either the community or the police to ensure security (the selection of the community or the state was randomly chosen).<sup>20</sup> If individuals donated an amount, it provides evidence that they may be willing to incur costs on behalf of the police force. The outcome is measured by the proportion donated.

- Option 1: You will now be given 80 Liberian Dollars. You have the option of donating none of the money, some of the money, or all of the money to the Government of Liberia, so that the money can be used to improve security

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<sup>19</sup>The ability of states to collect taxes is an important function of strong states (Ghani and Lockhart 2009, Hendrix 2010)

<sup>20</sup>The inclusion of two scenarios tests whether there are differences in behavior with respect to who should get donations (the state or informal institutions).

services like the LNP. The money will go to helping provide you with more security. I will give you an envelope and turn around so that you can put any amount into the envelope, including nothing. The envelope is only identifiable by a code and no one will ever know how much you put into it.

- Option 2: You will now be given 80 Liberian Dollars. You have the option of donating none of the money, some of the money, or all of the money to the community fund. The money will only be used for funding community business. I will give you an envelope and turn around so that you can put any amount into the envelope, including nothing. The envelope is only identifiable by a code and no one will ever know how much you put into it.

### **Intent to Treat**

The research design uses an intent-to-treat research design. This approach summarizes the net impact of the treatment, and not of the treatment that was assigned. When the police officers visited the households, they treated the entire household (all individuals within it). They spoke to the entire household when they visited them. However, onesided non-compliance may have been an issue if those that received the treatment were not home when the outcome survey was conducted. Or, the random selection of the individual in the household for the survey did not yield a person that was treated (present during the officer visit). In other words, not all the household members may have been treated.

Based on the data, 97% of the respondents were treated (said they had experienced

a visit by a police officer in the last month) or were present during the officers' visits, and 98% could produce the card that the LNP officers gave them with phone numbers. Of those that said they did not meet the police (18 people), four people said they had not heard of the police coming to their household, and of those that could not produce a card (12 people), one person said they had not heard about the police visiting their household. Thus, the threat to onesided non-compliance is quite low, with around 1-4 people reportedly not experiencing the treatment in any way.

### 3.3.3 Models

The models use randomization inference. Two-tail tests are used in the analyses to assess whether police presence had a positive or negative impact. Two sets of models are presented. In the first, logit models are presented, including the predicted probabilities of some survey questions, as well as OLS estimates for the question on donations. To mitigate the possibility of both Type I and Type II errors, the Average Effect Size (AES) is also measured across all questions within each cluster (effectiveness or restraint), following the procedure proposed in Clingingsmith, Khwaja and Kremer (2009) and Kling, Liebman and Katz (2007).<sup>21</sup>

The data are presented using covariates on the variables that do not balance as well as controls for if respondents had prior experience being interviewed for another survey, if they were suspicious that the enumerators were a part of the Liberian

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<sup>21</sup>The AES across  $J$  related dependent variables is given by  $\tau = \sum_{j=1}^J \frac{\pi_j}{\sigma_j}$ , where  $\pi_j$  is the average treatment effect on each dependent variable and  $\sigma_j$  is the standard deviation of dependent variable  $j$  in the control group. To test the null hypothesis of no average effect, the effects  $\pi_j$  are jointly estimated using seemingly unrelated regression. The  $J$  dependent variables are stacked to compute a variance-covariance matrix for testing the statistical significance of  $\tau$ , the AES. For further details see Clingingsmith, Khwaja and Kremer (2009), Kling, Liebman and Katz (2007).



National Police,<sup>22</sup> as well as if they were a war victim, if they had a personal relationship with a LNP officer (know LNP), and whether the individual heard about the household visits. All models are presented using village-level clustered errors, because treatment was conducted at the quarter level. Conventional p-value levels are used with p-values that are below 0.05 for the AES models and 0.10 for the logit models. Additionally, the results below were tested with enumerator fixed effects, and they do not change.

## 3.4 Descriptive Statistics

### 3.4.1 Dependent Variables

Table 3.5 provides the descriptive statistics for the dependent variables as well as other questions that are related to the concepts of effectiveness and restraint. The means represent the proportion that stated that they agree with the question. In general, perceptions of the LNP's effectiveness were high, whereas perceptions of abuse tended to be lower. The majority of respondents perceived the LNP as effective but not abusive. Respondents tended to donate on average 4% more of their earning to the community over the state.

To put these results in context, in 2011, around 1% of respondents in a 2011 survey in Grand Kru County thought the police were a source of insecurity, suggesting that just like the findings here, a minority of respondents perceived the police as abusive (Vinck, Pham and Kreutzer 2011). In the same survey, 67% of respondents in Grand

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<sup>22</sup>The latter questions was filled out by the enumerator after the survey was complete.

Kru county felt safe, and 46% felt that in the past year (from 2010-2011), the security situation had improved (with 49% thinking it has stayed the same and only 5% thinking that it has worsened). Again, though the questions are not directed at the police, the findings in the 2011 survey results appear to be consistent with the survey here, as many people felt safe and thought that the security situation had improved.

Table 3.5: Summary Statistics: Dependent Variables

Variable	Mean	Std. Dev.	N
No rogue will come into the village if the LNP stay here	0.45	0.50	952
There will be less crime in the community if the LNP come to the village	0.91	0.29	963
It is easy to get help from the LNP	0.97	5.42	973
The LNP are good at catching criminals	0.77	0.42	952
I am afraid that the LNP will arrest me some day if I commit a crime	0.76	0.43	921
The police can sometimes steal things from me or the community.	0.28	0.45	933
When the LNP arrest someone, they treat them badly	0.24	0.43	965
Now now I do not like the Liberian National Police	0.16	0.37	969
The LNP are causing problems if they come into the community	0.17	0.37	970
The LNP sometimes behave like criminals	0.32	0.47	884
If the LNP comes to your village, the LNP will beat community members	0.13	0.34	941
I believe the LNP should have more power to conduct police operations	0.55	0.50	938
The LNP can sometimes do man woman business with women if the woman does not agree [rape]	0.07	0.26	940
I feel safer when the LNP are in the village	0.80	0.40	971
The LNP treat women unfairly/badly	0.08	0.27	951
The LNP are corrupt and eating money	0.52	0.50	877
The LNP discriminates based on religion/ethnicity/tribe	0.28	0.45	948
Proportion donated to government	0.15	0.17	591
Proportion donated to community	0.19	0.16	379

### 3.4.2 Balance

Despite randomizing treatment at the quarter level, balance between control and treatment samples is mixed. Table 3.6 shows balance on a number of covariates specified in the pre-analysis plan.<sup>23</sup> The p-values come from t-tests conducted between the control and treated samples.

The treated sample tended to include less Kru but more Grebo people, had more religious minorities, more landowners and people who work on farms, and tended to have more people living in their households than control group members. There were fewer ex-combatants in the treated sample, but the respondents in the treated sample tended to have more contact with government institutions as well as with UNMIL. Those in the treated sample were also more likely to be victims of a recent crime. However the two samples do balance on a number of key variables such as sex, age, traditional leadership, naval string (born in town), educational level, children, experience with wartime violence, contact with AFL, and bad experiences with the LNP.

The imbalance may be due to randomization at the quarter level. The imbalances for Kru and Grebo are concentrated in Doeswan, Barfowin, Barclayville, Behwan B, Genoyah City, Tuaken, Wilsonville, Garaway A, and Garaway B villages, which means that in these villages, quarters may have contained a higher number of Kru or Grebo. This appears to be the case due to the organization of households in many villages.

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<sup>23</sup>See Evidence in Governance and Politics (EGAP) Registration: <http://egap.org/registration/1629>. Pre-registration of research design through EGAP is required for all experiments.

Table 3.6: Balance Table: Control versus Treatment

Variables	Control	Treatment	p-value
Age	35.35	35.21	0.89
Women	0.50	0.49	0.82
Kru	0.46	0.20	0.00
Grebo	0.47	0.74	0.00
Christian	0.99	0.95	0.05
Traditional Leader	0.10	0.07	0.13
Naval String	0.74	0.76	0.52
Own Land	0.41	0.54	0.00
Farm	0.34	0.41	0.05
Head of Household	0.34	0.38	0.43
Household Number	6.09	6.73	0.00
Read	0.65	0.59	0.14
Cognitive Ability	0.57	0.55	0.71
Children	0.91	0.91	0.67
Participation in Armed Group	0.09	0.02	0.00
Experience Wartime Violence	0.50	0.56	0.13
Current Victim of Crime	0.13	0.19	0.05
Bad Experience with LNP	0.04	0.03	0.48
Contact with AFL	0.03	0.02	0.65
Contact with UNMIL	0.21	0.38	0.00
<b>Total Observations</b>	<b>225</b>	<b>750</b>	

In rural villages, members of the same tribe live in the same quarter.<sup>24</sup> Additionally, Figures 3.1 and 3.2 show boxplots of the imbalanced variables (Kru, Grebo, current victim of crime, contact with UNMIL, landowner, farmer, ex-combatant, Christian, and household number, respectively).<sup>25</sup> The boxplots show the distribution of each imbalanced variable based on the village proportion in control and treated villages. All the boxplots contain the same fifteen villages, but the distribution of each variable is based on the sample from each village for the control and treatment. In this sense, the minimum, median, maximum, and outlier points represent the sample from a particular village. We can see from the plot that the outlier village (Piciness City) for treated Kru is pulling the distribution toward the control Kru median, and the treated Grebo outliers (Piciness City and Barfowin) are pulling the distribution toward the control Grebo median. These outlier villages could be communities where Kru and Grebo live together, as the norm is for them to live in separate quarters.

Looking at Figure 3.2, we can see that for some variables, outliers pull the distribution away from being balanced. For example, treated household members in Doeswan are an outlier, and increase the proportion of “current victims” in the treated sample; and treated household members in Gbarken are an outlier, and decrease the proportion of “Christians” in the treated sample. In most cases, however, quarters appear to be fundamentally different within the same village. This is the case for land ownership, contact with UNMIL, presence of ex-combatants, and farm land. This means that some selected quarters in villages have more residents that own land, more resi-

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<sup>24</sup>This is reported from the enumerators on the ground.

<sup>25</sup>A “C.” indicates control and a “T.” indicates treatment.

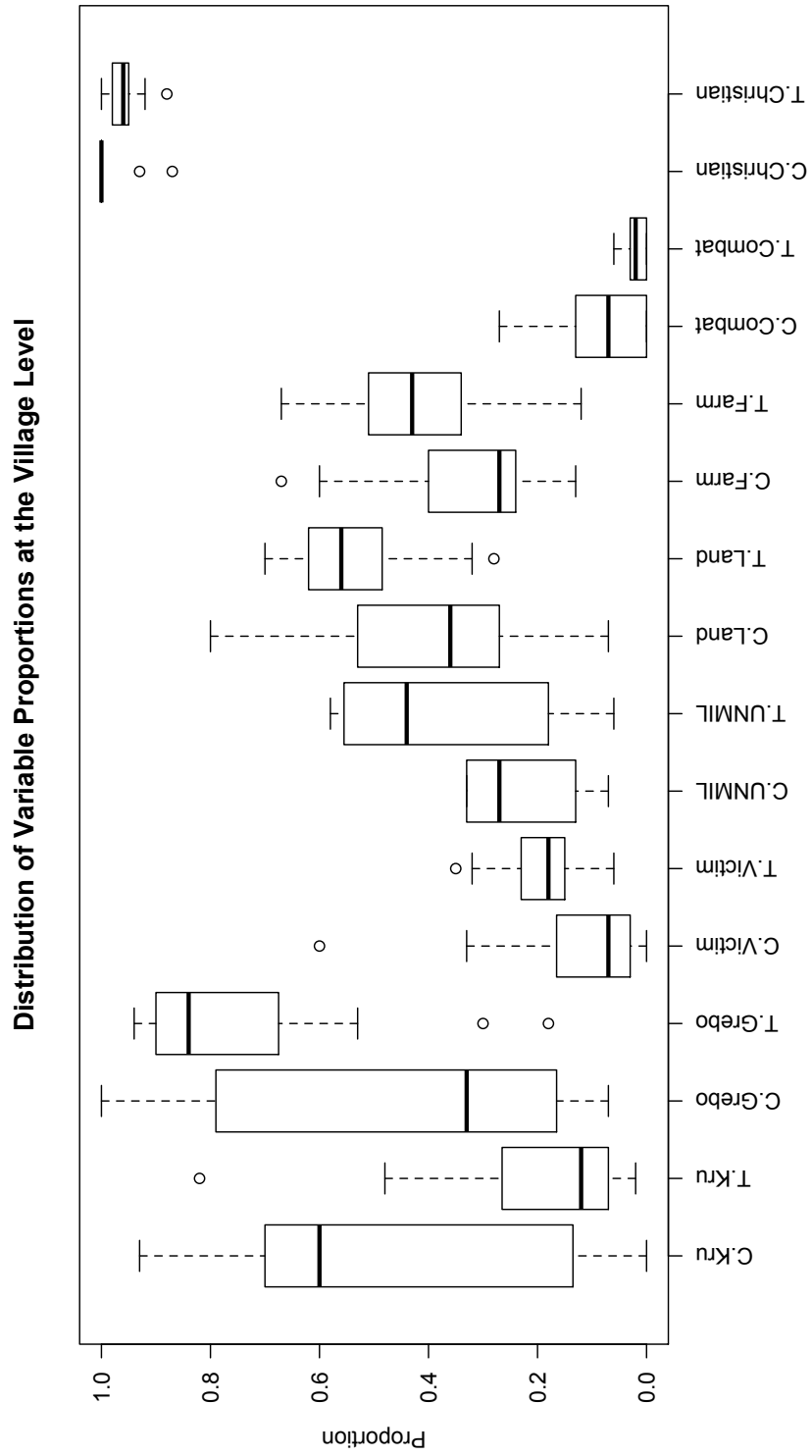


Figure 3.1: Distribution of Variable Proportions at the Village Level

### Distribution of Household Number at the Village Level

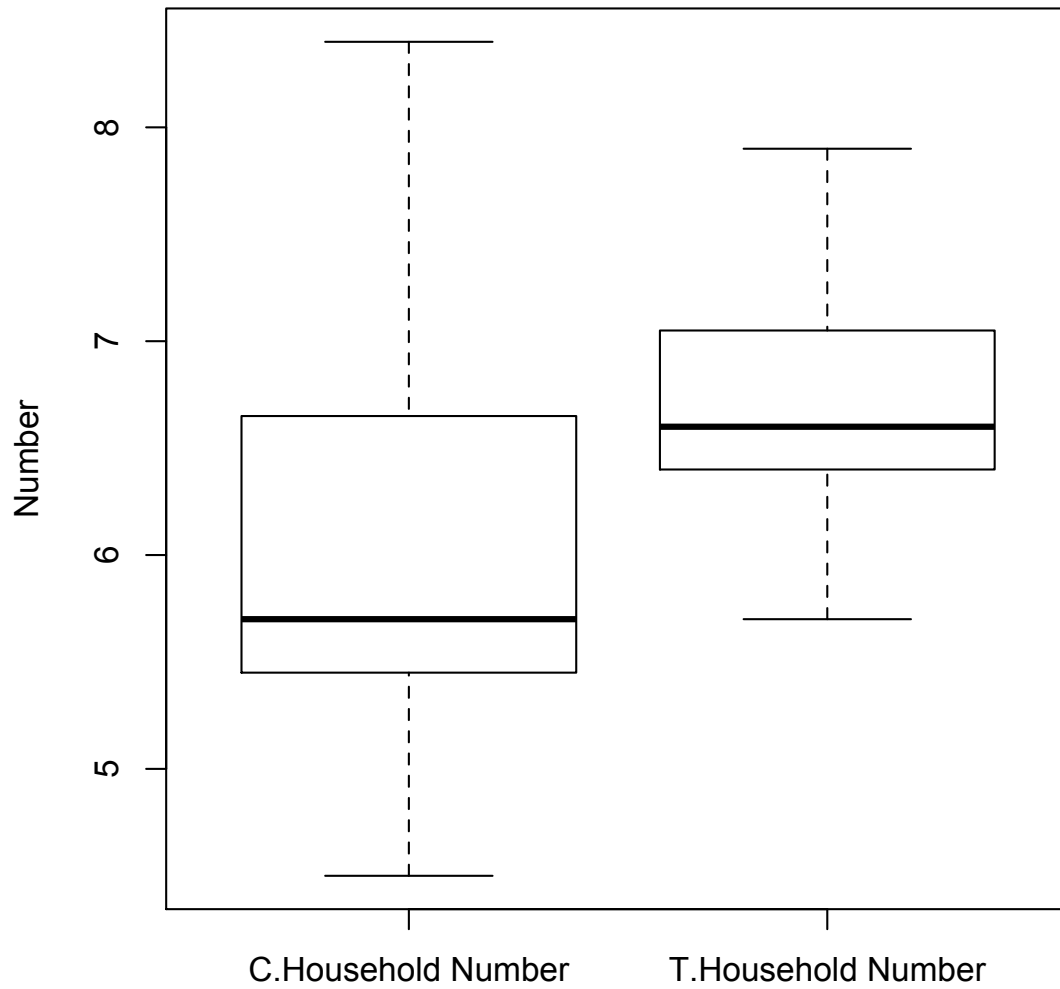


Figure 3.2: Distribution of Household Number at the Village Level



dents that have contact with UNMIL,<sup>26</sup> more residents that are ex-combatants, and more residents that farm land. Randomization at the quarter level is thus, perhaps, responsible for much of the imbalance among these variables. It would not have been possible to account for this imbalance in the randomization process, because data (i.e. the census data) is not disaggregated at the quarter level.

With respect to the imbalanced co-variates, we can assess which villages in the sample of fifteen villages are imbalanced using t-test comparisons for each village. Imbalance in individual villages is limited to a few village for each variable. Four villages are imbalanced on land ownership (Newaken, Tuaken, Wilsonville, Garaway A); three villages are imbalanced on Christianity (Gbarken, Weteken, Wilsonville); one village is imbalanced on farming (Gbarken); four villages are imbalanced on household number (Barclayville, Newaken, Genoyah City, Garaway B); four villages are imbalanced on current victim of a crime (Gbarken, Behwan A, Wilsonville, Garaway A); and finally, five villages are imbalanced on contact with UNMIL (Piciness City, Behwan A, Behwan B, Garaway A, and Genoyah City). At the individual village level, no one single village is imbalanced with respect to ex-combatants. Given that some individual villages appear to be responsible for imbalance, rather than more systematic imbalance across all villages, it is possible that the proportions would have balanced if a higher number of villages had been included.

To account for imbalance, the following imbalanced covariates are included in the models: current crime victim, own land, Kru, Grebo, Christian, ex-combatant, and

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<sup>26</sup>From the enumerator notes on each village, there was a UNMIL program to train community watch teams in some communities. Thus, it is the case that, like the police, UNMIL only visited certain quarters in villages.

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contact with UNMIL.<sup>27</sup>

### 3.5 Results

There are four different sets of hypotheses to explore. Hypothesis 1a suggests that those that received police visits were more likely to perceive the police as effective compared to those that did not receive police visits. We should expect positive coefficients for all the questions. Table 3.7 shows that for four of the five questions about effectiveness, the results are positive and significant, suggesting that the police visits enhanced perceptions of effectiveness among treated households. Treated households were more likely to believe that no rogue would enter the community if a police officer is present,<sup>28</sup> that the police help people, that they are capable of catching criminals, and that they will arrest someone if they commit a crime.

Table 3.8 shows the Average Effect Size (AES) for effectiveness (including its component variables). It shows that compared to the control households, treated households were about 64% more likely to perceive the police as effective. Additionally, the predicted probabilities in Table 3.9 demonstrate that those in treated households were 33% more likely to say that the police help, 57% more likely to say that the police can catch criminals, and 42% more likely to say that they were afraid the police would arrest them if they committed a crime. Moreover, Table 3.22 in the Appendix corroborates these findings by demonstrating that the civilians that experienced a

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<sup>27</sup>The analyses below included different specifications using different combinations of controls (including farm and household number), and results do not change.

<sup>28</sup>This result is sensitive to whether or not respondents heard about the police and is not significant in a two-tail t-test comparison.

household visit feel safer if the police are present. The overall evidence suggests that the police visits had a significant effect on civilians' perceptions of effectiveness.

Additionally, using alternative indicators of effectiveness—preferences for the police force to respond to security—there is evidence that those that experienced the treatment were more likely to perceive the police force as effective. Table 3.23 and Table 3.24 (in the Appendix) show that treated individuals were more likely to prefer the police to respond to mob violence, respond to a *hala hala* (community dispute), provide security, and protect them from rape when compared to UNMIL, traditional/village leaders, the AFL, and community defense groups. The average treatment effect size is 81%. This means that the treatment not only affects perceptions of effectiveness directly, but also that it affects citizens' preferences about who should provide security.

Table 3.7: Perceptions of Effectiveness

	<i>Dependent variable:</i>				
	No Rogue (1)	Less Crime (2)	Help (3)	Catch Criminal (4)	Arrest Me (5)
Treatment	1.55*** (0.39)	0.37 (0.33)	2.15*** (0.29)	1.65*** (0.23)	2.53*** (0.29)
Current Victim	-0.42** (0.19)	0.02 (0.41)	0.33 (0.33)	0.35 (0.29)	1.26*** (0.40)
War Victim	-0.50*** (0.18)	-0.11 (0.22)	0.27*** (0.09)	-0.07 (0.20)	0.26 (0.24)
Own Land	0.18 (0.14)	0.44 (0.27)	-0.25 (0.19)	0.37** (0.18)	0.44*** (0.15)
Kru	-0.06 (0.30)	0.98** (0.31)	0.10 (0.51)	-0.41 (0.48)	0.25 (0.25)
Grebo	0.13 (0.35)	0.97** (0.40)	-0.07 (0.55)	0.03 (0.51)	0.36 (0.26)
Christian	1.06** (0.34)	0.36 (0.59)	0.80* (0.41)	0.52 (0.50)	-0.82 (0.58)
Ex-Combatant	0.46 (0.43)	-0.23 (0.55)	0.27 (0.44)	0.22 (0.49)	0.12 (0.55)
Heard about Police Visit	-1.30*** (0.26)	0.28 (0.27)	-0.12 (0.23)	-0.74*** (0.26)	-0.34 (0.16)
Know LNP	-0.97*** (0.15)	-0.05 (0.24)	1.16*** (0.19)	0.36* (0.17)	-0.76*** (0.16)
Contact with UNMIL	-0.56*** (0.09)	0.63** (0.32)	-0.17 (0.11)	0.48*** (0.12)	0.08 (0.11)
Suspicious of Enumerator	0.84*** (0.22)	0.41 (0.64)	2.09*** (0.54)	1.38*** (0.46)	1.37** (0.60)
Experienced Prior Interviews	-0.30* (0.30)	0.68*** (0.23)	0.21 (0.24)	1.13*** (0.28)	1.49*** (0.21)
Constant	-0.65 (0.49)	0.07 (0.71)	-2.24*** (0.63)	-0.93* (0.67)	-0.62 (0.59)
Observations	950	961	968	950	919
Log Likelihood	-559.15	-271.67	-472.29	-427.17	-385.03
Akaike Inf. Crit.	1,146.29	571.33	972.59	882.34	798.06

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 3.8: Average Effect Size: Perceptions of Effectiveness and Abuse

	(1)	(2)
<b>Effectiveness</b>	<b>0.64*** (0.07)</b>	
No Rogue	0.34*** (0.07)	
Less Crime	0.04 (0.04)	
Help	0.28*** (0.06)	
Catch Criminal	0.43*** (0.06)	
Arrest Me	0.44*** (0.06)	
<b>Abusive</b>		<b>-0.46*** (0.12)</b>
Steal		-0.46*** (0.09)
Abusive Arrest		-0.08 (0.05)
Like Criminal		-0.30*** (0.09)
Cause Problems		-0.22*** (0.07)
Beat Community		-0.01 (0.04)
Observations	877	836

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Standard Errors clustered at the village level

Controls include: current victim, war violence, own land, Kru, Grebo, Christian, ex-combatant, heard police visit, know LNP, UNMIL contact, suspicious of visit, previous interview

Table 3.9: Predicted Probabilities for Perceptions of Effectiveness and Abuse

<i>Predicted Probabilities:</i>			
Perceptions of Effectiveness and Abuse			
Variables	Control	Treatment	Change in Percentage
Police Help	0.33 (0.24-0.42)	0.81 (0.78-0.84)	0.48 (0.34-0.52)
Catch Criminal	0.57 (0.46-0.67)	0.87 (0.84-0.90)	0.30 (0.19-0.38)
Arrest Me	0.42 (0.32-0.52)	0.90 (0.87-0.93)	0.48 (0.34-0.51)
LNP Steal	0.63 (0.53-0.72)	0.16 (0.13-0.19)	-0.47 (-0.54- -0.33)
Like Criminal	0.53 (0.43-0.63)	0.24 (0.20-0.27)	-0.29 (-0.37- -0.17)
Cause Problems	0.16 (0.10-0.23)	0.07 (0.05-0.09)	-0.09 (-0.19- -0.05)

*Note:*

Predicted Probabilities with 95% CI  
All other variables held at their means

It is important to assess whether these results are externally valid and robust. As an alternative experiment, we briefly look at whether deployment of the Police Support Unit (PSU), a tactical unit of the LNP, affected civilians' perceptions of effectiveness. In another randomized controlled trial conducted with Robert Blair and Ben Morse, we assessed the effect of the Police Support Unit's (PSU) "confidence patrol" program in three Liberian Counties during 2014-2015.<sup>29</sup> The PSU are permanently deployed in the rural counties. The study included three visits by 10-15 PSU officers to 36 randomly selected villages (out of 72) in Bong, Lofa, and Nimba Counties. Instead of conducting household visits, each time the PSU officers visited the communities, they organized community meetings that lasted 2-3 hours. The control and treated villages were surveyed several months after the last visits. The survey included a few questions from the Grand Kru survey such as "I believe the LNP should have more power to conduct police operations," "I feel safer when the LNP are in the village," "there will be less crime in the community if the LNP come to the village," "I am afraid that the LNP will arrest me some day if I commit a crime," and "the LNP are causing problems if they come into the community."<sup>30</sup>

Table 3.21 in the Appendix shows the results from the PSU patrols. In general, the confidence patrols by the PSU do not appear to have affected perceptions of effectiveness or restraint. None of the coefficients was statistically significant at the 0.05 level. Nevertheless, similar to the findings here, the coefficients for effectiveness in the confidence patrol study were in the right direction (positive), and the "arrest

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<sup>29</sup>See "Building Trust in a Reformed Security Sector: A Field Experiment in Liberia": <http://egap.org/registration/1609>.

<sup>30</sup>Not all the questions from the Grand Kru survey could be added due to limited space in the confidence patrol survey.

me” question was positive and significant at the 0.1 level. Thus, perceptions of effectiveness may have been enhanced amongst those that received visits by PSU officers, but the treatment may not have been strong enough to detect an effect.

In addition to the PSU “Confidence Patrol Program,” the study in Grand Kru included an alternative control group. Surveys were conducted in another ten villages, which did not receive any police visits. Using this alternative, the treatment was randomized at the village level (See Chapter Appendix). The results from this study actually contradict the results for H1a presented above. When comparing the treated households to the control households in villages that did not receive any visit by the police, there is a negative relationship—treated households were *less* likely to perceive the police as effective. Table 3.19 shows that there is a negative and significant effect for “no rogue” and “catch criminal,” and that the coefficient is negative for “less crime” and “arrest me.”

The negative results from the alternative control group present a puzzle. One possible explanation is that the two control groups are unbalanced. Table 3.18 in the Appendix shows that the two control groups only balance on sex, age, Kru, cognitive ability, and contact with UNMIL. Those in the control group in villages that did not receive police visits (between village control sample) were more likely to be Grebo, less likely to be Christian, more likely to be a traditional leader, more likely to be born in the same village, own land, farm, be head of a household, have a higher number of household members, less likely to be able to read, have fewer children, less likely to be a part of an armed group, more likely to experience wartime violence, more likely to have experienced a crime recently, have contact with more government



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institutions, less likely to have a bad experience with the LNP, and more likely to have contact with the Armed Forces of Liberia (AFL).

These strong differences may affect baseline perceptions of the police. In particular, the fact that control villages in the “between” control sample were less likely to have a bad experience with the police may suggest that their baseline view of the police effectiveness was already high, and the treatment was not strong enough to change these perceptions.

Moreover, it is possible that because the surveys in the within-village control sample were implemented at the same time as the treatment, this may have affected perceptions of those being surveyed. The enumerator who did the control surveys was perceived as a civilian, and thus those surveyed may have felt as if they were not getting the service of police visits. This group may have heard about the police visits, and it is possible that such “spillover” may have caused heightened animosity toward the police because those surveyed did not receive police visits. Unfortunately, there is no way to detect whether this sort of spillover occurred from the survey data. However, field notes from the enumerator who surveyed the control households in the “within” village sample suggest that members of households that were not selected sometimes knew about the police visits in other parts of the village and “were upset and few of them even said that whenever people are interviewing or selecting houses, their households is not selected.”

Additionally, Figure 3.3 shows the distribution of baseline levels of perception of effectiveness (no rogue, less crime, help, catch criminal, and arrest me) in both control groups, where “C.B.” is the between-village control group and “C.W” is the within-

village control group. From the figure, it is clear that the between-village control group had much higher baseline perceptions of effectiveness than the within-village control group. This implies that baseline perceptions of effectiveness could decrease if non-treated individuals have knowledge about the police visits in their community but do not receive the actual service of a visit. Given that most police visits to villages do not include all households, the results may yield an accurate picture of what happens if the police only visit some households and not all households in the same village.

Despite the potential spillover effect, the results from the control within villages sample are a better comparison group than the control between villages sample, because balance between the treated households and the between-village control sample was worse than balance between the treated households and the control group within the same village (control within villages). Moreover, randomization was conducted at the quarter level, not the village level, which is only one step from randomizing at the household level, instead of two steps (village, quarter, and then household). This suggests that comparisons within communities may yield more accurate results, because there were fewer confounding factors within villages. At the same time, it is important to be vigilant of the potential for “reverse” spillover effects.

Hypothesis H1b predicts that professionalization has a positive effect on perceptions of restraint (H1b). Table 3.10 shows that the reform had a positive effect on perceptions of restraint, providing support for this hypothesis. In three out of the five models, the individuals that received visits by police were less likely to find the police abusive. In particular, they were less likely to believe that the police would steal

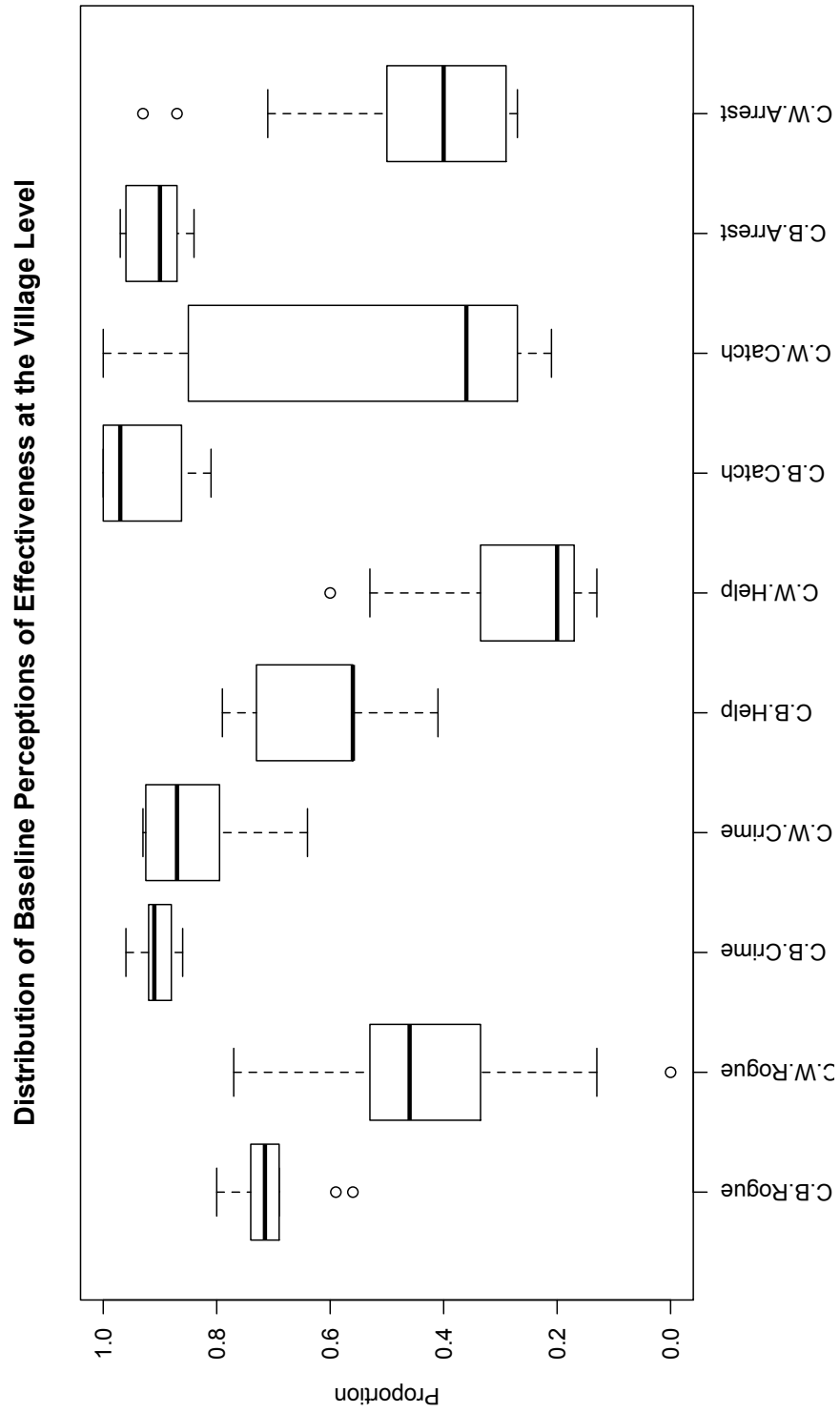


Figure 3.3: Distribution of Baseline Perceptions of Effectiveness at the Village Level

things from them, they were less likely to think that the police behave like criminals, and they were less likely to think that the police cause problems. Other questions such as whether individuals thought the police would be abusive during an arrest and whether the police beat people were also negative, but not significant. Table 3.8 shows the average effect size for abuse (including its component variables). It shows that compared to the control households, treated households were about 46% less likely to perceive the police as abusive. Additionally, the predicted probabilities for certain questions, shown in Table 3.9, demonstrate that those in the treated sample were 47% less likely to believe that the police would steal from them, 29% less likely to think that the police behave like criminals, and 9% less likely to think that the police cause problems in the community.

Table 3.22 in the Appendix provides additional evidence that “proactive” community policing that showcases the police’s professionalization improves the police’s image with respect to their behavior toward civilians. In particular, police visits improved perceptions of corruption, discrimination, gender-based violence, and general antipathy toward the police. Thus when professionalization of the security forces is paired with community policing initiatives in which the security forces interact with locals, it may enhance perceptions of restraint.

Table 3.10: Perceptions of Abuse

	<i>Dependent variable:</i>				
	Steal (1)	Abusive Arrest (2)	Like Criminals (3)	Cause Problems (4)	Beat People (5)
Treatment	-2.18*** (0.40)	-0.33 (0.21)	-1.30*** (0.43)	-0.96*** (0.33)	-0.26 (0.27)
Current Victim	-0.15 (0.48)	-0.12 (0.36)	0.15 (0.38)	0.09 (0.37)	0.16 (0.29)
War Victim	-0.12 (0.18)	-0.01 (0.16)	0.16 (0.18)	0.17 (0.19)	-0.12 (0.22)
Own Land	-0.11 (0.16)	0.26** (0.12)	-0.21 (0.20)	-0.21 (0.21)	-0.03 (0.17)
Kru	-0.55 (0.41)	-0.66* (0.38)	-0.50 (0.60)	-0.74* (0.53)	0.37 (0.37)
Grebo	-1.05*** (0.37)	-0.61 (0.42)	-0.82** (0.40)	-0.78** (0.40)	0.19 (0.48)
Christian	-0.28 (0.54)	-0.06 (0.48)	-0.10 (0.63)	-0.56 (0.52)	-0.86 (0.52)
Ex-Combatant	0.02 (0.66)	0.34 (0.39)	0.27 (0.44)	-0.56 (0.64)	0.08 (0.51)
Heard about Police Visit	-0.02 (0.25)	0.20 (0.27)	-0.64** (0.29)	-0.32 (0.27)	-0.28 (0.27)
Know LNP	-0.65*** (0.16)	-0.35** (0.15)	-0.67*** (0.20)	-2.00*** (0.35)	-1.30*** (0.23)
Contact with UNMIL	0.25*** (0.09)	0.24*** (0.08)	0.32*** (0.05)	0.71*** (0.06)	0.74*** (0.11)
Suspicious of Enumerator	-1.41*** (0.41)	1.79*** (0.25)	1.05*** (0.26)	-3.84*** (1.08)	-1.34*** (0.54)
Experienced Prior Interviews	-0.29 (0.15)	-0.12 (0.17)	0.20 (0.13)	-0.65*** (0.17)	0.42** (0.19)
Constant	2.22*** (0.79)	-0.71 (0.56)	1.22** (0.85)	0.97* (0.52)	-1.00 (0.48)
Observations	931	963	882	968	941
Log Likelihood	-424.39	-481.91	-467.00	-342.12	-326.82
Akaike Inf. Crit.	876.79	991.82	962.00	712.24	663.76

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Again, assessing the robustness of these findings is also important. Turning to the alternative control group (between-village control sample), we see that the results are consistent with those in the within-village control sample. Table 3.20 shows that those in the treated group are less likely to believe that the police steal and less likely to perceive the police as causing problems. Other variables using this sample such as gender-based violence, corruption, and discrimination were also negative. Thus, we can conclude that there is robust evidence that the type of visits conducted by the LNP in Grand Kru leads to enhanced perceptions of restraint.

In sum, for H1a and H1b, the results indicate that proactive outreach programs that highlight the police's professionalization provide an effectiveness and restraint "dividend." At face value, the results for perceptions of restraint are not as strong as the results for perceptions of effectiveness. The treatment reduced perceptions of abuse by 46%, whereas the treatment increased perceptions of effectiveness by 64%. However, the results for perceptions of restraint are more consistent and robust than those for perceptions of effectiveness. This is consistent with the idea that the proactive nature of outreach programs that showcase the constraint dimension of professionalization reforms may better enhance perceptions of restraint, compared to perceptions of effectiveness.

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The second set of hypotheses explore heterogeneous treatment effects based on prior victimization. H2a and H2b suggest that the treatment should lead to a restorative effect on those with previous experience with violence, and H2c and H2d suggest that the treatment should exacerbate fears, because the police visits remind victims of police ineptitude.

There are two measures of prior victimization that are important: victims of a recent crime (post-conflict violence) and victims of wartime violence. The survey included questions for both. The survey question: “In the past year, has anyone in the family been a victim of some problem (theft, beating, physically attacked, rape etc.)?” is used to assess current, post-conflict victimization. Nineteen percent of the respondents said yes to this question. Although the survey asked whether the perpetrator of the crime was a non-state or state actor, too few respondents had experience with state actors for any meaningful disaggregated analysis.

The survey also asked whether the individual or their family and friends experienced a beating/injury, death, damaged property, or rape during the war. A variable was created based on whether individuals experienced any of these wartime abuses. About 64% of the population experienced some form of wartime violence. Again, the survey asked whether the perpetrator of the crime was a non-state or state actor, but too few respondents had experience with state actors for any meaningful disaggregated analysis.

Turning to the results, in general, there is more support for the “reminder effect” than the “restorative effect,” as Tables 3.11 and 3.12 show support for H2b. When victims—current and wartime—were treated, they were less likely than non-victims

to find the police effective. This was particularly the case for believing that there would be less crime, believing that no rogues would enter the community with police presence, and perceiving the police as able to catch criminals. Figure 3.4 shows the predicted probabilities of the treatment on those with and without previous exposure to wartime violence. From the figure, we can see that while the treatment had a positive effect on both victims and non-victims, the treatment had less of an effect among those that experienced wartime violence than those that did not.



Table 3.11: Interaction (Effectiveness): Current Victim

	<i>Dependent variable:</i>				
	No Rogue (1)	Less Crime (2)	Help (3)	Catch Criminal (4)	Arrest Me (5)
Treatment	1.50*** (0.40)	0.57 (0.38)	2.16*** (0.27)	1.75*** (0.24)	2.63*** (0.27)
Current Victim	-0.71 (0.56)	1.59 (0.97)	0.39 (0.39)	1.05* (0.53)	1.87*** (0.46)
War Victim	-0.50*** (0.18)	-0.12 (0.22)	0.27*** (0.09)	-0.09 (0.19)	0.26 (0.24)
Own Land	0.18 (0.14)	0.42 (0.27)	-0.25 (0.19)	0.36** (0.18)	0.43** (0.15)
Kru	-0.06 (0.30)	1.02*** (0.31)	0.11 (0.51)	-0.40 (0.47)	0.26 (0.26)
Grebo	0.14 (0.30)	0.92** (0.37)	-0.07 (0.55)	0.002 (0.49)	0.33 (0.28)
Christian	1.06** (0.34)	0.33 (0.57)	0.80* (0.41)	0.49 (0.49)	-0.83 (0.57)
Ex-Combatant	0.45 (0.43)	-0.18 (0.57)	0.27 (0.44)	0.25 (0.49)	0.15 (0.55)
Heard about Police Visit	-1.30*** (0.25)	0.30 (0.27)	-0.12 (0.24)	-0.72*** (0.26)	-0.32** (0.16)
Know LNP	-0.96*** (0.14)	-0.09 (0.25)	1.15*** (0.19)	0.35** (0.17)	-0.78*** (0.16)
Contact with UNMIL	-0.56*** (0.09)	0.66** (0.32)	-0.17 (0.11)	0.48*** (0.12)	0.08 (0.12)
Suspicious of Enumerator	0.83*** (0.21)	0.44 (0.66)	2.10*** (0.54)	1.39*** (0.46)	1.39** (0.60)
Experienced Prior Interviews	-0.30* (0.29)	0.67*** (0.22)	0.21 (0.23)	1.14*** (0.28)	1.50*** (0.21)
Treatment x Current Victim	0.36 (0.53)	-1.92* (1.13)	-0.08 (0.29)	-0.93* (0.47)	-0.95 (0.66)
Constant	-0.63 (0.50)	-0.01 (0.69)	-2.24*** (0.63)	-0.95 (0.67)	-0.67 (0.58)
Observations	950	961	968	950	919
Log Likelihood	-558.91	-269.53	-472.28	-426.01	-384.01
Akaike Inf. Crit.	1,147.82	569.05	974.57	882.02	798.02

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

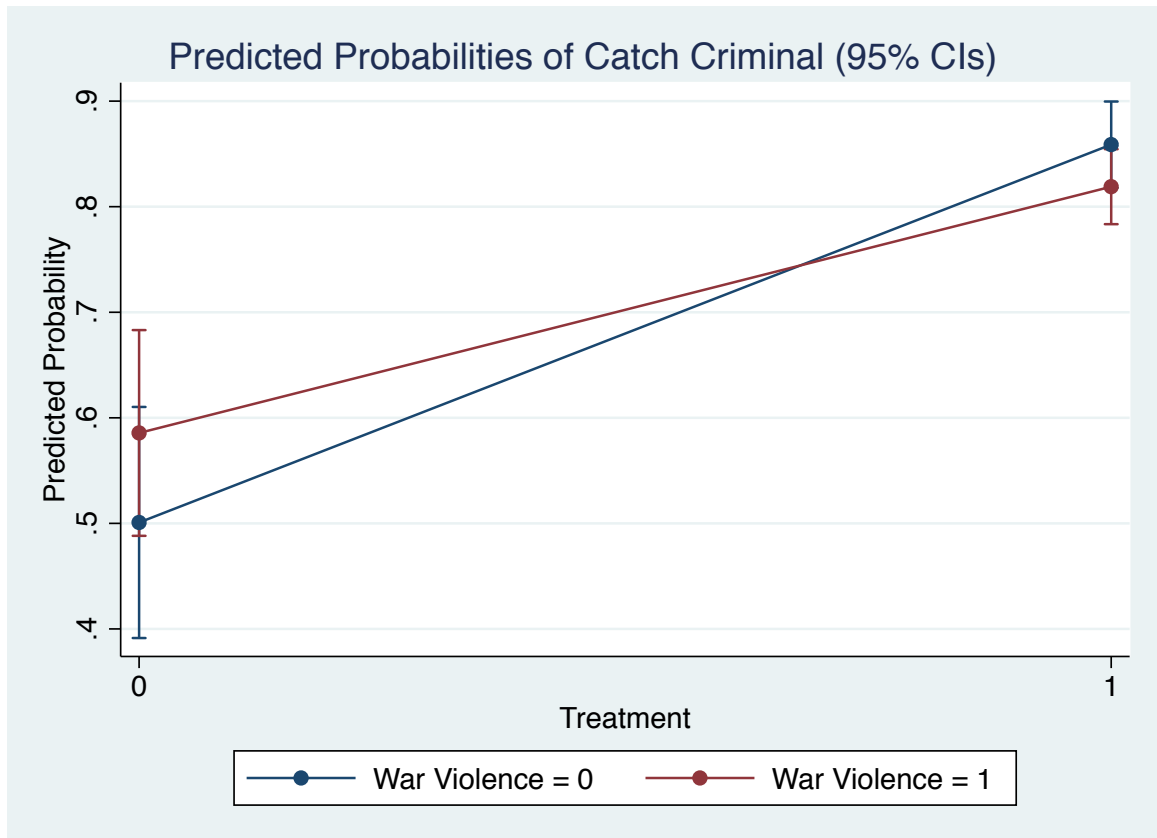


Figure 3.4: Interaction: Treatment and War Victim on Perceptions of Effectiveness

Table 3.12: Interaction (Effectiveness): War Victim

	<i>Dependent variable:</i>				
	No Rogue (1)	Less Crime (2)	Help (3)	Catch Criminal (4)	Arrest Me (5)
Treatment	1.90*** (0.40)	-0.07 (0.39)	2.21*** (0.36)	2.09*** (0.38)	2.23*** (0.45)
War Victim	-0.06 (0.33)	-0.59 (0.30)	0.34 (0.34)	0.42 (0.30)	-0.07 (0.36)
Current Victim	-0.43** (0.20)	0.04 (0.40)	0.32 (0.32)	0.32 (0.29)	1.28*** (0.38)
Own Land	0.16 (0.14)	0.46* (0.27)	-0.25 (0.19)	0.35* (0.18)	0.45*** (0.14)
Kru	-0.07 (0.31)	1.02*** (0.31)	0.10 (0.52)	-0.43 (0.48)	0.25 (0.25)
Grebo	0.09 (0.36)	1.03** (0.40)	-0.08 (0.57)	-0.03 (0.50)	0.39 (0.26)
Christian	1.06** (0.34)	0.34 (0.59)	0.80* (0.41)	0.56 (0.51)	-0.84 (0.60)
Ex-Combatant	0.39 (0.39)	-0.14 (0.55)	0.26 (0.45)	0.14 (0.49)	0.19 (0.55)
Heard about Police Visit	-1.32*** (0.26)	0.29 (0.27)	-0.12 (0.23)	-0.75*** (0.26)	-0.34** (0.16)
Know LNP	-0.95*** (0.15)	-0.08 (0.24)	1.16*** (0.19)	0.39** (0.18)	-0.78*** (0.16)
Contact with UNMIL	-0.54*** (0.09)	0.61** (0.31)	-0.17 (0.11)	0.50*** (0.13)	0.06 (0.11)
Suspicious of Enumerator	0.83*** (0.22)	0.43 (0.64)	2.10*** (0.55)	1.36** (0.46)	1.39*** (0.62)
Experienced Prior Interviews	-0.30 (0.30)	0.68** (0.23)	0.21 (0.24)	1.14*** (0.28)	1.49*** (0.21)
Treatment x War Victim	-0.59 (0.47)	0.71* (0.37)	-0.09 (0.46)	-0.74** (0.33)	0.50 (0.47)
Constant	-0.87 (0.52)	0.33 (0.72)	-2.27*** (0.57)	-1.20** (0.73)	-0.43 (0.65)
Observations	950	961	968	950	919
Log Likelihood	-557.72	-270.70	-472.27	-425.28	-384.21
Akaike Inf. Crit.	1,145.44	571.40	974.53	880.56	798.42

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Tables 3.13 and 3.14 show similar effects for perceptions of abuse. Again there is more evidence for a “reminder” effect rather than the restorative effect, indicating support for H2d. From the tables, we see that there are consistent positive interaction terms, and the terms are significant for those that experienced current violence. Figure 3.5 shows that the treatment reduced perceptions of abuse for those that were not current victims, whereas for current victims, the treatment did not influence their perceptions of police abuse. Thus, the evidence here suggests that police visits may not be helpful for restoring trust among those that are victims of some form of violence. Such experiences of violence appear to become ingrained in peoples’ memories, and the state must come up with alternative methods to enhance trust in the police for this group of people. We return to the implications from these findings in the concluding chapter.

Table 3.13: Interaction (Abusive): Current Victim

	<i>Dependent variable:</i>				
	Steal (1)	Abusive Arrest (2)	Like Criminals (3)	Cause Problems (4)	Beat People (5)
Treatment	-2.41*** (0.41)	-0.42** (0.21)	-1.57*** (0.43)	-1.19*** (0.33)	-0.31 (0.28)
Current Victim	-1.50*** (0.60)	-0.84 (0.63)	-1.30*** (0.72)	-1.36*** (0.47)	-0.13 (0.63)
War Victim	-0.10 (0.18)	0.002 (0.16)	0.19 (0.17)	0.19 (0.19)	-0.11 (0.32)
Own Land	-0.10 (0.16)	0.27** (0.12)	-0.20 (0.19)	-0.22 (0.21)	-0.04 (0.17)
Kru	-0.55 (0.43)	-0.66* (0.38)	-0.52 (0.65)	-0.74 (0.56)	0.38 (0.37)
Grebo	-0.97** (0.38)	-0.58* (0.42)	-0.75** (0.43)	-0.66 (0.42)	0.22 (0.47)
Christian	-0.23 (0.52)	-0.06 (0.48)	-0.06 (0.62)	-0.50 (0.51)	-0.85 (0.53)
Ex-Combatant	-0.04 (0.70)	0.31 (0.40)	0.23 (0.44)	-0.65 (0.67)	0.07 (0.51)
Heard about Police Visit	-0.07 (0.23)	0.19 (0.26)	-0.68** (0.29)	-0.37 (0.27)	-0.29 (0.27)
Know LNP	-0.62*** (0.17)	-0.34** (0.15)	-0.67*** (0.22)	-2.04*** (0.35)	-1.29*** (0.23)
Contact with UNMIL	0.25*** (0.10)	0.23*** (0.08)	0.33*** (0.05)	0.74*** (0.07)	0.74*** (0.11)
Suspicious of Enumerator	-1.52*** (0.40)	1.77*** (0.25)	0.93*** (0.24)	-4.11*** (1.14)	-1.37*** (0.57)
Experienced Prior Interviews	-0.29** (0.14)	-0.12 (0.17)	0.21 (0.15)	-0.65*** (0.18)	0.42** (0.19)
Treatment x Current Victim	1.79*** (0.52)	0.85 (0.64)	1.83*** (0.73)	2.01*** (0.58)	0.39 (0.70)
Constant	2.29*** (0.81)	-0.67 (0.57)	1.34 (0.90)	0.98* (0.54)	-1.00** (0.47)
Observations	931	963	882	968	939
Log Likelihood	-419.28	-481.05	-460.73	-337.93	-326.65
Akaike Inf. Crit.	868.56	992.09	951.47	705.87	665.15

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

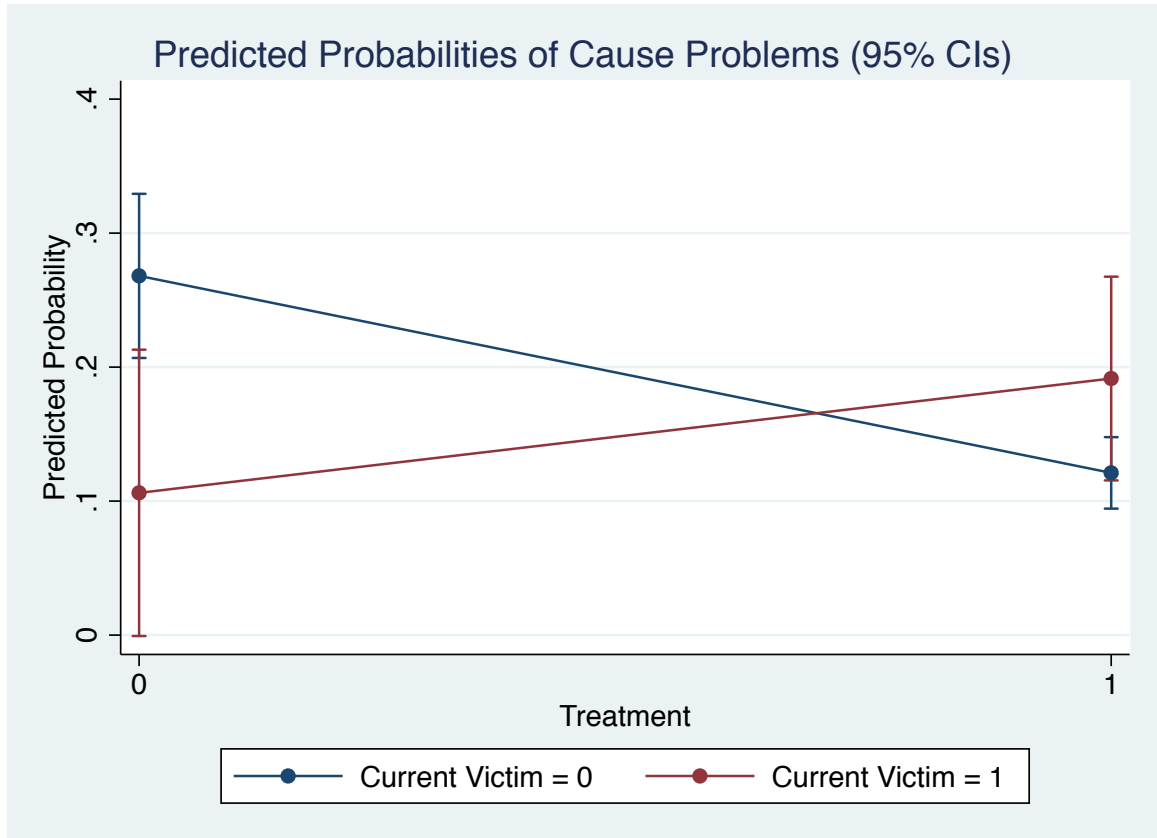


Figure 3.5: Interaction: Treatment and Current Victim on Perceptions of Abuse

Table 3.14: Interaction (Abusive): War Victim

	<i>Dependent variable:</i>				
	Steal (1)	Abusive Arrest (2)	Like Criminals (3)	Cause Problems (4)	Beat People (5)
Treatment	-2.48*** (0.44)	-0.40 (0.32)	-1.43*** (0.32)	-1.16*** (0.42)	0.08 (0.24)
War Victim	-0.47 (0.35)	-0.09 (0.36)	0.01 (0.44)	-0.03 (0.27)	0.26 (0.41)
Current Victim	-0.13 (0.46)	-0.12 (0.35)	0.16 (0.37)	0.10 (0.36)	0.14 (0.28)
Own Land	-0.10 (0.17)	0.27** (0.13)	-0.20 (0.21)	-0.20 (0.21)	-0.04 (0.17)
Kru	-0.55 (0.40)	-0.66* (0.39)	-0.50 (0.61)	-0.74 (0.53)	0.37 (0.37)
Grebo	-1.02*** (0.37)	-0.61 (0.45)	-0.80** (0.42)	-0.76* (0.42)	0.15 (0.49)
Christian	-0.28 (0.54)	-0.06 (0.48)	-0.10 (0.64)	-0.56 (0.52)	-0.87* (0.52)
Ex-Combatant	0.06 (0.66)	0.35 (0.40)	0.28 (0.46)	-0.52 (0.65)	0.02 (0.53)
Heard about Police Visit	-0.01 (0.25)	0.20 (0.26)	-0.63** (0.29)	-0.31 (0.28)	-0.29 (0.27)
Know LNP	-0.67*** (0.16)	-0.35** (0.14)	-0.68*** (0.20)	-2.01*** (0.35)	-1.29*** (0.24)
Contact with UNMIL	0.24** (0.09)	0.23*** (0.08)	0.32*** (0.06)	0.70*** (0.06)	0.76*** (0.11)
Suspicious of Enumerator	-1.43*** (0.41)	1.79*** (0.26)	1.05*** (0.26)	-3.87*** (1.07)	-1.33*** (0.53)
Experienced Prior Interviews	-0.29 (0.15)	-0.12 (0.17)	0.20 (0.13)	-0.66*** (0.16)	0.42** (0.19)
Treatment x War Victim	0.49 (0.33)	0.12 (0.45)	0.21 (0.51)	0.32 (0.48)	-0.57 (0.39)
Constant	2.42*** (0.84)	-0.67 (0.54)	1.30** (0.80)	1.07* (0.49)	-1.19* (0.44)
Standard Errors clustered at the village level					
Observations	931	963	882	968	939
Log Likelihood	-423.65	-481.87	-466.85	-341.82	-326.06
Akaike Inf. Crit.	877.30	993.73	963.70	713.64	664.03

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Finally, the last set of hypotheses are related to direct support for the state's security forces. Recall that this is measured by the proportion of money donated to the police from respondents' compensation for taking the survey. H3a and H3b suggest that when respondents think highly of the police—that they are more effective or less abusive—then they should donate more to the state. Additionally, H4a suggests that exposure to reforms and subsequent enhanced perceptions should be enough to persuade respondents to donate to the state's security forces. Hypothesis H4b implies that changes in perception may not matter, and that citizens will support the state's security forces simply if they are exposed to reforms.

Aggregating the five questions used to measure effectiveness and the five questions used to measure abuse yields a measure for overall perceptions of effectiveness and abuse. Table 3.15 shows that when respondents perceived the police as abusive, they were less likely to donate money to the police (support for H3b). However, they were also less likely to donate a higher proportion of money when they perceived the police as effective (contradicting H3a). This implies that, when it comes to providing support to the police, perceptions of security sector abuse decrease support.<sup>31</sup> But perceptions of effectiveness also reduce support. We return to potential explanations for this below.

If the police visits improved perceptions, then they were more likely to give a higher proportion of their earnings to the state's security forces, indicating support for H4a. Table 3.15 (Model 4) shows that when individuals were treated and found the police to be effective, respondents were more likely to donate a higher proportion

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<sup>31</sup>The effects are also negative effects for the between-village control sample.



of their earnings. Figure 3.6 displays the substantive effects from the model. The figure shows that among those who received the treatment, as their perceptions of effectiveness increased, the proportion that they donated also increased. For the untreated group, as they found the police to be effective, they were less likely to donate a higher proportion. This is consistent with the earlier finding that those that perceive the security forces as effective are less likely to provide it with monetary resources. The figure also implies that when the treatment “worked” to enhance perceptions of effectiveness, among those people, support may increase. In other words, positive behavioral changes from the treatment occur via changed perceptions due to the treatment. Nevertheless, there is still a stark contrast between those that were treated and those that were not and their likelihood to support the police.

Table 3.15 (and Figure 3.6) shows that the treatment consistently had a direct, negative effect on support,<sup>32</sup> negating H4b. Those that experienced the treatment were less likely to donate to the state. On average, those in the treated group were likely to give about 8% of the amount they received to the state, whereas those from the control households were likely to give 34% of the money they received. Thus, at face value, police visits decreased monetary support for the state’s security sector.<sup>33</sup>

One potential explanation for the negative result may be that treated individuals perceived the police as having resources. In other words, if the status quo is minimal police professionalization or outreach by professional police, then when police officers visit, community members may feel that the police do not need any more resources,

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<sup>32</sup>The effects are also negative effects for the between village control sample.

<sup>33</sup>The results are the same when using the control between-villages.

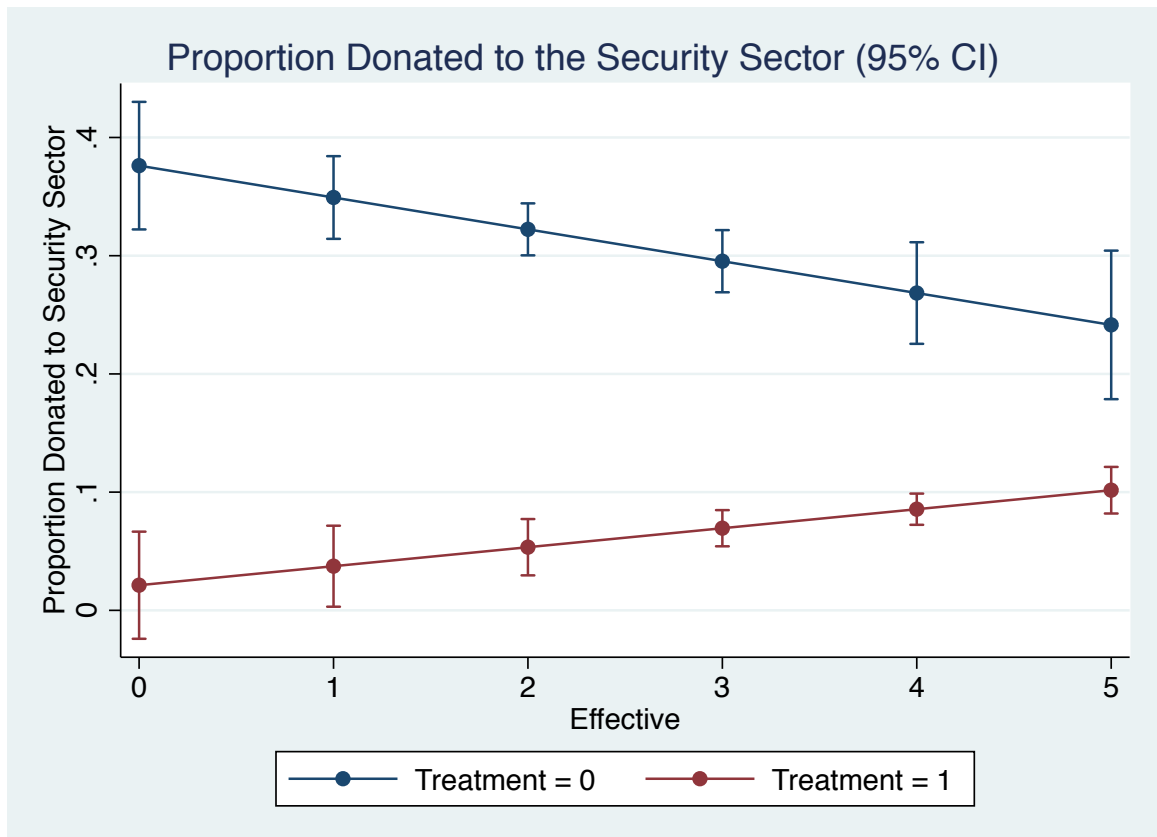


Figure 3.6: Interaction Effect: Treatment and Perceptions of Effectiveness on Proportion Donated to the Security Sector

The Figure shows the substantive effects from the bivariate model.

because they are already professionalized, and have the means to conduct an elaborate outreach program. The visits, thus, may display the resources of the state, rather than suggest that the police force needs more resources for security.

The negative results for perceptions of effectiveness also give weight to this argument—if individuals already perceive the security sector as effective, they do not believe it needs more resources. But, if individuals perceived the police as effective because of the household visits, then they were more likely to give to the state's security forces, indicating that the successful implementation of reforms increases support, and not the reform itself, nor perceptions of effectiveness unrelated to the reforms.

Table 3.15: Support for the State's Security Forces

	<i>Dependent variable:</i>				
	Proportion Donated				
	(1)	(2)	(3)	(4)	(5)
Treatment	-0.26*** (0.01)	-0.26*** (0.02)	-0.29*** (0.03)	-0.41*** (0.04)	-0.24*** (0.02)
Current Victim	0.04** (0.02)	0.03 (0.07)	0.04** (0.02)	0.03* (0.02)	0.04* (0.02)
War Victim	-0.02** (0.01)	-0.02** (0.01)	-0.06** (0.03)	-0.02* (0.01)	-0.02** (0.01)
Effective	-0.02*** (0.01)	-0.02*** (0.01)	-0.02*** (0.01)	-0.06*** (0.01)	-0.02*** (0.01)
Abusive	-0.03*** (0.01)	-0.03*** (0.005)	-0.03*** (0.01)	-0.03*** (0.01)	-0.02** (0.01)
Own Land	0.003 (0.01)	0.003 (0.01)	0.003 (0.01)	0.003 (0.01)	0.003 (0.01)
Kru	0.06** (0.02)	0.05** (0.02)	0.06** (0.02)	0.05* (0.02)	0.05** (0.02)
Grebo	0.04 (0.02)	0.04 (0.02)	0.04 (0.02)	0.03 (0.02)	0.03 (0.02)
Christian	0.02 (0.04)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Ex-Combatant	0.03 (0.06)	0.03 (0.06)	0.03 (0.06)	0.03 (0.06)	0.03 (0.06)
Heard about Police Visit	0.0001 (0.02)	-0.002 (0.02)	0.0002 (0.02)	0.01 (0.02)	0.0004 (0.02)
Know LNP	-0.04*** (0.01)	-0.04*** (0.01)	-0.04*** (0.01)	-0.03** (0.01)	-0.04*** (0.01)
Contact with UNMIL	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Suspicious of Enumerator	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.08*** (0.02)	0.09*** (0.02)
Experienced Prior Interviews	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Treatment X Current Victim		0.01 (0.07)			
Treatment X War Victim			0.04 (0.04)		
Treatment X Effective				0.05*** (0.01)	
Treatment X Abusive					
Constant	0.39*** (0.04)	0.38*** (0.04)	0.40*** (0.05)	0.48*** (0.05)	-0.01 (0.01)
Observations	498	498	498	498	498
R <sup>2</sup>	0.52	0.52	0.52	0.53	0.52
Adjusted R <sup>2</sup>	0.50	0.50	0.50	0.52	0.50
Residual Std. Error	0.12	0.12	0.12	0.12	0.12
F Statistic	34.45***	32.23***	32.59***	34.33***	32.35***

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

## 3.6 Conclusion

This chapter has assessed the effects of exposure to one reform—professionalization of the police through outreach programs—on perceptions of effectiveness and restraint and support for the state’s security forces. The reform increases security sector capacity, because when compared to a “rag tag” security organization, a professionalized police force is better able to deter and respond to non-state-actor attacks. The reform increases constraint because professionalization minimizes shirking and the credible commitment problem. Additionally, reforms that increase effectiveness and restraint should theoretically increase support for the state because citizens directly experience the state providing the service of security to them.

The results from the field experiment in Grand Kru County in 2015 suggest that civilians’ perceptions generally align with the theorized placement of this reform along the two dimensions. Based on evidence from this chapter, citizens’ exposure to reforms that professionalize the police appear to signal security sector effectiveness and restraint. Table 3.16 shows the findings from the results. As expected, we do not see much evidence for the effectiveness-restraint tradeoff. Nevertheless, the results for perceptions of restraints were more robust than the results for perceptions of effectiveness. Using the alternative control group (control between villages), there is some evidence for a effectiveness-restraint tradeoff in the opposite direction—those that received a household visit by police were less likely to perceive the police as effective and more likely to perceive them as restrained. At the same time, the program consistently enhanced perceptions of restraint.

Table 3.16: Table of Hypotheses and Results

Hypothesis	Result
H1a: Individuals that experience visits from professionalized police officers are more likely to perceive the security sector as effective	+
H1b: Individuals that experience visits from professionalized police officers are more likely to perceive the security sector as restrained	+
H2a: Individuals that experienced household visits from police officers and that were exposed to previous violence are more likely to perceive the security sector as effective	-
H2b: Individuals that experienced household visits from police officers and that were exposed to previous violence are more likely to perceive the security sector as restrained	-
H2c: Individuals that experienced household visits from police officers and that were exposed to previous violence are less likely to perceive the security sector as effective	+
H2d: Individuals that experienced household visits from police officers and that were exposed to previous violence are less likely to perceive the security sector as restrained	+
H3a: If individuals perceive the security sector to be effective, they are more likely to support the state's security forces	-
H3b: If individuals perceive the security sector to be abusive, they are less likely to support the state's security forces	+
H4a: Individuals that experience household visits from police officers and that perceived the security forces as more effective are more likely to support the state's security forces	+
H4b: Individuals that experience household visits from professionalized police officers are more likely to support the state's security forces	-

The heterogeneous effects based on past exposure to violence suggest that the treatment enhanced perceptions, but among those that experienced previous violence, the treatment was not as strong or had no effect. This could imply that exposure to the police reminds respondents of the security force's inability to handle security rather than restoring confidence in the security forces. Thus, reforms that address security do not necessarily correct for past "security gaps." The state may need to do much more than professionalize its police force to address post-conflict and wartime grievances.

When the reforms had the desired effect of enhancing perceptions of effectiveness, the household visits increased support for the state's security forces. This means that the mere implementation of reforms may not affect people's willingness to provide resources to the state, but only when such reforms actually change people's perception of the state in a more positive direction might they support the security sector.

However, when looking at the effect of reforms directly on support, treated individuals were less likely to support the police. Exposure to a professionalized police force may have the adverse consequence of demonstrating a highly resourced security sector. The public may prefer to support security forces that need more resources rather than ones that already have resources. Thus, either perceived need or successful implementation appear to drive support for the state's security sector.

In sum, the chapter has provided evidence that when a state implements a reform in Quadrant A (Figure 2.1 in Chapter 2), citizens could perceive it to be both effective and restraining. This is in accordance with the overall theoretical framework for finding the "right" security sector strategy to enhance legitimacy. However, while

professionalization is a reform that is firmly established as both capacity-increasing and constraint-increasing, other reforms' placements may not be as obvious. The next chapter turns to a reform whose classification is more ambiguous.

## 3.7 Chapter 3: Appendix

### Research Design for Alternative Control Group in Grand Kru County

The study draws from the population of Grand Kru County, Liberia of individuals (18 and older) that live in villages with more than 80 households. In total, twenty-five villages were selected. Using the 2008 census data from Liberia, there were 42 villages in Grand Kru County that had 80 households. The sample was chosen randomly using a random number generator in R. The villages were listed in the order of the census, and then the random number generator chose the villages to include in the sample.

The treatment included a scripted visit by two LNP officers to households in the villages. Households in the control group did not receive visits by LNP officers. The officers visited 15 villages, while the remaining 10 villages did not receive visits by police officers. The officers spent between 1-3 days in the village, visiting 50 households total. The total sample size for the treatment consists of 750 households. Table 3.17 provides the details of the experimental research design.

Table 3.17: Research Design for Alternative Control Group

<b>Group</b>	<b>Number of Villages</b>	<b>Households per village</b>	<b>Total Households</b>
Control: No Visit	10	25	300
Visit by Police Officers	15	50	750
Total	25	50	1050



The treatment was assigned at the village level. A random number generator selected 15 villages for the treatment from the sample of villages. Using the 2008 census data, the average population of the treated villages was 673 individuals (348 males and 325 females) and for the control villages, it was 710 (355 males and 355 females). The average number of households was 98 in the treated communities and 109 in the control communities. In treated communities, the average distance to Barclayville, the capital city of the county, was about 150 minutes by car and in the control villages it was 149 minutes by car. Using t-tests, these numbers are in balance. All villages, treatment and control, are Kru and Grebo speaking and experienced violence during the war.

Households were selected for treatment based on a random walk procedure. Upon entering the community, the police officers met with the village elders to obtain a list of quarters in the village. The team then randomly selected enough quarters to ensure that forty households were reached. When they arrived at the quarter, they used a random walk procedure to treat every other household.

Table 3.18: Balance Table: Control (Within Villages) versus Control (Between Villages)

Variables	Control (within)	Control (between)	p-value
Age	35.35	36.63	0.30
Women	0.50	0.49	0.90
Kru	0.46	0.40	0.14
Grebo	0.47	0.58	0.02
Christian	0.99	0.78	0.00
Traditional Leader	0.10	0.19	0.00
Naval String	0.74	0.87	0.00
Own Land	0.41	0.66	0.00
Farm	0.34	0.63	0.00
Head of Household	0.34	0.44	0.03
Household Number	6.09	6.61	0.07
Read	0.65	0.49	0.00
Cognitive Ability	0.57	0.55	0.68
Children	0.91	0.85	0.02
Participation in Armed Group	0.09	0.01	0.00
Experience wartime violence	0.50	0.68	0.02
Victim of Crime	0.13	0.24	0.002
Contact with Gov. Institutions	0.43	0.54	0.00
Bad Experience with LNP	0.04	0.01	0.01
Contact with AFL	0.03	0.20	0.00
Contact with UNMIL	0.21	0.20	0.74
<b>Total Observations</b>	<b>225</b>	<b>300</b>	

**Results: Control Between Villages Group in Grand Kru County**

Table 3.19: Perceptions of Effectiveness (Alternative Control)

	<i>Dependent variable:</i>				
	No Rogue	Less Crime	Help	Catch Criminal	Arrest Me
Treatment	-2.96*** (0.65)	-0.04 (1.28)	0.12 (0.66)	-1.58* (0.65)	-1.67 (1.11)
Current Victim	-0.84*** (0.19)	-0.15 (0.31)	0.11 (0.21)	-0.16 (0.27)	0.52 (0.29)
Gov War Victim	-1.41*** (0.37)	-0.47 (0.53)	-1.99*** (0.34)	-0.76 (0.48)	0.19 (0.52)
Rebel War Victim	-0.08 (0.07)	0.15 (0.12)	0.22** (0.08)	0.01 (0.10)	0.23* (0.10)
Female	0.33* (0.15)	0.29 (0.25)	-0.26 (0.16)	0.17 (0.21)	0.08 (0.21)
Born in Town	0.02 (0.20)	-0.21 (0.33)	-0.04 (0.22)	-0.29 (0.27)	0.12 (0.25)
Own Land	-0.10 (0.16)	0.22 (0.26)	-0.47** (0.17)	0.47* (0.21)	0.10 (0.21)
Traditional Leader	-0.54* (0.27)	-0.59 (0.42)	0.13 (0.28)	0.19 (0.49)	-0.34 (0.39)
Kru	-0.16 (0.20)	0.58 (0.33)	0.69** (0.22)	0.10 (0.28)	0.24 (0.28)
Christian	1.08*** (0.29)	-0.44 (0.48)	0.53* (0.27)	0.40 (0.43)	0.25 (0.39)
Know LNP	0.04 (0.17)	-0.14 (0.27)	0.78*** (0.18)	0.52* (0.23)	-0.70** (0.22)
Contact with UNMIL	0.18 (0.17)	1.47*** (0.36)	0.14 (0.20)	2.10*** (0.30)	0.83*** (0.25)
Constant	0.91 (0.61)	2.92* (1.16)	0.54 (0.60)	0.90 (0.68)	2.33* (1.11)
AIC	1177.1	589.3	1081.8	720.7	767.1
BIC	1354.6	760.1	1259.6	869.0	942.9
Observations	1024	972	1032	883	975

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
Fixed Effects Model at Village Level

Table 3.20: Perceptions of Abuse (Alternative Control)

	<i>Dependent variable:</i>					
	Steal	Abusive Arrest	Like Criminal	Cause Problems	Beat People	
Treatment	-2.04** (0.71)	-0.94 (0.57)	-0.77 (0.65)	-2.43** (0.77)	0.75 (1.19)	
Current Victim	0.46* (0.21)	0.65*** (0.19)	1.14*** (0.19)	0.38 (0.26)	-0.02 (0.32)	
Gov War Victim	0.97** (0.36)	0.32 (0.34)	0.91** (0.33)	1.61*** (0.40)	1.40** (0.44)	
Rebel War Victim	-0.24 (0.19)	-0.16 (0.17)	0.07 (0.18)	0.12 (0.24)	-0.49 (0.28)	
Female	-0.05 (0.18)	0.05 (0.16)	-0.19 (0.17)	-0.29 (0.22)	-0.17 (0.26)	
Born in Town	-0.15 (0.23)	0.04 (0.21)	-0.32 (0.21)	-0.19 (0.27)	-0.20 (0.33)	
Own Land	0.06 (0.18)	0.33* (0.17)	0.02 (0.18)	0.15 (0.22)	0.13 (0.27)	
Traditional Leader	0.05 (0.30)	-0.30 (0.27)	0.13 (0.27)	-0.27 (0.35)	0.02 (0.46)	
Kru	0.35 (0.23)	0.12 (0.21)	0.21 (0.22)	0.33 (0.27)	-0.16 (0.35)	
Christian	-0.83** (0.30)	-0.81** (0.27)	-0.30 (0.29)	-0.74* (0.32)	-0.27 (0.49)	
Know LNP	-0.63** (0.19)	-0.86*** (0.18)	-0.74*** (0.18)	-2.08*** (0.27)	-1.78*** (0.29)	
Contact with UNMIL	0.57** (0.21)	0.93*** (0.19)	0.77*** (0.20)	0.98*** (0.27)	1.67*** (0.32)	
Constant	0.62 (0.60)	0.29 (0.53)	-0.62 (0.59)	0.89 (0.61)	-2.53* (1.15)	
AIC	935.5	1100.9	1018.9	719.0	508.8	
BIC	1111.0	1278.4	1193.7	896.4	644.9	
Observations	968	1025	947	1021	809	

*Note:*\*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
Fixed Effects Model at Village Level

### **Alternative Randomized Control Trial: PSU Confidence Patrols**

In collaboration with Rob Blair and Ben Morse, a randomized control trial of the LNP's Police Support Unit Confidence Patrol program was carried out between 2014-2015. The evaluation began in June 2014 and focused on the three counties within the jurisdiction of the Gbarnga Hub (Bong, Lofa and Nimba). In collaboration with the Ministry of Justice and the LNP, we identified 74 communities as potential program beneficiaries, then randomly assigned 36 of the 74 to receive the program. The remaining 38 served as "comparison" communities, eligible to receive the program after the evaluation ended. On average, each community was patrolled approximately three times over the 14 months of the evaluation. The program was suspended between September 2014 and February 2015 due to the Ebola epidemic, and continued thereafter until September 2015.<sup>34</sup>

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<sup>34</sup>Ebola did not hit Grand Kru County as hard as it did in Bong, Lofa, and Nimba Counties, so it is possible that the Ebola epidemic influenced the results in the PSU study, but not in Grand Kru.

Table 3.21: External Validity: PSU Confidence Patrols

	<i>Dependent variable:</i>				
	More Power	Feel Safer	Less Crime	Arrest Me	Cause Problems
Treatment	0.86 (0.84)	1.14 (1.32)	0.20 (1.48)	1.81 (0.99)	0.45 (1.10)
Female	-0.14 (0.14)	0.08 (0.28)	-0.24 (0.27)	-0.08 (0.15)	-0.07 (0.27)
Age	0.01** (0.005)	0.02* (0.01)	-0.004 (0.009)	-0.03*** (0.005)	-0.01 (0.01)
War Violence	0.02 (0.05)	0.18 (0.11)	0.07 (0.10)	0.14* (0.06)	-0.11 (0.10)
Farmer	0.04 (0.15)	0.02 (0.30)	0.20 (0.28)	0.26 (0.16)	-0.32 (0.27)
Christian	0.52** (0.20)	-0.17(0.43)	-0.12(0.43)	-0.36(0.22)	0.01 (0.42)
Minority Ethnicity	-0.12 (0.23)	0.40(0.54)	0.62 (0.54)	0.36 (0.25)	-1.28* (0.65)
Pay Bribe	-0.73*** (0.22)	-0.66 (0.42)	-0.21 (0.44)	-0.07(0.24)	0.33 (0.40)
Constant	-1.58 * (0.68)	0.49 (1.11)	2.73* (1.29)	-0.73 (0.87)	0.37(0.97)
AIC	1569.3	505.4	541.8	1408.8	561.4
BIC	1979.9	715.6	774.4	1801.6	785.9
Observations	1175	648	708	1137	659

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
Fixed Effects Model at Village Level

## Alternative Measures of Restraint and Effectiveness

Table 3.22: Alternative Indicators

	<i>Dependent variable:</i>				
	Feel Safer	Police Rape	Don't Like Police	Corrupt	Discriminate
Treatment	0.71*** (0.25)	-1.57*** (0.62)	-0.74*** (0.22)	-0.52** (0.26)	-2.07*** (0.33)
Current Victim	0.71** (0.36)	0.25 (0.41)	0.22 (0.33)	-0.29 (0.28)	-1.20*** (0.40)
War Victim	-0.16 (0.22)	-0.37 (0.27)	0.11 (0.17)	-0.12 (0.17)	-0.06 (0.12)
Own Land	-0.02 (0.22)	0.21 (0.28)	0.18 (0.14)	0.01 (0.17)	0.04 (0.18)
Kru	0.003 (0.41)	-1.11* (0.67)	-0.57 (0.43)	-0.57 (0.41)	-0.29 (0.30)
Grebo	0.09 (0.36)	-1.41** (0.71)	-0.71* (0.42)	-0.41 (0.32)	-0.63 (0.15)
Christian	0.55 (0.62)	0.65 (0.80)	-0.60 (0.42)	0.31 (0.37)	-0.44 (0.63)
Ex-Combatant	0.58 (0.56)	0.38 (0.62)	-0.18 (0.42)	0.03 (0.40)	0.55 (0.58)
Heard about Police Visit	-0.44* (0.22)	-0.90 (0.69)	-0.67*** (0.29)	-0.85*** (0.25)	-0.81** (0.32)
Know LNP	0.56*** (0.12)	-0.61* (0.37)	-0.97*** (0.27)	0.23 (0.20)	0.35** (0.16)
Contact with UNMIL	-0.11 (0.09)	0.47*** (0.13)	0.61*** (0.07)	0.52*** (0.11)	-0.67*** (0.14)
Suspicious of Enumerator	1.57*** (0.54)	0.28 (0.34)	-2.33*** (0.63)	0.09 (0.18)	2.35*** (0.34)
Experienced Prior Interviews	0.26 (0.20)	-1.09*** (0.39)	0.25 (0.19)	-0.24 (0.15)	-1.46*** (0.38)
Constant	0.19 (0.72)	-0.39 (1.05)	0.16 (0.54)	0.89 (0.54)	2.32*** (0.64)
Observations	969	938	967	876	946
Log Likelihood	-452.45	-197.03	-366.85	-564.04	-393.71
Akaike Inf. Crit.	932.89	422.07	761.69	1,156.08	815.42

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level



Table 3.23: Alternative Indicators: Prefer Police Response

	<i>Dependent variable:</i>			
	Respond to Mob Violence (1)	Respond to Hala Hala (2)	Provide Security (3)	Protect from Rape (4)
Treatment	2.44** (0.39)	2.86*** (0.47)	2.08*** (0.40)	1.98*** (0.26)
Current Victim	0.15 (0.38)	-0.33(0.50)	-0.46** (0.21)	0.24 (0.28)
War Victim	0.15 (0.17)	0.05 (0.26)	0.29* (0.13)	0.08 (0.18)
Own Land	-0.27 (0.35)	-0.41 (0.26)	-0.10 (0.15)	0.09 (0.25)
Kru	-0.43 (0.35)	0.28 (0.45)	-0.06 (0.25)	-0.38 (0.48)
Grebo	0.05 (0.42)	0.59 (0.29)	-0.27 (0.28)	-0.30 (0.44)
Christian	1.11** (0.49)	0.84* (0.44)	0.47 (0.29)	0.42 (0.56)
Ex-Combatant	-0.27 (0.43)	-0.38 (0.56)	-0.27 (0.53)	0.39 (0.42)
Heard about Police Visit	0.42 (0.33)	0.42 (0.28)	-0.74*** (0.23)	-0.52*** (0.20)
Know LNP	2.13*** (0.39)	1.94*** (0.29)	0.04 (0.13)	0.66*** (0.12)
Contact with UNMIL	-0.77*** (0.15)	-0.66*** (0.12)	-0.93*** (0.09)	-0.53*** (0.09)
Suspicious of Enumerator	3.38*** (1.08)	3.07*** (0.76)	-0.33 (0.14)	2.20*** (0.47)
Experienced Prior Interviews	-0.11 (0.28)	-0.16 (0.28)	0.82*** (0.13)	-0.11 (0.18)
Constant	-1.92*** (0.68)	-2.65*** (0.69)	-0.73 (0.35)	-0.27 (0.58)
Observations	967	970	962	954
Log Likelihood	-329.10	-339.74	-526.26	-371.27
Akaike Inf. Crit.	686.20	707.49	1,080.52	778.68

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 3.24: Average Effect Size: Prefer Police Response

	(1)
<b>Prefer Police Response</b>	<b>0.81*** (0.09)</b>
Respond to Mob Violence	0.49*** (0.06)
Respond to Hala Hala	0.57*** (0.06)
Provide Security	0.39*** (0.05)
Protect from Rape	-0.03 (0.04)
Observations	947

*Note:* \*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
Standard Errors clustered at the village level  
Controls include: current victim, war violence, own land, Kru, Grebo, Christian, ex-combatant, heard police visit, know LNP, UNMIL contact, suspicious of visit, previous interview

### LNP Script

Good day, you can invite other people inside the home to listen to me if you want to.

I am here to talk to all people in the community.

My name is XXX I work with the Liberia National Police XX years and I have worked in the following sections namely:

I have met with the village elders and they have approved me to speak with you about the LNP. It is entirely your choice whether you want to speak to me or not. You are not in trouble. I am going around talking to many different people about accessing the LNP and some questions about the community. You can ask me any questions you could like about the LNP. This visit will take about 20 minutes to complete. There is no risk in talking to me. I have the permission of the LNP headquarters to visit the community and also the village elder. Your privacy is very important to us. We are not recording your name or anything, but will just take some notes about

what you say. All your answers are anonymous. They will never be traced back to you. The notes we take may be used in a report that will be presented in different different places. You have the right to stop talking to me at any time. You may refuse to answer any questions that you do not wish to answer.

Do you have any questions about anything I just said? Were there any parts that seemed unclear?

Can you tell me a little bit about your household?

I was born in Grand Kru in XXXX and my parents also came from here. I have come along to let you know about the work we are coming to do. We all know that the civil war damaged plenty things in Liberia including our security area. So, because of the too much violence and crimes happening in our community, we are fixing our security problems so that all of us can live in peace together and have respect for human rights and the rule of law in our country. We have not come to arrest anyone. Is that clear?

I am here to talk to you about how we can all live together in peace, how you can see us as your friends, brother, sister, security and partner because I am part of the LNP and our work is to protect you, your properties and to make sure the whole county is safe so that no one can come from anywhere to harm you. Is that clear?

I know that this place is peaceful and that is why you don't see plenty police here. But, the LNP wants you people to work along with us. We know you are peaceful, but there are some people here that are can do small small bad bad things, I wrong?

The police are supposed to catch the bad people. So, we want you people to help us report crimes and violence. Such as rape, killing, armed robbery, fighting with

knives, cutlasses, taking in drugs, stabbing. We also want to advise you to stop mob violence. When plenty people come to do something, they just can't jump on the person. If you caught a bad criminal or somebody for doing bad things, please do not beat them, just arrest the person and turn the person over to the police. I also beg you, we should not beat on your woman if she does any bad thing please talk with her and make her to know that what she is doing is not good or tell the old people about it or any family member or else one day you will harm or kill her and then you will have to face the law. Rape is a serious crime and it is not good because it can damage the person or even kill the person. Once you have sex with someone below 18, the law says it is wrong. Also, sassywood is against the law. If these things are happening in your community, please report it. We all have to respect each other and respect the law in our country.

So, if you are walking around and you see or hear about these bad things, please call us and report the case. Please call us on this number XXXXXXXXXX. This is the number of the LNP. We will come as soon as we can, right away to put the situation under control or settle the problem. You hear? We would like for you people to please cooperate with us. So that we can live in peace in our community.

We have not forgotten about this County to send enough police officers because we are not many but as soon as we have more police officers, as soon as they graduate from the Police Academy, we will send some of them here.

The Liberian National Police are now professional. Before and during the war, we did not have much training. But, now we have been trained by Americans police officers and police officers from other countries. The LNP are trained to protect you

and your properties. Some of our police officers are high school graduates, university graduates, and some even have masters degree. To avoid tribalism or one tribe to be plenty in the LNP, the LNP got people from all the tribes, we got in our country. Also, there are plenty more women in the LNP now. Soon, one out of every three LNP officers will be women. We also do not recruit bad bad people into the LNP. If someone committed a crime during the war, they are not allowed to work for the LNP. So, the police are a more professional institution than before.

I want you to please encourage your children to join the Police because when they graduate, they will come back and serve you.

So, everything we say, you understand it good good, and you have any question to ask? Any question at all? Please ask us so we can all talk about it and any other question you have about the LNP.

Now, since I am here I want to ask you some small small questions. I am not here to arrest anyone, just to get some information. I am not recording their names or anything about them. They will not know your name. No one will know your name because we are not recording it anywhere. But, if you want, I will take this information to the nearest depot and have another police officer come here to actually take the case.

Have there been any problems in the community in the last six months that you would like to report? Did they report anything (problems)?

Would you be willing to tell me who committed the crime? Did they tell you?

Would you be willing to tell me of any other known rogues in the community?

Did they give the specific name of the rogue?

Have you witnessed beating among your neighbors in the last six months? Did they tell you?

Do you know of any rape cases in the community in the last six months? Did they tell you? What is the location in your community that has the most criminal activity? Did they tell you? Have you met any other police officers in the past week (not including today)? How many live in the household?

Now that I have just talked to you, you think I can stay the night here and eat some small food with you? What would it be like for me to spend one or two days with you? Thanks for your time and cooperation.

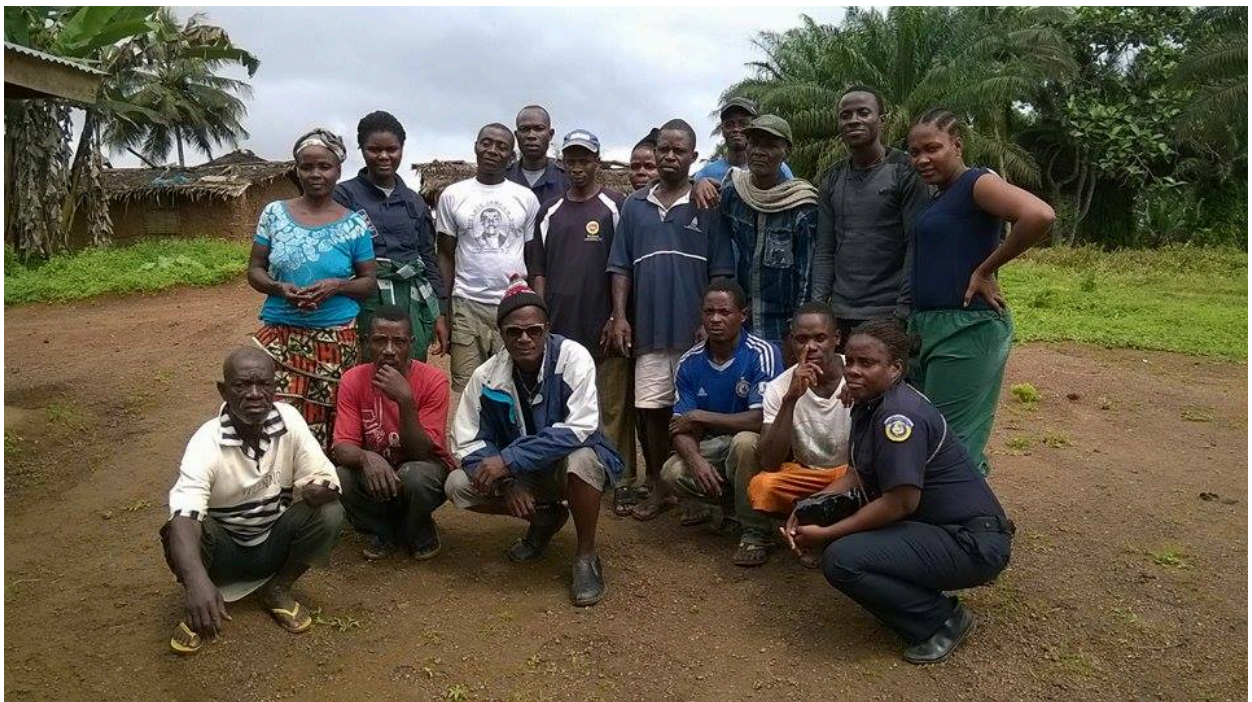


Figure 3.7: Police-Community Meeting in Grand Kru County.





Figure 3.8: Police Visits in Grand Kru County.



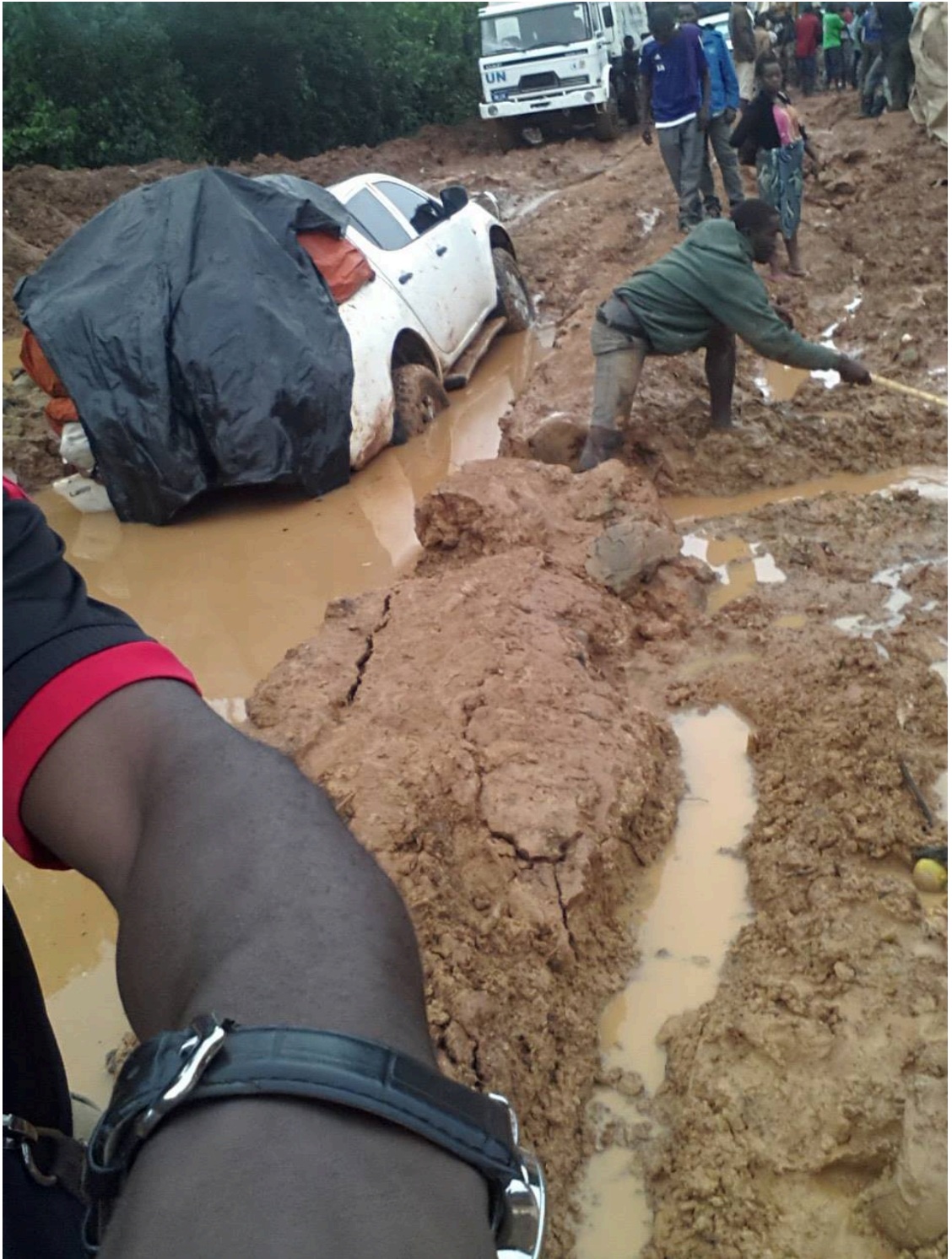


Figure 3.9: Road Conditions in Grand Kru County.

## Chapter 4

# Micro-Level Analysis: Female Ratio Balancing Reforms

This chapter investigates whether exposure to another reform—female ratio balancing—affects civilians’ perceptions of effectiveness and restraint and support for the state’s security forces. Unlike professionalization, female ratio balancing is more ambiguous with respect to whether it is both capacity and constraint-increasing. Female ratio balancing may increase capacity by increasing personnel and may make operations more efficient, as women bring certain skills or assets to the job. At the same time, some scholars have suggested that women’s integration may decrease efficiency. Female ratio balancing may be a constraint-increasing reform, because of gender stereotypes about women as more restrained. Nevertheless, these stereotypes may not transcend time and geography. Thus, female ratio balancing is a reform that could increase legitimacy of the state’s security forces, exacerbate the “effectiveness-restraint” tradeoff, or even decrease legitimacy.

The chapter uses the same field experiment from Chapter 3, but disaggregates the treatment based on sex. It specifically tests whether contact with female police officers leads civilians to perceive the security sector as more or less effective and restrained when compared to male police officers (or no police officers). It also assesses whether these perceptions translate to support for the state's security forces. Just like in the previous chapter, the impact of female ratio balancing is tested through community outreach by the police—exposure to *female* police officers through household visits compared to exposure to male police officers through household visits (or no exposure to police officers).

## 4.1 Female Ratio Balancing Reforms

Within the last decade, female ratio balancing reforms in the security sector have become increasingly popular in post-conflict countries. Female ratio balancing policies are enacted in order to increase the number of women relative to men in traditionally masculine institutions, such as the security sector, so that women and men are equally represented in them (Mazurana, Raven-Roberts and Parpart 2005). Balancing usually occurs through quotas or policy changes that encourage women's participation in the institution. As more countries have developed National Action Plans for UN Security Council Resolution 1325, post-conflict countries have institutionalized policies to female ratio balance their domestic security sectors (Karim 2016). Such reforms have also been institutionalized as state responses to violence against women (Walsh 2008). For example, the Sierra Leone National Police developed family support units and

recruited women to fill these posts. The Policia Nacional de Timor-Leste (PNTL) require a 20% quota, the Liberian National Police require a 30% quota, and the Kosovo Police Service (KPS) targeted women and ethnic minorities in recruitment (Bastick 2011).<sup>1</sup> Based on the data from the next chapter, the reform is implemented in 17% of conflict and post-conflict years between 1989-2012, and states are more likely to implement female ratio balancing reforms when peacekeeping missions are present.<sup>2</sup> Regardless of how implementation occurs, domestic efforts to female ratio balance represent states' increased commitment to gender equality globally.

Much of the existing literature suggests that the integration of women into the security forces constrains the security forces from excessive violence. It does so by specifically mitigating the adverse selection problem—individuals' sex may serve as a signal about their type. Women are perceived to be more restrained in using coercive force (among other positive attributes, i.e. beliefs about women as less corrupt),<sup>3</sup> which means that they may be less likely to shirk, or at least perceived by their superiors as less likely to shirk.

Historically, the roles associated with fighting, combat, and war have been relegated to the male sphere (Goldstein 2003). This may give the perception to society that women are less likely to use force (Bastick 2008). Moreover, the literature on policing offers numerous studies that show that women behave in a more constrained way, or that women are perceived to be less coercive than men.<sup>4</sup> Studies find that

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<sup>1</sup>Other countries in the report where gender has been a major part of SSR include: Hungary, South Africa, the UK, Central African Republic, Indonesia, Peru, Somalia, Afghanistan, Russia, Tajikistan, Rwanda, Ivory Coast, Israel, Jamaica, Brazil, and Nepal

<sup>2</sup>See Working Paper by Laura Huber and Sabrina Karim.

<sup>3</sup>See for example, Swamy et al. (2001) and Karim (2011).

<sup>4</sup>For exceptions, see Paoline and Terrill (2005).

policemen are more likely to make arrests and use force excessively than policewomen (Brandl, Strohine and Frank 2001, Rabe-Hemp 2008). Women may be better at diffusing conflicts non-violently (Leger 1997). Female officers and same-sex female-female officer pairs may use less force when compared to their male counterparts (Schuck and Rabe-Hemp 2007). Female police officers have a lower rate of weapons use (Hoffman and Hickey 2005). Carson (1993) found evidence that the inclusion of women in all levels of policing leads to the police force becoming less violent in general.

It is important to note that there are exceptions to the notion that women are less aggressive and violent than men. Women are perpetrators of violence (Sjoberg and Gentry 2007, Sjoberg and Via 2010). Studies even find that women are perpetrators of sexual violence (Cohen 2013). Nevertheless, regardless of whether women actually perpetrate violence, individuals may perceive women to be less aggressive and violent than men, and there appears to be some consensus that the public has a growing acceptance and appreciation for female police officers as more trustworthy (Leger 1997).

Moreover, much of the literature on gender stereotypes about women is based on studies conducted in the U.S. or other “Western” countries. However, simply looking at the division of labor with respect to coercive force, cross-nationally and over time, there has been a long history of gendered division where men are predominantly the warriors in society (Goldstein 2003). Indeed, when it comes to protection, men from all parts of the world have assumed this role, suggesting that perhaps stereotypes about women (and men) are generalizable. Other studies find

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cross-national consistency in gender stereotypes (Costa Jr, Terracciano and McCrae 2001).

*H1a: Compared to individuals that experience household visits by male police officers, individuals that experience household visits by female police officers are more likely to perceive the security sector as restrained.*

With respect to capacity, the same gender stereotypes that confine women to gender stereotypes about restraint may lead to perceptions of weakness among citizens who see the integration of women as a reform that undermines the security sector's effectiveness in providing protection. The same reform that might mitigate perceptions of abuse may lead to perceptions of ineffectiveness. Indeed, there is a significant body of literature that has argued that women's integration into the security forces, particularly in combat units, will make the security forces less effective, as such integration could disrupt unit cohesion (Simons 2001, Van Creveld 2000*b*), and could lower standards for specialized units (Fenner 2001). With respect to unit cohesion, opponents of women's integration argue that integration harms male bonding, or that men may feel more of a need to "save" their female colleagues and thus jeopardize the mission.<sup>5</sup> Opponents also argue that women may be less likely to be "combat ready," or that women are less easily able to deploy due to gender roles (such as leaving behind family and children),<sup>6</sup> or that sexual harassment may increase (Fenner 2001,

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<sup>5</sup>See Skaine (2011) for explanations of these arguments.

<sup>6</sup>See Skaine (2011) for explanation of this argument.

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Van Creveld 2000*b*).

Another body of literature suggests that the security forces become weaker when women are integrated into them. Van Creveld (2000*a,b,c*) argue that women's integration into the military has weakened the military and could jeopardize national security. Others find that female police officers are perceived as weaker than male officers (Rabe-Hemp and Schuck 2007). Moreover, the fact that women may be perceived as less likely to use coercive force may signal to some that they may not be as effective in providing security.

*H1b: Compared to individuals that experience household visits by male police officers, individuals that experience household visits by female police officers are more likely to perceive the security sector as ineffective.*

Nevertheless the scholarly community has challenged these studies, as there does not appear to be strong evidence that women disrupt unit cohesion, lower standards, or lead to any other negative outcomes with regards to effectiveness (Egnell 2013, Haring 2013, McSally 2007, 2011). For example, to negate the argument that women disrupt unit cohesion, Rostker et al. (1993) found that there are two types of unit cohesion—task cohesion and social cohesion. Of the two, task cohesion is far more important to unit performance than social cohesion (which is what women would supposedly disrupt).<sup>7</sup> Social cohesion may actually lead to negative outcomes for the unit, as they may perpetuate groupthink and polarize attitudes and decision

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<sup>7</sup>As suggested by Haring (2013), women may actually improve task cohesion in groups.

making (Cawkill et al. 2010, Haring 2013). Other evidence suggests that women are no less competent than men in policing and other security provision (Boldry, Wood and Kashy 2001, Karim et al. 2013), and that as the number of women in a group increases, performance may increase (Pazy and Oron 2001). Thus, in the U.S, the consensus seems to be that women's integration is a net positive. This is exemplified by the 2016 removal of combat restrictions for women in the military.

Moreover, some scholars suggest that when women are integrated into the security forces, it actually makes the security sector more effective. It increases resources by increasing the eligible pool of participants. If there are not enough qualified men for certain jobs, opening participation to women and opening positions to women increases the chance that those positions will be filled. In some cases, allowing women's participation may increase the overall size of the security forces if budgets also increase to accommodate the increase in female personnel.

Additionally, a growing body of literature suggests that integrating women into the security forces enhances the security sector's operational effectiveness by making it more efficient (Egnell, Hojem and Berts 2014, Menke 2013, Wooten 2015). Some argue that a gender perspective is important to address issues in new forms of warfare such as information gathering (Egnell, Hojem and Berts 2014, Erwin 2012). As an example, from the U.S. military, "female engagement teams" and "cultural support teams" participated alongside Rangers and other American special operations units in Afghanistan and Iraq so that they could conduct counterinsurgency more effectively (Erwin 2012, Harding 2012). Others argue that mixed units are more effective because they bring collective intelligence to a team, and that collective intelligence



actually increases as the number of women in the group increases (Haring 2013). To summarize the argument, “when women are present in significant numbers, the bottom line improves—from financial success to the quality and scope of decision making.”<sup>8</sup> The “effectiveness” argument is not limited to the military, but some of the policing literature has also found that women may provide specific characteristics in policing that are particularly helpful for community policing (Belknap and Shelley 1993, DeJong 2005, Poteyeva and Sun 2009, Singer and Singer 1985).

Finally, female ratio balancing could ensure that different skills, ideas, and assets permeate the institution and give the perception that it is more inclusive in efforts to address a wider variety of security needs. Whereas previously, certain types of issues might have gone unaddressed, integrating women into the security forces may ensure that these other issues receive attention. For example, women are sometimes perceived as better able to address rape (Meier and Nicholson-Crotty 2006, Mobekk 2010, Walsh 2008). In some cases, female police officers are more likely to want to respond to domestic violence disputes than their male counterparts (Homant and Kennedy 1985), and female officers could be better at conflict resolution (Braithwaite and Brewer 1998, Leger 1997). These skills may also be important in a post-conflict context, where women are often survivors of different forms of violence. In this way, “women are assumed to bring a more gender-specific, value-added approach to broader security tasks,” which helps “foster civilian trust towards the security sector (Mobekk 2010).”<sup>9</sup> This “added value” may increase overall perception of the security

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<sup>8</sup>This is a quote from the 2009 “White House Project Report: Benchmarking Women’s Leadership,” which was cited in Haring (2013) (pg. 29).

<sup>9</sup>See pg. 281.

sector's effectiveness.

*H1c: Compared to individuals that experience household visits by male police officers, individuals that experience household visits by female police officers are more likely to perceive the security sector as effective.*

#### **4.1.1 Previous Exposure to Violence and Female Ratio Balancing Reforms**

The previous chapter highlighted how prior exposure to violence may condition how the treatment is received. Women may be particularly vulnerable to violence by state actors, especially when it comes to sexual violence (Cohen and Nordås 2014, 2015). However, violence, whether sexual violence or other forms of violence, is not just limited to women. Thus, similar to the previous chapter, we look at how violence experienced recently, in the post-conflict period, as well as violence experienced during the war condition the treatment effect.

Just like in the previous chapter, exposure to different reforms could lead to a “restorative” or a “reminder” effect. The restorative effect implies that contact with women police officers will alleviate concerns about an abusive and/or ineffective security sector. When victims have contact with female police officers, they may be more likely to perceive the security sector as restrained and/or effective. If they perceive the security sector as less abusive, they may perceive the reform as correcting for

prior state-perpetrated abuses. If they perceive the security sector as more effective, they may perceive the reform as correcting for the state's inability to protect them in the past—for example, perhaps sexual violence was not an issue that was addressed previously, but with women in the security forces, victims may perceive the police as correcting for this oversight. These effects would be stronger for those that have contact with female police officers than for those that have contact with male police officers given the stereotypes about women as more effective and restrained.

The “reminder effect” implies that the reform will only serve to evoke feelings of fear and mistrust when victims encounter women in the security forces. Victims may perceive the security sector as more ineffective with women in it, because they are reminded of the security force's ineptitude. This could be exacerbated with women in the security forces, because if they perceive women as ineffective (or unrestrained), they may believe that the state has done the opposite of what is necessary to make them safer. This means that victims that experience visits by female police officers could perceive the security sector as more ineffective than those that experienced visits by male police officers.

#### **4.1.2 Female Ratio Balancing and Support for State Security Forces**

As suggested in Chapter 3, female ratio balancing reforms may not only affect individuals' perceptions of the state but also support for the state's security forces. Female ratio balancing reforms may directly generate support, because citizens

perceive the reforms as the state providing a public good. As mentioned previously, in the traditional social contract sense, citizens provide resources to the state in exchange for (better) protection through a reformed security sector. This simple bargain is, again, tested directly here.

*H2: Compared to individuals that experience household visits by male police officers, individuals that experience household visits by female police officers are more likely to support the state.*

### 4.1.3 Female Ratio Balancing Reforms and Gender Equality

Proponents of female ratio balancing reforms have argued that such reforms have the added benefit of enhancing gender equality within the state. Gender equality here is conceptualized and measured as the belief that women are equal to men, and can occupy spaces that were traditionally reserved for men. This is different than looking at aggregate indicators of gender equality, which some scholars have recently critiqued (Arat 2015).<sup>10</sup> Beliefs about women may affect actions towards them, particularly related to violence (Costin and Schwarz 1987). Thus, if reforms affect beliefs such that more people perceive women as equal to men, this may lead to more gender-equal outcomes and perhaps even peace.<sup>11</sup>

Promoting gender equality is one of the primary justifications used by the United

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<sup>10</sup>See also Ellerby, Kara. *The Problem with Gender Equality: The Politics of Women's Inclusion*. Forthcoming 2017, New York: New York University Press.

<sup>11</sup>For connections between gender equality and peace, see Melander (2005a), Melander (2005b), Bjarnegård and Melander (2011), Caprioli and Boyer (2001), Caprioli (2005), Caprioli (2003), Caprioli (2000), Hudson (2013), Hudson and Den Boer (2002).

Nations for increasing the proportion of women in peacekeeping missions. They argue that increasing women's representation in peacekeeping missions may "help contribute to more equitable gender relations within the local society by serving as role models or mentors for local women and girls."<sup>12</sup> Mazurana (2002) suggests that female peacekeepers "alter the perception and willingness to engage with peacekeepers on the part the local population, most notably local women."<sup>13</sup> While these studies apply to the effects of female peacekeepers on local women, the same dynamic may occur when local women are integrated into the domestic police force. In places where females were traditionally not a part of the security sector, women's integration into the police force may serve as a vehicle for gender equality, as both men and women perceive that women can provide security.

*H3: Compared to individuals that experience household visits by male police officers, individuals that experience household visits by female police officers are more likely to value gender equality.*

## 4.2 Field Experiment: Research Design

The hypotheses in this chapter are tested using the Grand Kru, Liberia field experiment described in the previous chapter. Again, the experiment involves randomizing household visits by professionalized police officers, but this time by sex. The treatment is the measure of the effects of Liberia's female ratio balancing reform, and is

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<sup>12</sup>The quote is from the UN but cited in Jennings (2011) (pg. 3).

<sup>13</sup>See pg. 70.

operationalized through direct exposure and conversation with female officers. Female officers are present in the LNP due to the LNP's female ratio balancing program.

Liberia has been a champion of gender reforms since the end of its civil war. In 2005, the LNP developed a Gender Policy for the LNP, introduced a 15% quota and then a 20% quota in an attempt to increase the influence of women in the institution, and to improve the LNP's capacity to respond to rape (Bacon 2013, Karim and Gorman 2016). In 2012 the quota increased to 30%. By March 2014, the LNP had 18% female officers, compared with the 2% in 2005 (Bacon 2013, Karim and Gorman 2016). While Liberia is not the only country with quotas for female security personnel, it has received international attention for these reforms.

Again, the treatment took place at the quarter level, and included a scripted visit by either two male LNP officers or two female LNP officers. Recall that quarters are considered organized neighborhoods within villages. On average in the fifteen villages selected for treatment, each village included four quarters, and each quarter contained about 56 households. Quarters were randomly assigned to male or female officers. This means that at least one quarter was visited by male officers and at least one quarter was visited by female officers. When the team, which included four police officers and three enumerators, arrived in each village, they asked for a list of the quarters in the village. Quarters were then randomly assigned to male officers, female officers, and the control group (surveys). Table 4.1 provides the research design for the experiment.

Table 4.1: Research Design for Treatment

<b>Group</b>	<b>Number of Villages</b>	<b>Households per village</b>	<b>Total Households</b>
Control: No Visit	15	15	225
Visit by Male Police	15	25	375
Visit by Female Police	15	25	375
Total	15	65	975

### 4.2.1 Treatment

Similar to the previous chapter, the research design uses an intent-to-treat research design. This approach summarizes the net impact of the treatment, and not of the treatment that was assigned. When the police officers visited the households, they treated the entire household (all individuals within it). However, on-sided non-compliance may have been an issue if those that received the treatment were not home when the outcome survey was conducted or the random selection of the individual in the household for the survey did not yield a person that was treated (present during the officers' visit). Additionally, some respondents may not have been treated if they could not recall the sex of the officer that visited, which means that the treatment may not have "worked" for them.

Based on the data, 69% of the respondents were reportedly treated. Community members were considered "treated" if they said they had experienced a household visit and accurately recalled the sex of the officer. Among those that said that they received officer visits in the past month, 71% could accurately recall the sex of the officer.

There are some differences among those that could accurately recall the sex of the officer and those who got it wrong. Those who got the officer sex wrong were more

likely to be a traditional leader and less likely to have children and a higher number of children. They tended to have lower levels of education. They were more likely to have contact with UNMIL and more likely to know someone in the LNP. They were more likely to be suspicious of the enumerators, more likely to be angry during the interview, and more likely to have had a bad experience in the community. However, they were less likely to have been interviewed in the past. The differences suggest that those that could not accurately recall the sex may be a fundamentally distinct group than those who could recall the sex of the officer, which means the intent-to-treat design provides a safer and more conservative way to estimate the treatment's effects.

Moreover, any bias that could occur from such a diverse pool of “treated” individuals is attenuated using the intent-to-treat research design. Included in the intent-to-treat group are those that may not have been treated, which should theoretically dampen any impact the treatment may have on the outcomes.

### **4.2.2 Outcomes**

The outcomes are evaluated based on comparing female police-officer visits to male police-officer visits—those that received visits by female officers constitute the treatment group, and those that received visits by male officers constitute the control group. Nevertheless, the appendix shows results for the effect of female (and male) household visits using households that did not receive any police visits as the control group. The discussion below also includes this analysis.

The same outcome variables that are used as Chapter 3 are used to measure



perceptions of effectiveness, restraint, and support for the state's security forces.<sup>14</sup> To account for the gendered nature of the reform, two additional questions are added to the effectiveness and restraint questions.<sup>15</sup>

### **Effectiveness**

- No rogue will come into the village if the LNP stay here: this measure captures whether respondents perceive the police as a deterrent for potential criminals or other non-state actors.
- There will be less crime in the community if the LNP came to the village: this measure also captures whether respondents perceive the police as a deterrent for crime.
- I am afraid that the LNP will arrest me some day if I commit a crime: this is a measure about whether individuals perceive the LNP as a deterrent for the respondents themselves.
- The LNP are good at catching criminals: this measure captures whether respondents perceive the police as able to make arrests.
- It is easy to get help from the LNP: this measures the respondents' perception about being able to get assistance from the police.
- I feel safer when the LNP are in the village: this measures the respondents' perception about being safe if police are around.

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<sup>14</sup>All questions were asked in and are presented in Liberian English.

<sup>15</sup>The results below do not change based on whether the additional question is added or not.

## Abuse

- If the LNP comes to your village, the LNP will beat community members: this measure captures whether individuals perceive the security sector as physically abusive.
- The police can sometimes steal things from me: this measure captures whether individuals perceive the police as violating their property rights.
- The LNP are causing problems (shouting, yelling, etc.) when they come into the community: this measure captures the degree to which community members perceive the police as problematic in the community.
- When the LNP arrest someone, they treat them badly: this measure captures perceptions of how respectfully the police handle criminals.
- The LNP sometimes behave like criminals: this measure directly captures whether individuals perceive the police as criminals.
- The LNP can sometimes do man woman business with women in the community even if the woman does not agree: this measure directly captures whether individuals believe the police will rape women in the community.

In addition to the perceptual outcomes measured three weeks after the implementation of the treatment, other behavioral outcomes were measured during the initial police visits. These assessed the immediate behavioral responses related to restraint, effectiveness, and support.<sup>16</sup> During the visits, an enumerator accompa-

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<sup>16</sup>These measures were only tested with the male officer as the control group.

nied the male and female officers as they visited the households.<sup>17</sup> The enumerators recorded immediate behavioral responses during the interaction between police officers and community members.

There are several behavioral responses that might indicate that individuals found the security sector to be restrained and/or effective. The responses related to effectiveness indicate how successful the officers were in garnering the attention of community members, keeping the attention of household members, engaging the audience, as well as whether the officer was able to get the message across without being interrupted.<sup>18</sup> The responses related to fear of abuse focus on whether individuals looked scared, nervous and/or fearful, whether respondents appeared to trust the enumerators more than the police officers, and whether individuals were willing to interrupt the police officers. If individuals were willing to interrupt the officers, this demonstrates that they may not be afraid of them.<sup>19</sup>

### **Effective**

1. Did other people not a part of the household stop to listen?
2. Did people focus their attention on the police and nothing else?
3. Did the person look at the officer in the eye when talking?
4. Did the person look at the police officer/ask the police officer questions/engage the police officer instead of the enumerator?

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<sup>17</sup>A female enumerator accompanied the female police officers and a male enumerator accompanied the male police officers.

<sup>18</sup>With respect to looking individuals in the eye, there is a growing body of literature that suggests this is an important indicator. See, for example, Bayliss and Tipper (2006).

<sup>19</sup>The Pre-Analysis Plan includes other measures, but there was too little variation in the answers to include them in the analysis.

5. Did the person avoid interrupting the police officer during the speech?

### **Abusive**

1. Did the person look scared or nervous?

2. Was the emotion of the person fearful?

3. Did the person look at the enumerator/ask the enumerator questions/engage the enumerator instead of the officer?

4. Did the person avoid looking at the officer in the eye when talking?

5. Did the person avoid interrupting the police officer during the speech?

In addition to measuring immediate behavioral responses related to restraint and effectiveness, direct support to the state was measured by how willing individuals were to give information to the police (Support 1-6). Providing information indicates that the community members may be willing to incur the cost of being known as someone that “gossips” or “rats out” other people in the community. Willingness of the community member to let the officer stay in his or her home and readiness with which the household gave consent to the officers are additional indicators of support.

### **Support**

1. Would you be willing to tell me who committed the crime? Did they tell you?

2. Would you be willing to tell me of any other known rogues in the community?

Did they give the specific name of the rogue?

3. Have you witnessed beating among your neighbors in the last six months? Did they tell you?
4. Do you know of any rape cases in the community in the last six months? Did they tell you?
5. What is the location in your community that has the most criminal activity? Did they tell you?
6. Was the respondent willing to share information and experiences with the officer?
7. Now that I have just talked to you, you think I can stay the night here?
8. Did the household easily give consent?

### 4.2.3 Models

Again, the models use randomization inference. Two-tail tests are used in the analyses to assess whether police presence has a positive or negative impact. Two sets of models are presented. To mitigate the possibility of both Type I and Type II errors, the Average Effect Size (AES) is also measured across all questions within each cluster (effectiveness, restraint, support, and gender equality), following the procedure proposed in Clingingsmith, Khwaja and Kremer (2009) and Kling, Liebman and Katz (2007).<sup>20</sup> All AES models are presented with standard errors clustered at the

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<sup>20</sup>The AES across  $J$  related dependent variables is given by  $\tau = \sum_{j=1}^J \frac{\pi_j}{\sigma_j}$ , where  $\pi_j$  is the average treatment effect on each dependent variable and  $\sigma_j$  is the standard deviation of dependent variable  $j$  in the control group. To test the null hypothesis of no average effect, the effects  $\pi_j$  are jointly estimated using seemingly unrelated regression. The  $J$  dependent variables are stacked to compute

village level. In addition to AES, logit models are presented, including the predicted probabilities of some survey questions, as well as OLS estimates for the question on donations.

The survey data are presented using covariates on the variables that do not balance, as well as controls for if respondents had prior experience being interviewed for another survey, or if they were suspicious that the enumerators were a part of the Liberian National Police.<sup>21</sup> Other controls include being a current victim of a crime, a war victim, a traditional community leader, a landowner, born in town, household number, Kru, Grebo, Christian, contact with UNMIL, and a relationship with the LNP. Additionally, the results below were tested with enumerator-fixed effects, and they do not change. All models include standard errors clustered at the village level. Conventional p-value levels are used with p-values that are below 0.05 for the AES estimates and the 0.10 for the logit analysis.

For the immediate behavioral responses, the following control variables were included: previous police visits in the last week, previous police visits in the past year, distractions that occurred during the officer visits, whether the officers spoke in dialect, and the length of the visit. Some of these variables address factors that might have affected the implementation of the treatment. Because the treatment was conducted at the household level (all members of the household were treated), it is not possible to control for individual-level variables and it is not possible to assess heterogeneous effects based on prior victimization or sex.<sup>22</sup>

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a variance-covariance matrix for testing the statistical significance of  $\tau$ , the AES. For further details see Clingingsmith, Khwaja and Kremer (2009), Kling, Liebman and Katz (2007).

<sup>21</sup>The latter questions were filled out by the enumerator after the survey was complete.

<sup>22</sup>And it would have aroused too much suspicion among the community members if they were

Below, the survey results are presented first, followed by results from the behavioral responses.

## **4.3 Descriptive Statistics**

### **4.3.1 Dependent Variables**

The dependent variables for the survey questions are presented in Chapter 3, Table 3.5. Table 4.2 provides the summary statistics for the dependent variables based on behavioral responses. Based on this table, only about a quarter of the respondents were willing to tell the police some information about crime in their community. Nevertheless, enumerators judged about 80% of the households as willing to share information and experiences, which suggests that most participants felt comfortable talking to the police. Additionally, most respondents did not interrupt the officers while they spoke, looked them in the eye, focused their attention on the police, addressed the police and not the enumerators, and let the officers stay the night at their home. By the end of the visit most people were not fearful, even though they may have been scared or nervous when officers approached their home.

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asked a series of questions about previous exposure to violence and other such questions.

Table 4.2: Summary Statistics: Dependent Variables

Variable	Mean	Std. Dev.	N
Willing to tell the police who committed the crime	0.04	0.19	691
Willing to tell the police of any known rogues in the community	0.02	0.15	688
Willing to tell police about beating by neighbors in the last six months	0.21	0.41	725
Willing to tell police about rape in the community in the last six months	0.03	0.17	722
Willing to tell police about the location that has the most criminal activity	0.07	0.25	540
Report any crime	0.26	0.44	749
Willing to share experiences and information	0.80	0.40	734
Did not interrupt during speech	0.67	0.47	733
Looked the officer in the eye	0.91	0.29	734
Other people not a part of the household stopped to listen	0.30	0.46	733
Focused their attention only on police	0.94	0.24	734
Addressed police officers not civilian enumerators	0.82	0.38	734
Look scared or nervous	0.24	0.43	734
Emotion was fearful at the end of the visit	0.03	0.18	734
Household agreed to let officer stay the night	0.66	0.47	734
Gave a hard time for consent	0.03	0.17	733
Asked a question	0.30	0.46	734



### 4.3.2 Balance

Despite randomizing treatment at the quarter level, balance among the different groups (control, female treatment, and male treatment) is mixed. Table 4.3 shows balance on a number of co-variates specified in the pre-analysis plan.<sup>23</sup> The p-values for F v. C compare the female treatment group to the control group, the p-values for the M v. C compare the male treatment group to the control group, and the p-values F v. M. compare the female treatment group to the male treatment group.

Compared to those that experienced visits by male officers, those that experienced visits by female officers tended to be more Christian, more likely to be born in town (naval string), more likely to be landowners, have slightly higher cognitive ability, more likely to be victims of a current crime, and more likely to have contact with UNMIL. Balance was better between those that experienced visits by male officers and the control group than other comparisons. Analysis in Chapter 3 demonstrated that one reason that imbalance occurred is because of the way that randomization was conducted, at the quarter level. There is heavy concentration of certain variables (such as ethnicity and UNMIL contact) in some quarters but not others. Regardless, to account for imbalance, imbalanced co-variates are included in the models below.

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<sup>23</sup>See Evidence in Governance and Politics (EGAP) Registration: <http://egap.org/registration/1629>

Table 4.3: Balance Tables

Variables	Control	Female Visits	Male Visits	p-value (F v. C)	p-value (M v. C)	p-value (F v. M)
Age	35.35	35.70	34.50	0.74	0.46	0.20
Women	0.50	0.50	0.47	0.96	0.57	0.46
Kru	0.46	0.19	0.22	0.00	0.00	0.32
Grebo	0.47	0.76	0.72	0.00	0.00	0.22
Christian	0.99	0.93	0.99	0.00	0.18	0.00
Traditional Leader	0.10	0.08	0.05	0.45	0.03	0.09
Naval String	0.74	0.80	0.71	0.10	0.44	0.01
Own Land	0.41	0.62	0.42	0.00	0.78	0.00
Farm	0.34	0.43	0.39	0.03	0.24	0.32
Head of Household	0.34	0.40	0.34	0.16	0.82	0.07
Household Number	6.09	6.80	6.70	0.01	0.03	0.80
Read	0.65	0.59	0.60	0.15	0.24	0.84
Cognitive Ability	0.57	0.58	0.50	0.66	0.16	0.03
Children	0.91	0.92	0.88	0.77	0.22	0.07
Participation in Armed Group	0.09	0.02	0.01	0.00	0.00	0.20
Experience Wartime Violence	0.50	0.63	0.70	0.22	0.01	0.09
Victim of Crime	0.13	0.21	0.15	0.01	0.49	0.03
Bad Experience with LNP	0.04	0.03	0.03	0.55	0.50	0.89
Contact with AFL	0.03	0.02	0.02	0.90	0.40	0.42
Contact with UNMIL	0.21	0.42	0.30	0.00	0.02	0.00
<b>Total Observations</b>	<b>225</b>	<b>375</b>	<b>375</b>			

## 4.4 Results

There are several different sets of hypotheses to explore. The first hypothesis suggests that those that experienced visits by female officers are more likely to perceive the security sector as restrained. Hypothesis 1b and 1c make predictions about perceptions of effectiveness—H1b predicts that the female treatment will lead to perceptions of ineffectiveness, and H1c suggests that the treatment will lead to positive perceptions of effectiveness. These hypotheses are tested through the surveys as well as through immediate behavioral responses.

Table 4.4 provides the Average Effect Size (AES) estimates of the male and female treatments on the control (F v. C and M v. C), as well as comparing the male and female groups (F v. M) on perceptions of restraint and effectiveness. The table shows that when it comes to enhancing perceptions of restraint, there does not appear to be a difference with regards to whether the officer is male or female. The results imply that both male and female visits equally enhanced perceptions of restraint—suggesting a null result for H1a. In other words, both male and female police officers contribute to reducing perceptions of abuse by the police (See Table 4.17 and Table 4.18), but females are not more likely to enhance such perceptions when compared to male police officers.

Using alternative measures of restraint such as perceptions of corruption and general valence toward the police, compared to visits by male police officers, visits by female officers contributed to a heightened perception of “restraint.” In the chapter appendix, Table 4.21 and Table 4.22 show negative coefficients for contact with fe-

male police. Substantively, interactions with female versus male police officers lead to an 8% decrease in perceiving the police as corrupt and a 5% decrease in stating that one does not like the police.<sup>24</sup> Regardless of the alternative results, most of the indicators of restraint point to a null result for H1a.

When it comes to perceptions of effectiveness, analysis from the survey evidence suggests that there is more support for H1b than H1c. While overall, both male and female police officers enhanced perceptions of effectiveness (See Appendix Table 4.16 and Table 4.15), male police officers were slightly more successful than female officers in enhancing such perceptions. Those that received visits by female officers were slightly less likely to perceive the security sector as effective compared to those that received visits by male officers (by about 10%). This suggests that female police officers may be perceived as slightly less effective than their male counterparts, even though, overall, both male and female police officers enhanced perceptions of effectiveness.

The null results for H1a and support for H1b are further demonstrated in Table 4.5 and Table 4.6.<sup>25</sup> While most models in Table 4.6 is negative (for Female Treatment versus Male Treatment), none of them are statistically significant, and one response is even positive (Model 2—Abusive Arrest), indicating that contact with male and female officers equally enhance perceptions of restraint.

Again, Table 4.5 shows that there is a negative effect for perceptions of effectiveness when individuals received visits by female officers versus male officers. In

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<sup>24</sup>Using a 95% CI, the difference is between -15%– -0.03% and -9%–0.4%, respectively.

<sup>25</sup>The chapter appendix presents the disaggregated treatment (Female or Male) results on the control group (See Table 4.15, Table 4.16, Table 4.17, and Table 4.18).

Table 4.4: Average Effect Size: Perceptions of Effectiveness and Restraint

	(F v. C)	(F v. C)	(M v. C)	(M v. C)	(F v. M)	(F v. M)
<b>Effectiveness</b>	<b>0.40*** (0.07)</b>		<b>0.51*** (0.07)</b>		<b>-0.10* (0.05)</b>	
No Rogue	0.05 (0.07)		0.20* (0.09)		-0.08 (0.04)	
Less Crime	0.05 (0.03)		0.08* (0.04)		-0.02 (0.02)	
Help	0.20*** (0.06)		0.22*** (0.04)		-0.06** (0.02)	
Catch Criminal	0.37*** (0.06)		0.39*** (0.06)		-0.03 (0.03)	
Arrest Me	0.40 *** (0.05)		0.45*** (0.06)		0.005 (0.04)	
Feel Safer	0.06 (0.04)		0.11*** (0.04)		-0.06** (0.02)	
<b>Abusive</b>		<b>-0.49*** (0.10)</b>		<b>-0.46*** (0.10)</b>		<b>-0.005 (0.05)</b>
Steal		-0.46*** (0.08)		-0.45*** (0.09)		0.02 (0.03)
Abusive Arrest		-0.04 (0.04)		-0.09* (0.04)		0.05 (0.03)
Like Criminal		-0.41*** (0.07)		-0.34*** (0.08)		-0.04 (0.03)
Cause Problems		-0.23*** (0.07)		-0.22*** (0.05)		-0.01 (0.03)
Beat Community		-0.02 (0.03)		-0.05 (0.04)		-0.003 (0.03)
Rape Women		-0.19*** (0.03)		-0.13*** (0.04)		-0.02 (0.02)
Observations	595	551	484	434	673	653

Note:

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Std. Err. adjusted for 15 clusters (villages)

Controls include: current victim, war violence, land owner, born in town,

household number, Kru, Grebo, Christian, UNMIL contact

heard police visit, know LNP, suspicious of visit, previous interview

particular, those that had contact with female officers versus male officers were 6% less likely to believe that no rogues would enter if the police were present,<sup>26</sup> 5% less likely to believe that the police could catch criminals,<sup>27</sup> and 5% less likely to feel safer.<sup>28</sup> Nevertheless, the evidence does not suggest that female police officers are perceived as ineffective, rather both male and female police officers are perceived as effective, but female police officers are just perceived as slightly more ineffective than their male counterparts.

Additionally, the chapter appendix shows negative (though insignificant) AES estimates for preferring the police to respond to a variety of incidents when the treatment was female police officers (See Table 4.23). Again, the implication is that individuals prefer both male and female officers to respond to crime.

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<sup>26</sup>Using 95% CI, the difference is between -13%–2%.

<sup>27</sup>Using 95% CI, the difference is between -10%–0.08%.

<sup>28</sup>Using 95% CI, the difference is between -11%–0.02%.

Table 4.5: Perceptions of Effectiveness: Female Treatment (v. Male)

	<i>Dependent variable:</i>						
	No Rogue	Less Crime	Help	Catch Criminal	Arrest Me	Feel Safer	
Female Treatment (v. Male)	-0.31* (0.16)	-0.23 (0.30)	0.02 (0.26)	-0.38** (0.17)	-0.15 (0.23)	-0.44*** (0.17)	
Current Victim	-0.39 (0.24)	-0.36 (0.47)	0.39 (0.35)	0.04 (0.28)	0.93* (0.51)	0.59 (0.36)	
War Victim	-0.68*** (0.23)	0.19 (0.25)	0.27 (0.17)	-0.27 (0.21)	0.55 (0.33)	-0.12 (0.26)	
Kru	0.09 (0.36)	1.40** (0.48)	0.91** (0.39)	0.06 (0.59)	0.41 (0.40)	0.28 (0.65)	
Grebo	0.29 (0.41)	1.47*** (0.50)	0.43 (0.53)	0.19 (0.44)	0.27 (0.34)	0.06 (0.62)	
Traditional Leader	-0.31 (0.41)	0.83 (0.93)	-0.12 (0.35)	0.22 (0.72)	-0.78 (0.57)	0.66 (0.38)	
Land Owner	0.21 (0.13)	0.32 (0.34)	-0.34 (0.20)	0.66*** (0.17)	0.20 (0.20)	0.002 (0.30)	
Born in Town	-0.07 (0.24)	-0.55** (0.26)	-0.04 (0.21)	-0.54** (0.24)	0.12 (0.24)	-0.20 (0.19)	
Household Number	-0.08** (0.04)	-0.01 (0.07)	-0.01 (0.04)	-0.02 (0.05)	-0.03 (0.05)	-0.05 (0.05)	
Christian	0.96** (0.42)	0.54 (0.43)	0.72* (0.46)	0.97** (0.40)	-1.68 (1.15)	0.65 (0.55)	
Know LNP	-0.83*** (0.15)	-0.36 (0.38)	0.96*** (0.28)	-0.01 (0.19)	-1.33*** (0.29)	0.53*** (0.16)	
Contact with UNMIL	-0.96*** (0.28)	1.00 (0.65)	-0.28 (0.24)	1.38*** (0.39)	0.03 (0.26)	-0.29 (0.21)	
Suspicious of Enumerator	0.69*** (0.24)	1.00 (0.83)	1.85*** (0.52)	1.43** (0.57)	1.79*** (0.63)	1.57*** (0.56)	
Experienced Prior Interviews	-0.04 (0.41)	0.53 (0.38)	0.31 (0.33)	0.48 (0.39)	1.57*** (0.26)	-0.17 (0.21)	
Constant	0.58 (0.60)	0.71 (0.92)	-0.40 (0.69)	0.52 (0.47)	3.10*** (1.19)	1.31* (0.77)	
Observations	734	742	743	737	697	744	
Log Likelihood	-449.49	-183.70	-351.43	-297.09	-260.09	-323.61	

*Note:*\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.6: Perceptions of Abuse: Female Treatment (v. Male)

	<i>Dependent variable:</i>					
	Steal	Abusive Arrest	Like Criminals	Cause Problems	Beat People	Rape
Female Treatment (v. Male)	0.04 (0.19)	0.36** (0.18)	-0.28 (0.17)	-0.17 (0.24)	-0.15 (0.28)	-0.82** (0.40)
Current Victim	0.14 (0.41)	-0.12 (0.39)	0.34 (0.34)	0.30 (0.39)	-0.03 (0.32)	-0.12 (0.43)
War Victim	-0.02 (0.18)	0.09 (0.23)	0.20 (0.22)	0.30 (0.34)	-0.21 (0.39)	-0.01 (0.67)
Kru	-0.55 (0.39)	-0.67 (0.59)	-0.25 (0.85)	-0.77 (0.72)	0.49 (0.68)	-1.93*** (0.72)
Grebo	-0.87* (0.45)	-0.51 (0.59)	-0.27 (0.74)	-0.69 (0.62)	0.16 (0.71)	-1.66** (0.75)
Traditional Leader	0.34 (0.40)	-0.53 (0.40)	0.20 (0.38)	-0.50 (0.44)	-0.19 (0.50)	-0.34 (1.22)
Land Owner	0.04 (0.20)	0.30 (0.21)	-0.15 (0.20)	-0.19 (0.30)	0.16 (0.18)	0.18 (0.35)
Born in Town	-0.25 (0.23)	-0.30 (0.20)	-0.58*** (0.19)	-0.31 (0.31)	-0.01 (0.24)	-0.78 (0.76)
Household Number	0.05 (0.04)	0.04 (0.04)	0.01 (0.03)	0.10* (0.06)	0.04 (0.05)	0.02 (0.08)
Christian	-0.30 (0.51)	-0.20 (0.50)	-0.30 (0.65)	-0.75 (0.53)	-1.20** (0.51)	-0.15 (0.70)
Know LNP	-0.71*** (0.21)	-0.53*** (0.19)	-0.97*** (0.28)	-2.42*** (0.48)	-1.77*** (0.56)	
Contact with UNMIL	0.50** (0.22)	0.98*** (0.16)	0.69** (0.21)	1.37*** (0.21)	1.82*** (0.38)	-0.46 (0.56)
Suspicious of Enumerator	-1.36*** (0.37)	1.80*** (0.24)	1.04*** (0.23)	-3.41*** (1.10)	-1.05*** (0.42)	1.25*** (0.28)
Experienced Prior Interviews	0.09 (0.26)	-0.15 (0.29)	0.75*** (0.24)	0.20 (0.40)	0.72** (0.30)	-0.31 (0.69)
Constant	-0.54 (0.60)	-1.26* (0.74)	-0.52 (0.77)	-0.79 (0.78)	-1.51** (0.69)	-0.26 (1.12)
Observations	728	741	697	745	719	729
Log Likelihood	-308.21	-351.63	-335.46	-207.12	-207.68	-92.40

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level



Turning to the results from the behavioral responses, Table 4.11 shows the AES for measures of effectiveness and restraint. The results compare those that received visits by female officers to those that received visits by male officers. Again, there is no support for H1a, and in fact, Model 2 shows there is actually a positive relationship, suggesting those that had contact with female officers were *more* likely (by about 25%) to be fearful of the police than those that received visits by male officers. This is particularly noticeable among respondents who were initially more scared or nervous when officers arrived. However, the fear diminished over the course of the visit, as perceptions of the police improved among households that experienced visits by officers of both sexes. Moreover, the other indicators that measured abuse/fear could also be interpreted as indicators of effectiveness (addressed enumerator and not police and didn't interrupt). Thus, though there is evidence that female visits increased fear, the fear does not appear to last for the duration of the visit.

As indicated in Table 4.11, the AES for abuse was largely driven by reports of fear among those that interacted with female officers (Model 5). The logit models confirm the positive finding. Compared to those that received visits by male police officers, those that received visits by female police officers were 37% more likely to be fearful or nervous.<sup>29</sup> The results here contradict Hypothesis 1a and suggest that gender stereotypes about women as more restrained may not apply in some parts of Grand Kru County.

It is possible that the female police officers behaved more assertively, although the week-long training exercises conducted with both male and female police officers

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<sup>29</sup>Using 95% CI, the difference is between 28%–44%.

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ensured parity in the delivery of the message. What is possible is that community members were not used to seeing assertive women nor women in the security sector, and this “transgression” against traditional gender norms may have led to fear. In fact, field notes from the enumerator that accompanied the female officers state that “the community [that experienced visits by females] were fearful because, during the war, women who were part of army, police and other factions were more brutal and hostile than the men,” and that “dwellers appeared more fearful when they saw Josephine and Delphine in their uniform, but at the end of their visits, they became fearless because of the knowledge given to them on how the police work; and furthermore, they didn’t see the police officers misbehaving but instead they were professional.” This observation corroborates a body of literature that suggests that when women act as assertively as men, they are perceived as more aggressive than men who act the same way (Eagly and Steffen 1986, Huddy and Terkildsen 1993, Mathison 1986, O’Neill and O’Reilly III 2011, Sandberg 2013). Additionally, the observation demonstrates that female police officers were able to change perceptions of the police through their visit from one of fear to one of cooperation. The evidence here calls into question assumptions about gender as a fixed identity—gender stereotypes are more fluid than suggested in some of the literature. Regardless, together with the survey evidence from above, we can conclude that there is minimal support for H1a.

Contrary to the survey findings, the immediate behavioral responses show more support for H1c than H1b. In other words, based on behavioral responses, female police officers appear to be more “tactically” effective than male police officers. They got other community members to stop and listen (though this may have been due to

Table 4.7: Average Effect Size: Behavioral Measures of Effectiveness and Restraint

	(1)	(2)
<b>Effectiveness</b>	<b>0.20** (0.07)</b>	
Others Stop and Listen	0.14* (0.07)	
Focused on Message	-0.04 (0.03)	
Addressed Police Not Enumerator	0.21** (0.08)	
Look Police in the Eye	-0.01 (0.03)	
Didn't Interrupt	0.19*** (0.05)	
<b>Abusive</b>		<b>0.25** (0.09)</b>
Scared or Nervous		0.37*** (0.07)
Emotion is Fearful		0.006 (0.04)
Addressed Enumerator Not Police		-0.21** (0.08)
Do Not Look Police in the Eye		0.01 (0.03)
Didn't Interrupt		0.19*** (0.05)
Observations	727	728

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Std. Err. adjusted for 15 clusters (villages)

Controls include: contact with police in last week,  
contact with police in last year,  
distractions, dialect, length of visit

the novelty of seeing female police officers); they were more likely to be considered the authority on the subject (individuals were more likely to address the police officer instead of the enumerator); and they were more likely to hold peoples' attention as household members were less likely to interrupt female officers. Of course, the latter two indicators may have more to do with enhanced fear than effectiveness. Nonetheless, the evidence seems to indicate that even though female police officers were perceived as less effective in the survey data, their delivery of community policing messaging may have been more effective than mens' delivery.

Table 4.8 shows the logit models, which corroborate the AES results. When community members received visits by female officers, they were 20% more likely to address the police officer over the civilian enumerator (Model 1).<sup>30</sup> Put another way, civilians were more likely to address the civilian enumerator if they were visited by male police officers. Visits by female officers also increased the likelihood that other community members stopped and listened by 14% (Model 2).<sup>31</sup> Both these indicators suggest that female police officers were more effective at spreading a message. Additionally, those that experienced visits by female officers were 19% less likely to interrupt (Model 4).<sup>32</sup> Again, this could be interpreted as either effectiveness, as individuals were paying attention rather than disrupting the visit, or it could be interpreted as fear—community members were unlikely to interrupt officers whom they feared.

Although most indicators point to female police officers as effective, there is one indication that they were not effective in holding people's attention (Model 4). How-

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<sup>30</sup>Using 95% CI, the difference is between 14%–28%.

<sup>31</sup>Using 95% CI, the difference is between 6%–23%.

<sup>32</sup>Using 95% CI, the difference is between -26%– -11%.

ever, the substantive effects are quite small. Those that experienced female visits were 4% less likely to be focused on the message than those that experienced visits by male officers.<sup>33</sup> The overall indication is again that compared to male police officers, female police officers are more effective in delivering community policing activities even if community members do not perceive them as effective in providing security.

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<sup>33</sup>Using 95% CI, the difference is between -8%–0.3%.

Table 4.8: Behavioral Measures of Effectiveness and Restraint

	<i>Dependent variable:</i>					
	Address Police Officer	Others Stop and Listen	Focus on Message	Interrupt Officer	Scared of Officer	
Female Treatment	1.50*** (0.51)	0.65** (0.31)	-0.68* (0.41)	-0.68** (0.34)	1.71*** (0.55)	
Police Visit Last Week	-0.27 (0.34)	0.19 (0.41)	-0.50 (0.36)	0.18 (0.37)	-0.09 (0.21)	
Police Visit Last Year	-0.05 (0.31)	0.02 (0.32)	1.04 (0.45)	0.25 (0.35)	-0.19 (0.36)	
Distractions During Visit	-0.69** (0.33)	0.29 (0.27)	0.08 (0.34)	0.45* (0.27)	0.38 (0.29)	
Used Dialect	0.05 (0.68)	0.44 (0.45)	-0.61 (0.50)	-0.62 (0.39)	0.39 (0.37)	
Visit Length	-0.006 (0.03)	0.03 (0.02)	0.05* (0.03)	0.11*** (0.02)	-0.01 (0.02)	
Constant	1.10** (0.47)	-1.94*** (0.27)	1.82*** (0.63)	-2.67*** (0.34)	-2.05*** (0.47)	
Observations	743	742	743	742	743	
Log Likelihood	-322.36	-433.79	-162.32	-435.99	-369.45	

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01

We next turn to whether exposure to previous levels of violence conditions the female treatment effect. Unlike Chapter 3, which demonstrated that police visits may have a “reminder” effect, visits by female officers do not appear to lead to any conditional effects among survivors. In other words, whether male or female officers visited victims (either current victims or victims of wartime violence), the effect was the same. Thus, female officers do not appear to alleviate victims’ concerns and grievances. This is consistent with the null results for H1a—women are not perceived as less abusive than their male counterparts, and thus should not have a restorative effect among survivors of violence.

Moving to the second hypothesis, which predicts that female ratio balancing reforms have a positive effect on support for the state’s security forces, depending on how support is measured, the results vary. If we look at the proportion of donations made to the state security forces, the proportion given by those that received visits from female officers is about the same as those given by those that received visits from male officers. Exposure to both male and female police officers decreases support. Table 4.9 shows these null results.

Table 4.9: Support for the State's Security Forces: Donations

	<i>Dependent variable:</i>		
	(1)	(2)	(3)
Female Treatment	-0.26*** (0.02)		
Male Treatment		-0.25*** (0.02)	
Female Treatment (v. Male)			0.003 (0.01)
Effective	-0.03*** (0.01)	-0.04*** (0.01)	-0.01 (0.01)
Abusive	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.006)
Current Victim	0.05* (0.03)	0.02 (0.03)	0.02 (0.01)
War Victim	-0.02 (0.01)	-0.04** (0.02)	-0.01 (0.01)
Traditional Leader	-0.04 (0.03)	-0.08** (0.04)	-0.01 (0.02)
Household Number	-0.0002 (0.002)	-0.001 (0.003)	-0.002 (0.002)
Own Land	0.01 (0.02)	0.04 (0.02)	-0.01 (0.01)
Born in Town	-0.05** (0.02)	-0.05 (0.03)	-0.02 (0.01)
Kru	0.09*** (0.03)	0.09** (0.04)	0.05* (0.02)
Grebo	0.07** (0.03)	0.08*** (0.02)	0.03 (0.02)
Christian	0.01 (0.02)	0.004 (0.03)	0.02 (0.03)
Contact with UNMIL	0.01 (0.01)	-0.02 (0.03)	0.06*** (0.01)
Know LNP	-0.04** (0.02)	-0.05** (0.02)	-0.04** (0.02)
Suspicious of Enumerator	0.11*** (0.02)	0.15*** (0.04)	0.08*** (0.02)
Experienced Prior Interviews	0.05*** (0.02)	0.06*** (0.02)	0.03* (0.01)
Constant	0.41*** (0.06)	0.45*** (0.05)	0.10** (0.04)
Observations	347	267	380
R <sup>2</sup>	0.53	0.56	0.32
Adjusted R <sup>2</sup>	0.51	0.53	0.29
Residual Std. Error	0.13	0.13	0.09
F Statistic	23.27***	19.79***	10.55***

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01;

Standard Errors clustered at the village level



However, if support is measured using immediate behavioral outcomes related to resources, results are more favorable. Table 4.10, Model 2 shows a positive relationship for allowing the police officers to stay the night with members of the community—female police officers were more likely to be offered lodging at the end of their visit than their male counterparts. Specifically, they were about 19% more likely to be invited to spend the night with community members.<sup>34</sup> This is despite initial fears about their visit.

The provision of lodging to the security forces is actually an important indicator of support, because the Liberian state (and other weak states) do not always have the resources to build lodging facilities for their security sectors, and they do not always pay the hazard pay or per diems (on time) for police officers to stay in guest-houses.<sup>35</sup> If community members are willing to bear some of the costs associated with policing, this could provide the state with some leeway to shore up resources to build facilities to house security forces in the longer term. Thus, the evidence here may indicate that community members are perhaps not more likely to give resources to the state's security forces as a whole, but are likely to give resources to *individual officers*, particularly female ones.

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<sup>34</sup>Using a 95% CI, they may have been between 11%-27% more likely to be offered a place to stay than male police officers.

<sup>35</sup>This information comes from hours of participant observation of the Liberian National Police from 2012-2016.

Table 4.10: Support for the State's Security Forces: Alternative Measures

	<i>Dependent variable:</i>			
	Report Crime	Allowed to Stay the Night	Asked a Question	Difficulty Getting Consent
Female Treatment	-1.23** (0.53)	0.78*** (0.18)	-0.52 (0.34)	1.37*** (0.71)
Police Visit Last Week	0.04 (0.28)	-0.35 (0.29)	-0.12 (0.35)	0.10 (0.34)
Police Visit Last Year	-0.11 (0.30)	0.68** (0.32)	0.26 (0.37)	-0.24 (0.30)
Distractions During Visit	0.97*** (0.25)	-0.01 (0.22)	0.31 (0.25)	1.31*** (0.55)
Used Dialect	-0.72 (0.48)	-0.15 (0.53)	-0.15 (0.25)	-0.23 (0.81)
Visit Length	0.01 (0.03)	0.05*** (0.02)	0.09*** (0.02)	-0.02 (0.03)
Constant	-0.73 (0.57)	-0.84*** (0.31)	-2.50*** (0.44)	-4.22*** (0.83)
Observations	743	743	743	743
Log Likelihood	-396.35	-446.52	-430.08	-94.84

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Nonetheless, Table 4.10 indicates that compared to visits from male officers, visits from female officers lead to decreased support when it comes to information provision and consent. Those visited by female officers were less likely to report any information (crime, rogue, beating, rape, or the location of criminal activity). The substantive effects from Model 1 in Table 4.10 suggest that when female officers visit a household, community members were 26% less likely to report crimes.<sup>36</sup> Table 4.11 corroborates this finding, indicating that those that received visits by female officers were almost a third less likely to provide or share information.

Additionally, those that received visits by female officers were more likely to give the officers a difficult time in obtaining consent to speak with the household members. Compared to male-treated households, female-treated households were 5% more likely to give the officers a hard time to obtain consent.<sup>37</sup> This could be due to the reports of initial fear among those that experienced visits by female police officers, as such households may have been more reluctant to continue to speak with the officers.

The overall evidence regarding the effects of female police officer visits versus male police officer visits on support for the state's security forces is somewhat ambiguous. Those that experienced female visits versus male visits were perhaps more likely to give resources (in the form of lodging), but not more likely to give monetary resources. However, they were less likely to give the state information and consent. Thus, reforms may affect the type of support the state security forces need, and more work should be done to unpack how different reforms affect different forms of support.

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<sup>36</sup>Using a 95% CI, they may have been between 18%-33% less likely to report a crime and share information.

<sup>37</sup>Using a 95% CI, the difference is between 1%-8%.

Table 4.11: Average Effect Size: Support for the State's Security Forces (Information)

	(1)
<b>Provide Information</b>	<b>-0.30*(0.13)</b>
Report Crime	-0.06 (0.04)
Report a Rogue	-0.03 (0.03)
Report a Beating	-0.15 (0.08)
Report Rape	-0.02 (0.02)
Report Criminal Activity Location	-0.05 (0.05)
Share Information	-0.27 *** (0.07)
Observations	508

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
 Std. Err. adjusted for 15 clusters (villages)  
 Controls include: contact with police in last week,  
 contact with police in last year,  
 distractions, dialect, length of visit

Finally, we turn to the effects of female ratio balancing reforms on gender equality. Hypothesis 3 suggests that individuals that have interactions with female police officers are more likely to value gender equality than individuals that have contact with male police officers. Overall, without factoring in officers' sex, household visits by both male and female officers lead to more of a value for gender equality when compared to households that did not receive any visits.<sup>38</sup> This means that police visits by professional police have the side effect of enhancing beliefs about gender equality.

There is some indication that female police officers better enhance perceptions of gender equality compared to male police officers. Table 4.23 shows that this is indeed the case—the average effect size for perceptions of gender equality is about 10%.

<sup>38</sup>The Chapter Appendix provides the effects of the Female and Male Treatments compared to the Control Group (See Table 4.19 and Table 4.20).

However, most of this positive finding is driven by stronger preferences for women to provide security, and not overall measures of societal gender equality. Table 4.13 shows that when it comes to the questions, “in our country, women should have equal rights and receive the same treatment as men do,” “women should not be subject to traditional laws and customs,” and “men should not be elected over women,” while the results are positive, they are not statistically significant for those that received visits from female officers compared to those that received visits from male officers. Rather, the female treatment appears to have a significant effect on individuals’ preferences for security. When asked whether they would prefer female police officers, male police officers, female community/traditional leaders, or male community/traditional leaders to provide security protection or protection from rape, those that experienced female visits were more likely to prefer female police officers. For the provision of security, they were 5% more likely to prefer female police officers,<sup>39</sup> and for rape, they were 11% more likely to prefer female police officers.<sup>40</sup> Thus, visits by female officers may not change societal norms related to gender equality more generally, but they may change beliefs about women’s ability to provide security. If the goal is to enhance beliefs about gender equality in the security sector, household visits from female officers appear to help with this goal.

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<sup>39</sup>Using a 95% CI, the difference is between 0.05%-9%.

<sup>40</sup>Using a 95% CI, the difference is between 4%-19%.

Table 4.12: Average Effect Size: Perceptions of Gender Equality

	(Female)	(Male)	(F v. M)
<b>Gender Equality</b>	<b>0.65*** (0.10)</b>	<b>0.47*** (0.10)</b>	<b>0.10* (0.05)</b>
Women should have equal rights	0.09 (0.06)	0.13* (0.06)	0.005 (0.04)
Women should not be subject to traditional laws	0.06 (0.07)	0.09 (0.05)	0.006 (0.05)
Men do not make better leaders than women	0.15** (0.05)	0.07 (0.05)	0.04 (0.05)
Prefer female police officers to provide security	0.07*** (0.01)	0.05** (0.01)	0.04 (0.02)
Prefer female police officers to respond to rape	0.45*** (0.06)	0.30*** (0.07)	0.12** (0.04)
Observations	640	503	728

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001  
Std. Err. adjusted for 15 clusters (villages)

Controls include: current victim, war violence, landowner, born in town,  
household number, Kru, Grebo, Christian, UNMIL contact  
heard police visit, know LNP, suspicious of visit, previous interview

Table 4.13: Perceptions of Gender Equality: Female Treatment (v. Male)

	<i>Dependent variable:</i>				
	Equal Rights	No Traditional Laws	Women Leaders	Police Women (Security)	Police Women (Rape)
Female Treatment (v. Male)	0.05 (0.19)	0.03 (0.22)	0.20 (0.19)	0.48 (0.30)	0.55*** (0.16)
Current Victim	1.19*** (0.35)	-0.34* (0.17)	-0.34* (0.19)	0.16 (0.40)	0.35 (0.27)
War Victim	0.06 (0.16)	0.25 (0.20)	0.32 (0.18)	-0.21 (0.29)	0.36* (0.20)
Kru	-0.31 (0.40)	-0.38 (0.32)	0.81* (0.43)	0.64 (0.78)	0.97* (0.53)
Grebo	-0.26 (0.35)	-0.34 (0.26)	0.97** (0.49)	0.79 (0.63)	1.05** (0.46)
Traditional Leader	-0.17 (0.43)	0.32 (0.33)	-0.32 (0.37)	-2.39** (1.15)	-1.15*** (0.23)
Land Owner	0.15 (0.17)	-0.14 (0.24)	-0.45*** (0.22)	-0.32* (0.19)	-0.46*** (0.15)
Born in Town	-0.15 (0.17)	-0.07 (0.22)	-0.13 (0.27)	0.44 (0.36)	0.34 (0.23)
Household Number	0.05 (0.03)	-0.003 (0.03)	-0.06** (0.02)	-0.12** (0.05)	0.04 (0.03)
Christian	0.80** (0.35)	0.84** (0.36)	-0.10 (0.33)	-0.30 (0.89)	-0.34 (0.57)
Know LNP	-0.31* (0.19)	-0.35* (0.20)	-0.23* (0.12)	1.32*** (0.30)	0.97*** (0.14)
Contact with UNMIL	-0.33 (0.20)	-0.43** (0.20)	-0.08 (0.17)	-0.22 (0.23)	1.54*** (0.22)
Suspicious of Enumerator	-1.03*** (0.27)	0.04 (0.24)	0.30** (0.14)	1.75*** (0.39)	-0.67** (0.28)
Experienced Prior Interviews	0.62*** (0.16)	0.12 (0.19)	-0.17 (0.23)	-2.39*** (0.65)	-0.59* (0.34)
Constant	-0.14 (0.44)	0.36 (0.58)	-0.22 (0.55)	-2.70** (1.05)	-1.92*** (0.66)
Observations	745	746	736	738	739
Log Likelihood	-444.34	-481.42	-494.85	-211.47	-417.64

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

## 4.5 Conclusion

This chapter has assessed another reform—female ratio balancing—on perceptions of effectiveness and restraint, as well as support for the state’s security forces and gender equality. Theoretical placement of the reform in Quadrant A or Quadrant C of Figure 2.1 (Chapter 2) implies that the reform should increase constraint, because of long-held stereotypes about women as more restrained in the use of force, but could either increase or decrease capacity. The results from this chapter indicate that gender is more of a fluid concept than the literature suggests and that the literature may conflate sex with gender.<sup>41</sup> By assuming that gender maps onto sex, the literature assumes that women should be perceived a particular way, whereas gender and perceptions are shaped by context. Table 4.14 demonstrates that some hypotheses are supported whereas others are not, depending on the comparison group. Despite the evidence that women are perceived as less likely to use force (and maybe in some instances are less likely to do so), they were not perceived by respondents in the survey as more restrained than men, and these results did not change if respondents were victims. Instead, both male and female officers enhanced perceptions of restraint, indicating that visits by officers of both sexes enhance perceptions of restraint.

Some results even pointed to a heightened sense of fear when female police officers approached households. Why might this be the case? One theory is that traditional gender roles dictate that women should be docile and restrained—implying that they are not necessarily security providers. When experiences disrupt this sta-

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<sup>41</sup>For an overview of the difference, please see Sjoberg and Gentry (2007), among others.



Table 4.14: Table of Hypotheses and Results

Hypothesis	Comparison Group	Result
H1a: Individuals that experience visits by female police officers are more likely to perceive the security sector as restrained	versus no visit	+
H1a: Individuals that experience visits by female police officers are more likely to perceive the security sector as restrained	versus male officers	no effect/-
H1b: Individuals that experience visits by female police officers are more likely to perceive the security sector as ineffective	versus no visit	-
H1b: Individuals that experience visits by female police officers are more likely to perceive the security sector as ineffective	versus male officers	+
H1c: Individuals that experience household visits by female police officers are more likely to perceive the security sector as ineffective	versus no visit	+
H1c: Individuals that experience household visits by female police officers are more likely to perceive the security sector as ineffective	versus male officers	-
H2: Individuals that experience household visits by female police officers are more likely to support the state (donations)	versus no visit	-
H2: Individuals that experience household visits by female police officers are more likely to support the state (donations)	versus male officers	no effect
H2: Individuals that experience household visits by female police officers are more likely to support the state (resources)	versus no visit	+
H2: Individuals that experience household visits by female police officers are more likely to support the state (information)	versus male officers	-
H3: Individuals that experience household visits by female police officers are more likely to value gender equality	versus no visit	+
H3: Individuals that experience household visits by female police officers are more likely to value gender equality	versus male officers	+

tus quo, it may lead to backlash. When women participated in the Liberian civil war, it changed Liberians' views about gender roles, and many people became afraid of women, particularly of their fighting capacity (Utas 2005). Thus, when women in uniform approached households, the "disruption of gender" created by the war appears to have translated into fear of such "security women." Moreover, this is not the first Liberian National Police study to find evidence of backlash against women. In another study by the author, when male police officers were outnumbered by females, they tended to become more aggressive (Karim et al. 2013). Other evidence has pointed to similar themes (Eagly and Steffen 1986, Huddy and Terkildsen 1993, Mathison 1986, O'Neill and O'Reilly III 2011, Sandberg 2013). The implication is that the deployment of solely female officers may not be a useful policy to reduce perceptions of abuse. Hence, the motivation for integrating women should not be that they make the security forces look more restrained—which is a stereotyping reason not borne out by the evidence; rather, women should be integrated because they are capable of providing security.

Some have argued that female ratio balancing decreases effectiveness, because it decreases unit cohesion, reduces standards, and may jeopardize national security. It is possible that perceptions align with these views. At the same time, there is a large body of literature that suggests that female ratio balancing reforms increase operational effectiveness because women bring new perspectives, skills, and other assets to the security forces. Specifically, within the LNP, women perform just as well as men (Karim et al. 2013, Karim and Gorman 2016). It is also possible that perceptions align with these views. The survey results show that both male and

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female police officers enhance perceptions of effectiveness, but that male police officers enhance perceptions slightly more than women. Thus, while respondents viewed males as more effective in providing security than females, visits by both male and females enhance perceptions of effectiveness when compared to no visits. The effects did not change based on whether respondents had experienced prior victimization.

When it comes to actual behavioral responses, *the delivery* of community policing initiatives appears to be more effective if women carry them out. In other words, if the goal is to spread a message about police professionalization, those that received visits by female officers were more likely to pay attention to the female police officer, attract the attention of other community members, and not interrupt. Consequently, while female officers may not be perceived as effective as male officers at providing protection, they may be more effective in the delivery of a message about protection.

With respect to support, the story is, again, not straightforward. We know from Chapter 3 that treated individuals were less likely to donate to the state. In this chapter, we find the same result. Monetary support does not change based on whether the police officer was a male or female. However, when it comes to providing other material support such as lodging, households were much more likely to offer their homes to female officers than to male officers. Thus, although female police officers were perceived as “scary” at the beginning of the visit, and even though households made it more difficult for female officers to obtain consent, by the end of the visit, the fear disappeared and households were welcoming of them. Such an “arc” is not apparent among the male visits, suggesting that female police officers were more effective in changing “valence” towards police officers. This is corroborated when

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looking at some alternative measures in the appendix—on corruption and liking police officers. Those that received visits by female officers were less likely to perceive the police as corrupt and more likely to actually like the police, indicating that there is still perhaps some merit with regards to how female versus male police officers can change attitudes about the police.

However, if support for the state's security forces means eliciting information, those that experienced visits from female police officers were less likely to provide information and share knowledge.<sup>42</sup> One reason for this could be that because community members perceived male police officers as more effective in providing protection, they were more likely to give them information, because they thought male officers would be more likely to do something about crime. Thus, the different measures of support indicate that male and female police officers garner support in different ways, depending on the goal. If the goal is to increase tax revenue, male versus female visits do not make a difference. If the goal is to gain temporary resources from the community, female officers may be more successful. If the goal is to gain information from the community, male officers may be more successful. Depending on the objective, then, both male and female officers elicit support for the state's security forces.

Finally, including women in the security forces appears to improve gender equality, although visits by both male and female officers enhanced values for gender equality. This means that both men and women can play a role in improving gender equality in societies. Female police officers were more successful in enhancing preferences for

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<sup>42</sup>Survey enumerators also asked respondents if they had any information they wanted to share with the police; only 0.71% provided information. This is compared to 25% who provided information to the police. Thus, police presence in general (compared to civilians) increases the ability to extract information from communities.

women to serve a role in security provision. This may mean that the public display of women in traditionally masculine roles is necessary to overcome gender roles that relegate women to certain spaces. Thus, female ratio balancing reforms may have the added benefit of normalizing women's integration into the security forces among the public.

Female ratio balancing reforms help ensure that a traditionally male-dominated security force is inclusive of women. The results in this chapter show that for truly successful outcomes, both male and female police officers are necessary, and to gain the full range of benefits from professionalization, both male and female police officers should engage in community outreach and community policing. This means that female ratio balancing reforms ensure that both men and women are represented in the security forces. In doing so, implementing the reforms maximizes the police force's ability to enhance perceptions and increase support.

The previous two chapters have assessed how two reforms affect the state's legitimacy. In general, there is support for the notion that capacity and constraint-increasing reforms such as professionalization and female ratio balancing enhance perceptions of and support for the state's security forces. Yet not all states adopt such reforms, and there is quite a lot of variation in the types of reforms that states adopt. It is to understanding these motivations that we next turn.

## 4.6 Chapter 4: Appendix

Treatment Comparisons with Control Group (No Visits)

Table 4.15: Perceptions of Effectiveness: Female Treatment (v. Control)

	<i>Dependent variable:</i>						
	No Rogue	Less Crime	Help	Catch Criminal	Arrest Me	Feel Safer	
Female Treatment	0.29 (0.34)	0.49 (0.29)	1.92*** (0.28)	1.10*** (0.27)	2.05*** (0.17)	0.22 (0.23)	
Current Victim	-0.14 (0.31)	0.21 (0.50)	0.24 (0.43)	0.43 (0.28)	1.24*** (0.40)	0.92** (0.43)	
War Victim	-0.52*** (0.17)	-0.09 (0.24)	0.40*** (0.15)	0.12 (0.18)	0.14 (0.25)	-0.10 (0.28)	
Kru	0.23 (0.26)	1.46** (0.49)	-0.34 (0.49)	-0.37 (0.48)	-0.09 (0.31)	0.16 (0.44)	
Grebo	0.51 (0.24)	1.16** (0.54)	-0.56 (0.57)	0.15 (0.54)	0.09 (0.43)	0.17 (0.43)	
Own Land	0.13 (0.17)	0.68** (0.29)	-0.14 (0.21)	0.38* (0.21)	0.53*** (0.18)	-0.06 (0.23)	
Born in Town	-0.07 (0.25)	-0.47 (0.32)	-0.19 (0.24)	-0.50** (0.23)	0.05 (0.25)	-0.39 (0.30)	
Household Number	0.004 (0.03)	0.001 (0.06)	-0.02 (0.03)	0.01 (0.04)	0.003 (0.04)	0.02 (0.03)	
Christian	0.91** (0.38)	0.31 (0.68)	0.76* (0.41)	0.27 (0.47)	-0.63 (0.62)	0.26 (0.65)	
Contact with UNMIL	-0.53*** (0.17)	1.30*** (0.55)	-0.08 (0.20)	-0.01 (0.24)	0.53** (0.23)	-0.25 (0.17)	
Know LNP	-1.17*** (0.13)	0.07 (0.27)	1.41*** (0.14)	0.29 (0.17)	-0.72*** (0.15)	0.53*** (0.13)	
Suspicious of Enumerator	0.48* (0.20)	0.72 (0.72)	2.11*** (0.56)	1.81*** (0.60)	1.11 (0.69)	1.61** (0.63)	
Experienced Prior Interviews	-0.75*** (0.31)	0.71** (0.32)	0.13 (0.18)	1.13*** (0.33)	1.20*** (0.31)	0.42** (0.19)	
Constant	-0.62 (0.53)	-0.10 (0.92)	-1.64*** (0.60)	-0.45 (0.52)	-0.54 (0.68)	0.50 (0.66)	
Observations	650	661	667	650	629	668	
Log Likelihood	-403.47	-196.33	-321.93	-316.05	-290.33	-328.99	
Akaike Inf. Crit.	834.94	420.66	671.85	660.10	608.67	685.98	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.16: Perceptions of Effectiveness: Male Treatment (v. Control)

	<i>Dependent variable:</i>						
	No Rogue	Less Crime	Help	Catch Criminal	Arrest Me	Feel Safer	
Male Treatment	0.89** (0.41)	0.74** (0.42)	2.19*** (0.24)	1.23*** (0.21)	2.44*** (0.31)	0.54** (0.24)	
Current Victim	-1.07*** (0.35)	0.26 (0.61)	0.54 (0.31)	0.24 (0.49)	1.34*** (0.49)	0.87 (0.63)	
War Victim	-0.38* (0.19)	-0.31 (0.36)	0.04 (0.27)	-0.07 (0.22)	0.34 (0.25)	-0.43* (0.24)	
Traditional Leader	0.90* (0.60)	0.32 (0.60)	1.34*** (0.36)	0.11 (0.35)	-0.09 (0.57)	0.39 (0.50)	
Household Number	0.003 (0.03)	0.01 (0.06)	-0.05 (0.04)	0.05 (0.04)	-0.04 (0.05)	0.01 (0.05)	
Kru	-0.32 (0.30)	0.95* (0.33)	-0.02 (0.67)	-0.38 (0.61)	0.75** (0.33)	0.03 (0.48)	
Grebo	-0.35 (0.36)	1.36*** (0.44)	-0.003 (0.58)	0.28 (0.62)	1.09*** (0.31)	0.40 (0.44)	
Contact with UNMIL	-0.90*** (0.17)	1.48*** (0.67)	-0.34 (0.21)	-0.27 (0.26)	1.14*** (0.28)	-0.89*** (0.20)	
Know LNP	-1.09*** (0.23)	0.17 (0.34)	1.01*** (0.22)	0.83*** (0.25)	-0.27 (0.21)	0.64** (0.26)	
Suspicious of Enumerator	0.51 (0.47)	-0.92 (0.93)	2.49** (1.02)	1.36* (0.87)	0.63 (0.83)	2.02** (0.89)	
Experienced Prior Interviews	0.35* (0.21)	0.49 (0.30)	0.20 (0.28)	1.69*** (0.40)	1.92*** (0.24)	0.53** (0.31)	
Constant	0.48 (0.44)	0.36 (0.53)	-1.21** (0.60)	-0.76 (0.72)	-2.16*** (0.45)	0.77 (0.64)	
Observations	514	517	524	511	512	524	
Log Likelihood	-314.38	-155.43	-261.32	-234.94	-218.36	-237.81	
Akaike Inf. Crit.	652.76	334.87	546.64	493.88	460.72	499.61	

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level



Table 4.17: Perceptions of Abuse: Female Treatment (v. Control)

	<i>Dependent variable:</i>						
	Steal	Abusive Arrest	Like Criminals	Cause Problems	Beat People	Rape	
Female Treatment	-2.32*** (0.41)	-0.07 (0.24)	-2.05*** (0.43)	-1.20*** (0.41)	-0.31 (0.22)	-3.11*** (0.72)	
Current Victim	-0.39 (0.43)	-0.21 (0.38)	-0.13 (0.36)	-0.04 (0.45)	-0.18 (0.34)	0.30 (0.56)	
War Victim	-0.21 (0.23)	-0.07 (0.24)	0.18 (0.25)	0.01 (0.16)	0.005 (0.36)	-0.27 (0.23)	
Kru	-0.63 (0.68)	-0.29 (0.42)	-0.01 (0.78)	-0.25 (0.60)	0.45 (0.37)	-0.75 (0.66)	
Grebo	-0.81* (0.58)	-0.19 (0.55)	-0.39 (0.61)	-0.09 (0.52)	0.45 (0.54)	-0.91 (0.68)	
Own Land	-0.22 (0.19)	0.17 (0.18)	0.005 (0.23)	-0.18 (0.31)	-0.03 (0.21)	0.36 (0.44)	
Born in Town	-0.08 (0.19)	-0.18 (0.20)	-0.72*** (0.37)	-0.05 (0.26)	-0.16 (0.30)	-0.26 (0.54)	
Household Number	0.03 (0.02)	-0.01 (0.03)	0.004 (0.04)	-0.04 (0.04)	0.04 (0.04)	-0.01 (0.05)	
Christian	-0.42 (0.57)	0.06 (0.44)	-0.32 (0.68)	-0.79 (0.50)	-1.03** (0.55)	-0.13 (0.83)	
Contact with UNMIL	0.68*** (0.20)	1.03*** (0.17)	1.21*** (0.24)	1.72*** (0.18)	1.62*** (0.29)	2.13*** (0.38)	
Know LNP	-0.64*** (0.20)	-0.35** (0.14)	-0.79*** (0.20)	-2.12*** (0.29)	-1.37*** (0.22)	-0.74* (0.38)	
Suspicious of Enumerator	-2.10*** (0.66)	1.45*** (0.27)	1.19*** (0.29)	-0.98*** (0.18)	-1.56*** (0.78)	0.70 (0.30)	
Experienced Prior Interviews	-0.70*** (0.19)	-0.19 (0.11)	-0.27 (0.20)	0.87** (0.43)	0.17 (0.20)	-1.17*** (0.41)	
Constant	2.42*** (0.91)	-1.06* (0.46)	1.54*** (0.83)	0.87** (0.43)	-1.26* (0.60)	-0.40 (1.02)	
Observations	635	662	599	666	648	642	
Log Likelihood	-288.50	-345.84	-303.57	-231.72	-229.40	-128.28	
Akaike Inf. Crit.	605.00	719.68	635.15	491.43	486.80	284.56	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.18: Perceptions of Abuse: Male Treatment (v. Control)

	<i>Dependent variable:</i>						
	Steal	Abusive Arrest	Like Criminals	Cause Problems	Beat People	Rape	
Male Treatment	-2.31*** (0.43)	-0.49* (0.25)	-1.51*** (0.36)	-0.97*** (0.34)	-0.58* (0.33)	-1.61** (0.66)	
Current Victim	-0.62 (0.87)	-0.49 (0.47)	-0.07 (0.50)	-0.74 (0.74)	-0.18 (0.51)	0.28 (0.38)	
War Victim	-0.03 (0.17)	0.43 (0.27)	0.21 (0.26)	0.36 (0.20)	0.36 (0.36)	-0.20 (0.30)	
Traditional Leader	0.07 (0.68)	-0.72 (0.42)	-0.19 (0.53)	-0.11 (0.61)	-1.23 (0.81)	-1.79 (1.18)	
Household Number	0.03 (0.05)	-0.04 (0.05)	-0.01 (0.03)	-0.02 (0.05)	0.06 (0.04)	-0.03 (0.04)	
Kru	-0.65** (0.32)	-0.91* (0.47)	-0.60 (0.57)	-0.88 (0.55)	0.35 (0.63)	-0.80 (0.78)	
Grebo	-1.64*** (0.41)	-0.82* (0.41)	-1.10** (0.48)	-0.96 (0.62)	0.22 (0.64)	-1.15* (0.85)	
Contact with UNMIL	1.30*** (0.26)	1.67*** (0.24)	0.80*** (0.26)	1.86*** (0.32)	2.20*** (0.23)	1.76*** (0.28)	
Know LNP	-0.76*** (0.26)	-0.70** (0.22)	-0.65*** (0.26)	-1.64*** (0.47)	-1.11*** (0.31)	-0.36 (0.35)	
Suspicious of Enumerator	-1.21* (0.80)	1.71*** (0.32)	0.88 (0.56)	-2.53** (0.98)	-0.54 (0.46)	-1.26 (1.02)	
Experienced Prior Interviews	-0.28 (0.20)	0.14 (0.26)	-0.02 (0.20)	-1.25*** (0.27)	0.38 (0.27)	-1.28*** (0.41)	
Constant	1.91*** (0.53)	-0.75 (0.62)	1.34** (0.56)	0.38 (0.54)	-2.87*** (0.53)	-0.20 (0.60)	
Observations	500	521	466	523	512	506	
Log Likelihood	-228.17	-223.18	-268.54	-205.63	-174.63	-135.26	
Akaike Inf. Crit.	480.35	470.35	561.08	435.27	373.26	294.53	

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.19: Perceptions of Gender Equality: Female Treatment (v. Control)

	<i>Dependent variable:</i>				
	Equal Rights	No Traditional Laws	Women Leaders	Police Women (Security)	Police Women (Rape)
Female Treatment	0.44* (0.24)	0.23 (0.26)	0.68*** (0.22)	2.76** (1.11)	2.79*** (0.51)
Current Victim	1.22*** (0.34)	-0.03 (0.25)	0.09 (0.21)	0.30 (0.40)	0.42 (0.32)
War Victim	0.06 (0.09)	0.57*** (0.18)	0.25 (0.19)	-0.41 (0.31)	0.27 (0.17)
Kru	-0.43 (0.47)	-0.55 (0.43)	0.48 (0.41)	0.88 (1.01)	0.76 (0.48)
Grebo	-0.25 (0.50)	-0.26 (0.32)	0.84** (0.36)	1.14 (0.88)	0.82** (0.42)
Own Land	-0.08 (0.20)	-0.23 (0.17)	-0.44** (0.19)	-0.35 (0.28)	-0.35 (0.20)
Born in Town	0.31 (0.27)	0.41* (0.20)	-0.13 (0.30)	0.48 (0.41)	0.45* (0.28)
Household Number	0.004 (0.02)	-0.03 (0.02)	-0.01 (0.03)	-0.11* (0.06)	0.01 (0.04)
Christian	0.39 (0.41)	0.61 (0.36)	0.25 (0.32)	-0.18 (0.84)	0.004 (0.52)
Contact with UNMIL	-0.12 (0.11)	-0.10 (0.18)	-0.02 (0.14)	-0.14 (0.23)	0.84*** (0.25)
Know LNP	0.12 (0.21)	-0.22 (0.17)	-0.15 (0.12)	1.23*** (0.36)	1.36*** (0.19)
Suspicious of Enumerator	-0.95*** (0.31)	-0.09 (0.26)	0.01 (0.14)	1.59*** (0.44)	-0.74** (0.29)
Experienced Prior Interviews	0.49*** (0.13)	-0.15 (0.15)	0.10 (0.21)	-2.23*** (0.69)	0.41* (0.42)
Constant	-0.41 (0.60)	-0.21 (0.46)	-1.35*** (0.44)	-5.52*** (1.51)	-4.50*** (0.64)
Observations	664	665	662	661	650
Log Likelihood	-415.44	-436.31	-440.08	-156.11	-302.51
Akaike Inf. Crit.	858.89	900.63	908.15	340.22	633.01

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.20: Perceptions of Gender Equality: Male Treatment (v. Control)

	<i>Dependent variable:</i>				
	Equal Rights	No Traditional Laws	Women Leaders	Police Women (Security)	Police Women (Rape)
Male Treatment	0.59*** (0.26)	0.36 (0.24)	0.36* (0.22)	2.54** (0.84)	2.12*** (0.61)
Current Victim	1.18*** (0.45)	0.54* (0.31)	0.04 (0.30)	-1.15 (1.17)	0.54 (0.39)
War Victim	0.09 (0.10)	0.12 (0.20)	0.09 (0.16)	0.0001 (0.51)	0.56** (0.20)
Traditional Leader	0.12 (0.23)	0.22 (0.22)	-1.03** (0.60)		-1.06* (0.80)
Household Number	0.01 (0.01)	-0.03 (0.02)	-0.05 (0.02)	-0.21** (0.07)	0.02 (0.05)
Kru	-0.69 (0.27)	-0.55 (0.37)	0.64 (0.41)	0.50 (0.84)	0.97 (0.58)
Grebo	-0.68 (0.28)	-0.24 (0.44)	1.00** (0.42)	0.88 (1.03)	1.59*** (0.58)
Contact with UNMIL	-0.09 (0.26)	-0.27 (0.18)	-0.06 (0.25)	-1.94** (1.28)	1.17*** (0.33)
Know LNP	0.02 (0.19)	-0.27 (0.25)	0.01 (0.14)	1.22** (0.50)	0.71*** (0.27)
Suspicious of Enumerator	-1.34*** (0.59)	-0.15 (0.44)	0.29 (0.32)	3.89*** (1.22)	-0.41 (0.31)
Experienced Prior Interviews	0.20 (0.23)	-0.06 (0.21)	0.28 (0.17)	-1.68** (0.79)	-0.77*** (0.42)
Constant	0.55 (0.25)	0.79* (0.41)	-1.21** (0.46)	-4.75*** (1.15)	-4.48*** (0.65)
Observations	523	523	522	523	512
Log Likelihood	-328.84	-341.37	-340.81	-67.39	-230.96
Akaike Inf. Crit.	681.69	706.73	705.61	158.77	485.92

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

## Alternative Measures of Restraint and Effectiveness

Table 4.21: Perceptions of Corruption

	<i>Dependent variable:</i>	
	The LNP are corrupt and eating money	
Female Treatment	-1.28*** (0.30)	
Male Treatment		-0.60*** (0.27)
Female Treatment (v. Male)		
Current Victim	-0.44 (0.34)	-0.29 (0.30)
War Victim	-0.24 (0.18)	0.03 (0.30)
Traditional Leader	0.88** (0.34)	0.52 (0.40)
Household Number	0.005 (0.03)	0.01 (0.04)
Own Land	0.02 (0.18)	0.22 (0.24)
Born in Town	-0.48** (0.22)	-0.67** (0.32)
Kru	-0.36 (0.57)	-0.28 (0.52)
Grebo	-0.03 (0.46)	-0.47 (0.41)
Christian	0.14 (0.35)	1.55 (1.56)
Contact with UNMIL	0.85*** (0.15)	0.79*** (0.15)
Know LNP	0.08 (0.19)	0.07 (0.24)
Suspicious of Enumerator	0.58*** (0.20)	-0.61 (0.44)
Experienced Prior Interviews	-0.77*** (0.18)	-0.14 (0.26)
Constant	1.28** (0.59)	-0.27 (1.39)
Observations	590	461
Log Likelihood	-369.59	-296.77
Akaike Inf. Crit.	769.18	623.55
		957.38

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard Errors clustered at the village level

Table 4.22: Don't Like the Police

	<i>Dependent variable:</i>	
	Now now I do not like the Liberian	National Police
Female Treatment	-1.37*** (0.30)	
Male Treatment		-0.89*** (0.26)
Female Treatment (v. Male)		-0.60** (0.30)
Current Victim	0.09 (0.41)	0.18 (0.41)
War Victim	0.30 (0.22)	0.19 (0.28)
Traditional Leader	-0.55 (0.39)	-0.78** (0.34)
Household Number	-0.004 (0.03)	-0.02 (0.07)
Own Land	0.27 (0.26)	0.15 (0.29)
Born in Town	-0.22 (0.30)	-0.21 (0.27)
Kru	-0.12 (0.52)	-0.61 (0.72)
Grebo	-0.17 (0.45)	-0.52 (0.69)
Christian	-1.04** (0.43)	-0.94* (0.46)
Contact with UNMIL	1.34*** (0.27)	1.77*** (0.28)
Know LNP	-0.81*** (0.23)	-2.11*** (0.48)
Suspicious of Enumerator		-2.07*** (0.55)
Experienced Prior Interviews	0.03 (0.20)	0.76*** (0.33)
Constant	0.07 (0.56)	-0.35 (0.86)
Observations	664	523
Log Likelihood	-249.78	-242.87
Akaike Inf. Crit.	529.56	515.74
		743
		-206.49
		442.98

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Standard Errors clustered at the village level

Table 4.23: Average Effect Size: Preference for Police Response to Security Threats

	(Female)	(Male)	(F v. M)
<b>Police Provision of Security</b>	<b>0.54*** (0.08)</b>	<b>0.56*** (0.08)</b>	<b>-0.06 (0.04)</b>
Prefer Police to Respond to Mob Violence	0.49*** (0.06)	0.47*** (0.06)	-0.008 (0.02)
Prefer Police to Respond to Hala Hala	0.58*** (0.06)	0.59*** (0.06)	0.006 (0.05)
Police Can Best Protect You	-0.43 ** (0.14)	-0.38** (0.13)	-0.06 (0.03)
Police Can Best Protect You from Rape	-0.09 (0.04)	-0.03 (0.05)	-0.04 (0.02)
Observations	647	512	732

*Note:*

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Std. Err. adjusted for 15 clusters (villages)

Controls include: current victim, war violence, land owner, born in town, household number, Kru, Grebo, Christian, UNMIL contact heard police visit, know LNP, suspicious of visit, previous interview



## Chapter 5

# Macro-Level Analysis: Security

# Sector Reform in Conflict and

# Post-Conflict Countries

The micro-level analyses from the previous chapters indicate that security sector reforms that professionalize the security sector and that increase women's representation in the security sector have important impacts on enhancing perceptions of effectiveness and restraint. These reforms appear to shape citizens' perceptions of and support for the security sector in a more positive light. Professionalization enhances perceptions of effectiveness and restraint, and when the reform is successful in enhancing such perceptions, it could lead to monetary support for the state's security sector. When men and women engage in community policing together, they improve perceptions of effectiveness and restraint, and ensure that their operations receive

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support from the community. This implies that female ratio balancing reforms help improve perceptions of the security force because they increase women's participation in a male-dominated sector, and in doing so help improve the security sector's overall legitimacy. Together, the chapters help demonstrate that if the goal is to improve security sector legitimacy, capacity and constraint-increasing reforms help achieve this goal. Thus, if capacity and constraint-increasing reforms lead to a heightened sense of security sector legitimacy, then it is important to explore the conditions under which states adopt these "ideal" reforms.

This chapter uses macro-level data on security sector reform at the cross-national, time series level to assess the conditions under which states adopt not only professionalization and female ratio balancing reforms, but also other capacity-increasing and constraint-increasing reforms. It specifically explores whether addressing prior security failures, external actors, regime type, or threats affect reform adoption. The data show that, in general, states are not motivated to adopt reforms to address previous flaws in security, nor do they adopt reforms in response to threats. Instead, external actors, specifically peacekeeping missions, as well as regime type, appear to influence implementation of capacity and constraint-increasing reforms.

While the focus of this chapter is on the motivating factors behind adoption of capacity-increasing and/or constraint-increasing reforms, the chapter also develops some expectations for the conditions under which states adopt capacity-decreasing or constraint-decreasing reforms. The chapter begins by highlighting different factors that may affect state choices in reform adoption, focusing on internal and external drivers of change, as well as regime type and threat level. The chapter then introduces

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a new cross-national dataset on security sector reforms (The Security Sector Reform Dataset). It then provides the research design and the results from the empirical analyses.

## **5.1 The Determinants of Security Sector Reform Adoption**

The implementation of capacity-increasing and/or constraint-increasing reforms (as well as capacity-decreasing or constraint-decreasing reforms) may depend on a number of factors. This section explores four possible explanations: addressing previous security failures, external actors, regime type, and threats to the state.

### **5.1.1 Addressing Previous Security Failures**

Given that ensuring security is one of the first steps toward restoring the social contract, one way to provide security in the post-conflict period could be to address prior security failures through the implementation of reforms. We already know that civilians experience a large brunt of wartime violence (Cohen and Nordås 2014, Eck and Hultman 2007, Valentino, Huth and Balch-Lindsay 2004). These civilians who have lived through war and that have experienced violence by different actors often continue to feel insecure in the post-conflict phase (Meintjes, Turshen and Pillay 2001). Thus to prevent violence toward civilians in the future, states could address the “protection gap” during the war (or prior to it) by implementing different reforms

that remedy violence perpetrated by different actors.

Experiences with different perpetrators of violence affect the type of reforms states could implement to address the past failure. If state security forces perpetrated most of the violence, then the state should implement constraint-increasing reforms that restrain the security forces from engaging in violence in the future. As demonstrated in the previous chapters, this may have the added benefit of demonstrating to citizens that the security sector is less threatening than previously.

*H1a: When a state has experienced high levels of civilian wartime rape or fatalities by state actors, it is more likely to implement constraint-increasing security sector reforms.*

If non-state actors committed most of the violence, then it demonstrates a failure on the part of the state security forces to protect civilians from non-state actors during the war. In order to address this security failure, states could implement capacity-increasing reforms that make the security sector more effective at providing protection from non-state actors. Again, as demonstrated in the previous chapters, this may have the side benefit of enhancing perceptions of security sector effectiveness among the public.

*H1b: When a state has experienced high levels of civilian wartime rape or fatalities by non-state actors, it is more likely to implement capacity-increasing security sector reforms.*

Given that many conflicts involve violence by both actors, in order for the state to get the most “bang for its buck” in terms of addressing prior security failures, it should adopt reforms in Quadrant A (Figure 2.1 in Chapter 2). By doing so, it may reduce the possibility that the state and non-state actors engage in any future violence against civilians, and may enhance perceptions of the security sector as less threatening and more effective than previously.

*H1c: When a state has experienced high levels of civilian wartime rape or fatalities by state and non-state actors, it is more likely to implement capacity-increasing and/or constraint-increasing security sector reforms.*

### **5.1.2 The Influence of U.N. Peacekeeping Missions**

In addition to internal pressures, external factors may condition states’ decisions about security sector reform adoption. In particular, international organizations may influence the types of reforms states implement. This “second image reversed” argument suggests that international actors and organizations are able to shape states’ decisions about democracy, human rights, and other areas such as security (Gourevitch 1978, Pevehouse 2005).

International influence occurs through at least two complementary mechanisms. First, post-conflict states may become better international “compliers,” because they

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want the material benefits and advantages that come along with being a part of the international system. For example, among other studies, Simmons (2000) argues that states comply with the voluntary IMF Article VIII to enhance their credibility in international markets. Mansfield and Pevehouse (2006) argue that democratizing countries are likely to enter international organizations because doing so allows leaders to credibly commit to liberal reforms, which sends a signal to international audiences about their commitment to follow through on these reforms. Similarly, Hashimoto (2012) finds that states more in need of international material support, such as foreign aid, are more likely to join the International Criminal Court (ICC).

A second way international organizations may influence states' adoption of reforms is through directly funding or implementing projects in the post-conflict state. External states and international organizations often fund projects in post-conflict countries that align with international objectives and goals such as democratization, good governance, and human rights. Sometimes, international organizations pressure states to comply through conditional funding and other "carrots" and "stick" approaches (Hafner-Burton 2008, Simmons 2009). Other times, international actors directly fund and implement projects that align with international agendas without local consultation or ownership (Autesserre 2010, 2014). While this "second image reversed" approach places external actors as more proactive and aggressive in conferring their particular international agendas onto states, it is possible that both mechanisms occur simultaneously. States may become better compliers and international organizations may pressure states or directly implement changes.

Bush (2011) argues that both mechanisms help explain why states adopt political

gender quotas. She theorizes that the international system incentivizes states to adopt gender quotas because doing so “demonstrates countries’ commitments to gender equality and democracy,” which are valued norms in the international system.<sup>1</sup> Bush (2011) goes on to note that “when international involvement is highest—in post-conflict countries with international peacekeeping forces—the adoption mechanism is closer to imposition,” and “when international involvement is lower but still strong—in countries that are concerned with increasing or maintaining their levels of foreign aid, foreign direct investment, international legitimacy, and the like—the mechanism is closer to inducement.”<sup>2</sup> In other words, the pressure that states feel to adopt certain reforms in order to conform to an international agenda varies based on the level of international presence in that country. Among other variables, Bush (2011) finds evidence that the presence of UN multidimensional peacekeeping influences the adoption of gender quotas.<sup>3</sup>

In addition to political gender quotas, peacekeeping presence may also influence state adoption of different types of security sector reforms. Peacekeeping missions are fundamental to state building because they often provide resources to help rebuild the security sectors of post-conflict states. Since “An Agenda for Peace,” a report written for the United Nations by Secretary-General Boutros Boutros-Ghali in 1992, peacekeeping missions have included a state building component in their mandates.<sup>4</sup> These mandates include operations such as DDR of soldiers, the rule of law, security

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<sup>1</sup>See pg. 113.

<sup>2</sup>See pg. 113.

<sup>3</sup>UN multidimensional peacekeeping is hereby referred to as just “peacekeeping.”

<sup>4</sup>Thus, multidimensional missions, and not merely observer missions, are likely to foster changes in the domestic security sector.

sector reform, reforms related to human rights, women's rights, political reforms and election monitoring, and other development programs (Doyle and Sambanis 2006, Woodhouse and Ramsbotham 2005). This shift took place in the late 1990s when major peace building agencies began to emphasize the construction of legitimate institutions (Paris 2004). The creation in 2006 of a UN Peace Building Commission exemplifies this change in the scope of peacekeeping/peace building missions (Call and Cousens 2008).

Similar to the literature above, peacekeeping missions have an active influence on the types of reforms adopted by states, or their presence may induce reforms passively. Regardless of the mechanism, states may prioritize policy changes that align with international agendas (Barnett and Finnemore 1999). For example, if the international agenda is focused on promoting gender equality, the reconstruction of domestic institutions in the post-conflict countries may parallel the international trend (Karim and Beardsley 2017). More broadly, the presence of peacekeeping missions could lead to the creation of particular types of policy changes in the domestic security sector that prioritize certain types of reforms that are valued by the international system.

Specifically, peacekeeping missions have promoted a good governance agenda in host countries. The good governance agenda focuses on constraining the security sector's powers. In the early 1990s, the international development agenda placed value on restraining state power, especially the security sector's power. The focus centered on transforming the structure of security bodies by making them transparent, professional, and representative, and by reducing corruption (Anderlini and



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Conaway 2004b, Brzoska 2006, Brzoska and Law 2013). Such reforms were a part of a broader “liberal peace building” agenda that privileged democracy promotion and market-based economic reforms (Lake 2016, Paris 2004). The sole purpose of major organizations such as the Geneva Centre for the Democratic Control of Armed Forces (DCAF) in 2000 was to pursue “good governance” and reform of the security sector. The OECD came up with a definition of SSR that encompassed this good governance agenda: a “transformation of the security system which includes all actors, their roles, responsibilities and actions working together to manage and operate the system in a manner that is more consistent with democratic norms and sound principles of good governance and thus contributes to a well functioning security framework (Hendrickson and Ball 2005).”<sup>5</sup> Thus, given that the international agenda prioritizes good governance, and that peacekeeping and peace building missions are often the vehicle through which change occurs, policies promoted in host countries may parallel this international agenda (Paris 2004).

*H2a: With peacekeeping presence, states are more likely to implement constraint-increasing security sector reforms.*

Moreover, measures to decrease the post-conflict state’s power, particularly with respect to the security sector, also became part of an international agenda. In particular, reforms to disarm, demobilize, and reintegrate (DDR) former soldiers are part of many international post-conflict reconstruction projects (Anderlini and

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<sup>5</sup>See pg. 20.

Conaway 2004a, Hanson 2007). Such programs focus on “the collection, documentation, control and disposal of small arms, ammunition, explosives and light and heavy weapons from combatants and often from the civilian population; the formal and controlled discharge of active combatants from armed forces and groups; and providing ex-combatants civilian status.”<sup>6</sup> The presence of third parties make it easier for states to reduce their capacity, both because they help alleviate a credible commitment problem between rebels and the state (Walter 2002), and because peacekeepers can serve as surrogate state when it comes to the provision of security (Blair 2013). This means that it is “safe” for states to reduce their capacity when there is third-party presence because such entities help ensure compliance of and safety from non-state actors.

*H2b: With peacekeeping presence, states are more likely to implement capacity-decreasing security sector reforms.*

In addition to a “good governance agenda” and DDR, peacekeeping missions have also engaged in a civilian protection agenda. In 2006, the UN Security Council passed Resolution 1674 on the Protection of Civilians in Armed Conflict, which institutionalizes the “Responsibility to Protect” doctrine. This doctrine proposed that states forfeit aspects of their sovereignty when they fail to protect their populations from mass atrocity and human rights violations. The resolution has allowed for more

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<sup>6</sup>See “Disarmament, Demobilization and Reintegration” (United Nations) <http://www.un.org/en/peacekeeping/issues/ddr.shtml>.

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robust peacekeeping missions with mandates that include the protection of civilians (Bellamy and Williams 2011, Hunt and Bellamy 2011). Since then, scholars have found that peacekeeping missions do indeed help protect civilians because of this new mandate (Hultman 2013). Thus, the new mandate for protection focuses on expanding the domestic security sector's ability to protect citizens from violence by non-state actors.

*H2c: With peacekeeping presence, states are more likely to implement capacity-increasing security sector reforms.*

At a first glance, it may seem paradoxical that peacekeeping missions help facilitate both capacity-increasing and capacity-decreasing reforms. These two reforms are, after all, in contradiction with one another. However, peacekeeping presence often lasts for a long time, with the average length being over 20 years.<sup>7</sup> This is a significant amount of time to both decrease the state's security sector capacity and rebuild and restructure it, especially given peacekeeping's dual mandate of protection and peace building. In fact, in order to enact major reforms that build capacity, it is often necessary to abolish parts or all of the state's security sector that were ineffective in the first place. Thus, both capacity-decreasing and capacity-increasing reforms are possible with peacekeeping presence, but they are likely to occur sequentially, with a decrease in capacity followed by an increase.

Finally, peacekeeping missions bring tremendous resources to post-conflict

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<sup>7</sup>See: "The Global Peace Operations Review" <http://peaceoperationsreview.org/>.

states—peacekeeping missions have similar short-run effects as states that receive foreign aid or other external windfalls.<sup>8</sup> Carnahan, Durch and Gilmore (2006) find that peacekeeping missions amounted to about 1.7% of the host country economy on average and a maximum of 6% in the case of Liberia. Thus, in addition to providing direct state building support, peacekeeping missions also indirectly play a central role in providing an economic stimulus in post-conflict countries. This boost could enable states to implement more reforms. Thus, we should expect that the presence of peacekeeping missions increases the number of security sector reforms states adopt with regards to capacity and constraint-increasing reforms.

*H2d: With peacekeeping presence, states are more likely to implement capacity and/or constraint-increasing reforms.*

### 5.1.3 Regime Type

In addition to adopting particular reforms to address previous security failures and pressure from external actors to adopt certain reforms, regime type may also condition the types of reforms that states adopt. Democratic states are better at solving the credible commitment problem because of the institutions in place that check the state's powers. As mentioned in Chapter 1, democratic states already have a number of institutional barriers that prevent them from committing human rights violations, and in general, democratic states commit fewer human rights violations

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<sup>8</sup>See working paper by Bernd Beber, Michael Gilligan, Jenny Guardado and Sabrina Karim, "Challenges and Pitfalls of Peacekeeping Economies."

than non-democratic states (Bueno de Mesquita et al. 2004, Davenport 1995, 1999, Hofferbert and Cingranelli 1996, Poe and Tate 1994). The institutional reforms in democracies prevent both the state and the state's security forces from engaging in violence, because of the electoral process (Bueno de Mesquita et al. 2002).<sup>9</sup> Citizens in democratic states where human rights abuses are a problem are unlikely to vote for a government that represses the population.<sup>10</sup> Thus, democratic states are likely to adopt constraint-increasing reforms to prevent state-sponsored repression, as well as non-sanctioned violence on the part of the security forces, because they need electoral support from the public.

Moreover, democratic states may adopt constraint-increasing reforms to tie their hands from oppressing the population in case the government turns autocratic in the future. Some states need international organizations to help them tie their hands (Mansfield and Pevehouse 2006). Simmons and Danner (2010) find that states that are most vulnerable to an International Criminal Court (ICC) affecting their citizens join the International Criminal Court (ICC) as a way to tie their hands from engaging in human rights violations, but states that already have institutional checks, such as democracies, do not need such international institutions. As such, democratic states implement constraint-increasing reforms to not only ensure leadership survival, but also to ensure that there are constraints in place in case the state slides back into an

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<sup>9</sup>Selectorate theory suggests that the larger the winning coalition (the minimal set of people whose support the incumbent needs in order to remain in power), the greater the emphasis leaders place on effective public policy (Bueno de Mesquita et al. 2002). Effective public policy does not include oppression.

<sup>10</sup>Sometimes, they might even cease to participate in the political process due to oppression that stems from government orders or from shirking on the part of the security forces (Lerman and Weaver 2014).

autocracy.

*H3a: Democratic states are more likely to implement constraint-increasing reforms.*

In contrast, autocratic states may be less likely to adopt reforms that tie their hands from certain behavior. Such states want the option of repressing their population and thus may want to give their security sector the autonomy and leeway to carry out violence. In this way, they are reluctant to constrain their security sector. They may also be more indifferent towards a security sector that shirks, because leadership survival is not necessarily contingent on popular support.

*H3b: Autocratic states are more likely to implement constraint-decreasing reforms.*

#### **5.1.4 Threat Environment**

Finally, states may not be influenced by legitimacy, external actors, or regime type, but rather by their threat environment. A crisis situation whether inter-state or intra-state sometimes requires drastic reforms. For example, in times of crisis, states are more likely to adopt conscription (Asal, Conrad and Toronto 2015). States may perceive there to be a threat when they are fighting a civil war or insurgency, when they are in a militarized inter-state dispute, or when they have not won a decisive

victory against the enemy in a conflict. In these cases, we should expect that the state's objective is to achieve full fighting power, or the ability to destroy the enemy while limiting the damage the enemy can inflict in return. For this, security sector capacity is needed. We should expect that states take measures to strengthen their security sector by implementing capacity-increasing reforms in order to defeat their enemies.

*H4: When states are under threat, they are more likely to implement capacity-increasing reforms.*

## 5.2 Categorization of Reforms

Chapter 2 outlined the criteria for placing reforms into different categories. Recall that for capacity-increasing reforms, the reform must lead to an increase in resources and/or efficiency (capacity-decreasing reforms lead to a decrease in resources and/or efficiency). For constraint-increasing reforms, the reform must mitigate the principal-agent and/or credible commitment problems (constraint-decreasing reforms exacerbate the principal-agent and/or credible commitment problems). In order to conduct macro-level analysis to test the hypotheses, security sector reforms must be sorted into different categories based on these criteria.

Also recall that, in most cases, placement of each reform in Figure 2.1 requires there to be a “dominant” dimension. Most reforms have elements of both capacity and constraint, but most reforms are usually oriented toward resources/efficiency or

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oriented toward the principal-agent/credible commitment problems. Below, reforms are classified as either in the capacity or constraint dimension based on what is thought to be their “dominant” dimension.

### **Capacity-Increasing Reforms**

Capacity-increasing reforms increase resources and/or efficiency. In terms of increasing resources,<sup>11</sup> increases in personnel, particularly highly trained personnel, not only augment resources, but also increase efficiency. This is particularly true for the creation of new operational or tactical units that specialize in thwarting non-state-actor violence. New armed operatives provide support for anti-terrorist campaigns, counterinsurgency, special operations, or rapid reaction to threats. With a higher number of operational units, a state may be more effective in providing protection against non-state actors. In the U.S, there has been an increased reliance on specialized units in warfare because they are perceived to be more efficient (Marquis 1997).

Additionally, if there is an increase in the presence of security forces in areas where there was no security previously, this increases the state’s resources and efficiency. It increases resources because security forces are deployed to areas that were ungoverned—resources extend throughout the state. It increases efficiency because the state is readily able to respond to threats in remote parts of the state, instead of having to mobilize security forces and deploy them, which takes more time and effort.

As suggested in Chapter 4, a growing body of literature suggests that integrating

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<sup>11</sup>Changes in budget allocations may be considered a capacity-increasing reform, because they directly affect resources. But, while budget allocations are policy decisions, here they are not included as *reforms*. Reforms may be affected by budgetary concerns, but changes in the budget or budget allocations do not themselves constitute reforms.



women into the security forces enhances the security sector's operational effectiveness by making it more efficient (Egnell, Hojem and Berts 2014, Menke 2013, Wooten 2015). Some argue that a gender perspective is important for efficiency because women help in operations in ways that men are unable to (Egnell, Hojem and Berts 2014, Erwin 2012). As an example, in the U.S. military "female engagement teams," and "cultural support teams" participated alongside Rangers and other American special operations units in Afghanistan and Iraq so that they could conduct counterinsurgency more effectively (Erwin 2012, Harding 2012). Others argue that mixed units are more effective because they bring collective intelligence to a team, and that collective intelligence actually increases as the number of women in the group increases (Haring 2013).

Finally, as stated in Chapter 3, many scholars have argued that professionalizing the security forces makes them more effective (Glenn et al. 2003, Huntington 1957, Janowitz 1961).<sup>12</sup> Professional development through training academies increases effectiveness because the security forces are better trained in operations and tactics. Millett, Murray and Watman (1986) state that "a critical element in the ability to increase coercive power involves the degree to which the political elite regards military activity as legitimate and officership as a distinct profession requiring extended education and special expertise."<sup>13</sup>

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<sup>12</sup>Huntington (1957)'s notion of corporateness, responsibility, and expertise are used in police academies as way to make the police more effective.

<sup>13</sup>See pg. 39.

## Constraint-Increasing Reforms

When reforms mitigate the principal-agent and credible commitment problems, they are considered constraint-increasing. From Chapter 2, we know that one of the most common ways to prevent shirking is through monitoring and/or “alarms.” This includes the use of third parties to watch agents and report on them. Thus, reforms such as civilian oversight bodies or ombudsmen that have the authority to monitor the actions of the security forces increase constraint.

Additionally, institutional design mechanisms may ensure monitoring. For example, constitutional provisions that restrict the security force’s ability to amass power or enter into politics also constitute constraint-increasing reforms, because they tie the hands of the security forces from engaging in repression. These types of institutional constraints, whether a part of laws or in the constitution, are a key part of ensuring that the state and its security sector do not abuse their privileges.

In order to minimize the adverse selection problems, the state could implement policies that are targeted at including certain demographic groups, such as women. Individuals’ sex may serve as a signal about their type—women are often perceived to be more restrained in using coercive force. There is a body of work that shows that women are more restrained than their male counterparts in the use of force (Brandl, Stroshine and Frank 2001, Carson 1993, Hoffman and Hickey 2005, Leger 1997, Rabe-Hemp 2008, Schuck and Rabe-Hemp 2007). Thus, gender stereotypes about women may serve as signals of being a “good type.” In this way, female ratio balancing could be considered a constraint-increasing reform.

Moreover, Brehm and Gates (1997) suggest that improving the quality of the agent and aligning the agent's preferences more closely to that of the principal's better resolves the principal-agent problem. This can be done through training academies. When the security forces undergo rigorous training by the state, they may be more likely to be loyal to the state and to have similar preferences and goals as the state. With respect to restraint, professionalization through training has increasingly stressed ethics in conduct as well training on use-of-force doctrines and rules of engagement (Robinson, De Lee and Carrick 2008).<sup>14</sup>

### **Capacity-Decreasing Reforms**

Capacity-decreasing reforms decrease resources and/or efficiency. The most straightforward decrease in resources is through the elimination of personnel and units. The fewer security personnel and units, the less protection the state may be able to provide. However, in some cases, decreasing personnel may increase efficiency if those that are removed were redundant or of "low quality." Nevertheless, in many post-conflict countries, states already lack qualified personnel, thus getting rid of personnel diminishes the state's resources to prevent violence.

The most obvious reform that decreases personnel (as well as weapons) is disarmament, demobilization, and reintegration programs (DDR). At the extreme end of these programs, states drastically reduce the size and number of their security forces. In some cases, they may even eliminate entire organizations such as the military.<sup>15</sup>

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<sup>14</sup>Nevertheless, some scholars have found that professionalization can lead to increased political involvement by the military (Nunn 1975).

<sup>15</sup>See for example the case of Panama, Haiti, and Costa Rica.

On the less extreme end, DDR includes getting rid of weapons and demilitarizing former combatants (Knight et al. 2004). Such reforms reduce the state's effectiveness when it comes to fighting power and preventing violence.

### **Constraint-Decreasing Reforms**

There are two ways the state may exacerbate the principal-agent problem and credible commitment problem respectively: through increasing the security sector's autonomy and/or by forgoing opportunities to create institutional checks. In the former, as states make their security sectors more autonomous through the creation of sub-national police or paramilitary organizations or state-sponsored militias, they have less control over the actions of these bodies. The fewer constraints (the more the autonomy), the more of a moral hazard problem may arise between the principal (the state) and the agent (the security forces). While the state wants well-behaved soldiers and police officers, it cannot control the actions of its personnel when they deploy far away, in areas where the state has minimal oversight. In these areas, security personnel may have more opportunities to shirk.

One way to increase autonomy is to decentralize. Decentralization in its "pure" form—the process of redistributing or dispersing functions, powers, people or things away from a central location or authority—may also exacerbate the adverse selection problem. If regional authorities are responsible for hiring, state authorities have minimal say in the type of personnel that are hired for the security forces. We see the consequences of decentralization in the U.S., as there are many examples of police brutality (U.S. police forces are decentralized at the state and city level). Additionally,

there is some evidence that state security forces engage in sexual violence when they have more autonomy (Butler, Gluch and Mitchell 2007, Cohen and Nordås 2015). It is possible that a centralized police force may mitigate some of the abuse, as central authorities in the state would have more oversight over the organization and in hiring practices.

Alternatively, state security forces, particularly the military, may assume more power in government if the state fails to implement institutional controls. In the most extreme form, the security forces may overthrow the government in a coup. More benign attempts to access power may include members of the security forces joining the government as ministers, or in other powerful positions. As Janowitz (1964) already suggested, increased power by the security forces may lead to repression of the population.

### 5.3 The Security Sector Reform Dataset

In order to test the hypotheses, the study uses an original dataset of security sector reforms (The Security Sector Reform Dataset (SSRD)), which covers the period between 1989 and 2012. In total, there are 1220 observations in the dataset, with 444 post-conflict years and 776 conflict years.<sup>16</sup> The unit of analysis is the conflict-year and is adopted from the UCDP/PRIO Armed Conflict Dataset. The dataset includes intra-state conflict and post-conflict years, because states adopt reforms in both periods. Similar to Hultman, Kathman and Shannon (2013), three post-conflict years are

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<sup>16</sup>They also include 77 countries in total.

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added to each state in the dataset. If reforms were implemented after the three-year period, they are included in the data as reforms that were adopted after the third post-conflict year in the last line of the third year.

The dataset draws from a number of open sources and existing databases to include different security sector reforms. Sources included: The Military Balance, World Encyclopedia of Police Forces and Correctional System, Geneva Centre for the Democratic Control of Armed Forces (DCAF) Reports, Security Sector Reform Resource Centre, International Crisis Group, African Policing Civilian Oversight Forum, OECD Reports, UNHCR Reports (Refworld), individual country police and military websites, books, and news articles. Some reforms were coded (or checked for robustness) using other datasets such as Toronto (2007) for military academies; Pickering (2010) for conscription (not used in this chapter); Strøm et al. (2015) for military legislator ban, sub-national police authority (presence), and ethnic balancing (not used in this chapter); Carey, Mitchell and Lowe (2013) for pro-government militias; and Joshi, Quinn and Regan (2015) on ethnic balancing (not used in this chapter).

The policy changes were coded based on the year the policy was implemented. For example, in 1991, Georgia created its Special Forces Brigade, which is an elite unit of the Georgian Armed Forces. Here, “new operational unit” was coded 1 for 1991, but not any of the years following 1991. As another example, in 2001, women joined the Iranian police force. This variable was coded as a 1 for female ratio balancing in 2001, but not for any years after. If a policy was adopted in a conflict or post-conflict year, then it was coded as a one.

Variable coding for this chapter followed these rules:

- **New Operational Unit:** if the state adopted a new unit, ministry, or other major security arms. In some way, these units had to be related to combat or operations. For example: in 1991, Georgia created its Special Forces Brigade, which is an elite unit of the Georgian Armed Forces.
- **New Academy:** if the state built a new training academy that related to professional development. These included institutions of higher education. An example is the opening of the Lebanese Special Forces School in 1990.
- **Female Ratio Balance:** if the state implemented a policy to recruit or include more women, if women were promoted to leadership positions, if women were allowed into military/police academies, or if large batches of women graduated from academies, or if women were allowed in new positions such as combat. For example: in 2001, women joined the Iranian police force.
- **Oversight:** if the state created civilian oversight mechanisms to monitor the security forces such as strengthening the powers of congress, oversight committees, an national ombudsman, etc. An example is the establishment of The Procurator-General being established to initiate a complaints process against the police and to carry out investigations in Mozambique in 1992.
- **DDR:** if the state implemented a formal DDR program (as specified by international actors) or if the state independently abolished parts of units, or parts or all of various bodies (i.e the military). For example, Haiti disbanded their standing military in 1995.

- Presence: 1 if subnational governments have control of police/paramilitary force (coding from Strøm et al. (2015))
- Military Ban from Politics: 1 if constitutional ban on military members becoming members of political parties (coding from Strøm et al. (2015))
- Defense Minister : 1 if the defense minister is a military officer; (coding from Strøm et al. (2015))
- Militia: presence of a pro-government militia (coding from Carey, Mitchell and Lowe (2013))

Some reforms have missing data, because information was not available about changes to the state's security sector. The missing data problem suggests that states are sometimes opaque about the reforms they implement. If internal and external pressures affect security sector reform adoption, especially with regards to a state's standing toward the public or in the international community, then states have an incentive to make their reforms transparent. States would be unlikely to keep reforms discreet if trying to increase popular support and/or follow international trends. In this way, the missing data does not necessarily bias the results.

## 5.4 Research Design

### Dependent Variable

The dependent variables are separated into six categories, each of which are dichotomous. Capacity-decreasing reforms include DDR as well as reforms that abolish parts



of the state's security sector. If a state adopted DDR or eliminated a security organization, the dichotomous variable is coded as capacity-decreasing. Capacity-increasing reforms include new operational units and/or increasing the presence of the security forces through the creation of sub-national police units. Constraint-decreasing reforms include having a defense minister that is in the military and/or the creation or use of pro-government militias. Constraint-increasing reforms include civilian oversight and/or a constitutional ban on the military's involvement in politics.

As stated above, some states may adopt combinations of reforms. They may adopt capacity and constraint-increasing reforms. The combination variable is coded dichotomously based on whether states implemented a constraint-increasing reform and a capacity-increasing reform. This means they would adopt new operational units or increase presence into the periphery and implement civilian oversight or ban the military from politics. Additionally, given the evidence from the previous chapters, new academies (professionalization) and female ratio balancing may be considered as both capacity-increasing and constraint-increasing, and are combined to create an additional dichotomous variable.

### **Independent Variables**

The first set of independent variables requires measuring violence during the civil war. The study uses both the UCDP One-Sided Violence Dataset (Eck and Hultman 2007) and the Sexual Violence in Armed Conflict (SVAC) dataset (Cohen and Nordås 2014). Both datasets are used to measure previous violence because violence during civil war may be gendered: men are disproportionately killed during civil wars (Carpenter

2003, 2006), and women are disproportionately subjected to rape (Cohen 2013, Wood 2006). It is possible that states respond to both types of violence, or they respond to either male-oriented violence (fatalities) or female-oriented violence (rape). Thus, in addition to understanding whether states adopt certain security sector reforms as a way to take remedial action, it is possible to test whether states adopt reforms based on the gendered aspect of violence as well.

The SVAC dataset measures rape committed by state and non-state actors. It measures the level of rape by state and non-state actors on a scale from 0-3. Zero represents no rape committed by the actor and three represents large-scale rape by the actor.<sup>17</sup> The UCDP one-sided violence dataset 1989-2013 measures both state and non-state-actor-perpetrated fatalities. The UCDP best estimates are used, which comprise the aggregated most reliable numbers for all incidents of one-sided violence during a year. These data are restructured so that there are three measures: state violence, non-state violence, and violence by both state and non-state actors, and they measure the count of reported fatalities by the actors.<sup>18</sup>

The second independent variable is the presence of a multidimensional UN peacekeeping mission in the state. The presence of a multidimensional mission is coded dichotomously based on UN mandates for peacekeeping operations. In total, there are 103 (8%) conflict and post-conflict years with multidimensional peacekeeping operations. One issue may be that peacekeeping missions are not deployed randomly.

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<sup>17</sup>The data include measures from three sources: the State Department, Amnesty International, and Human Rights Watch. Below, only the State Department reports are used, as they have the least amount of missing data.

<sup>18</sup>The SVAC dataset correlates with the UCDP one-sided violence when it comes to violence perpetrated by state and both state and non-state-actors, but not for non-state-actor-perpetrated violence.

However, the literature finds that peacekeeping missions deploy to the most difficult conflict cases, measured in terms of a greater number of combatants, rougher terrain, lower levels of development, and weaker governments (Fortna 2008). This means that concerns about selection bias may be tempered by the fact that peacekeeping missions do not choose states based on the reforms they have implemented. Additionally, if peacekeeping missions deploy to states where both the capacity and the ability to constrain the security sector are very low then it is important to understand what types of reforms peacekeeping missions may be pursuing in these weak states. Even if peacekeepers deploy to states that are most in need of reforms, there may still be interesting variation in the types of reforms these states adopt.

The third independent variable is regime type. This is collected from the Unified Democracy Score (UDS) (Pemstein, Meserve and Melton 2010). Higher numbers indicate states that are more democratic, and lower numbers indicate states that are more autocratic. The UDS scores are used over other datasets on regime type such as Polity IV, because the UDS provides a range for each country's score, rather than one point estimate, and takes into account existing datasets on regime type including Polity IV.

The fourth independent variable measures threats. This is operationalized using four measures: whether or not the state was involved in an inter-state military dispute ( Militarized Interstate Disputes (MIDs) from the Correlates of War database),<sup>19</sup>

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<sup>19</sup>MIDs are “the threat, display or use of military force short of war by one member state, which is explicitly directed towards the government, official representatives, official forces, property, or territory of another state. Disputes are composed of incidents that range in intensity from threats to use of force to actual combat short of war (Jones, Bremer and Singer 1996).” See pg. 163.

conflict-related battle deaths (Lacina and Gleditsch 2005),<sup>20</sup> conflict year (versus post-conflict year), and whether the conflict did not end in a decisive victory (Kreutz 2010).

### Control Variables

One of the major concerns may be that states start at different status quo or baseline levels with respect to the security sector's capacity and level of constraint. The level of state power before and during the war may condition whether or not states adopt reforms. A weak state may be more likely to implement reforms than a strong one, because the strong one may already have implemented numerous reforms. To account for varying "start levels," the models include lagged military capacity, lagged GDP, and a cubic polynomial to account for duration dependence across observations (Carter and Signorino 2010).<sup>21</sup> The cubic polynomial captures the hazard rate of the state adopting a new reform. Military capacity is measured using the Correlates of War Composite Indicator of National Capability, and GDP is taken from the World Bank. Other control variables include peace duration, state life, and regime transitions, which captures changes from the past year's UDS score.

The models also include conflict termination adopted from Kreutz (2010).<sup>22</sup> The data are transformed such that a "1" is a "negotiated settlement," "2" is a "ceasefire," "3" is a "ceasefire agreement," "4" is a "victory by the government," "5" is a "victory by rebels," "6" is "low intensity conflict," "7" is "other," and a "0" constitutes none

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<sup>20</sup>The highest count in the civil war.

<sup>21</sup>In the model,  $t$  = time in years until the adoption of the dependent variable.

<sup>22</sup>The "Outcome" variable is used.

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of these outcomes. These data are cross-referenced and recoded based on the coding from Harbom, Högladh and Wallensteen (2006) for negotiated settlements.

Some of the dependent variables are largely time-invariant such as presence (sub-national police authority) and a military ban on politics. All other dependent variables are time-variant. As such, random effects logit models are used. The models use random effects instead of fixed effects, because random effects may be more efficient when there is less variation among independent variables and fewer observations within units (Clark and Linzer 2015).<sup>23</sup> Moreover, in order to check for the robustness of the findings, analysis is also done using multinomial logit models, which compares the likelihood of adopting each type of reform against all other types of reforms and no reform. These results are mentioned in the discussion, but the tables are included in the Appendix.

#### 5.4.1 Descriptive Statistics

Table 5.1 provides the summary statistics for the dependent variables. Capacity-decreasing reforms are operationalized through DDR as well as reforms that abolish parts of the state's security sector. About 19% of conflict and post-conflict years included the adoption of capacity-decreasing reforms. Capacity-increasing reforms are operationalized through new operational units and/or increasing the presence of the security forces through the creation of sub-national police units. About 61% of conflict and post-conflict years included such reforms. Constraint-decreasing reforms are operationalized through having a defense minister that is in the military and/or

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<sup>23</sup>The results do not change when using a fixed effects model.

the creation or use of parallel militias. About 82% of conflict and post-conflict years included such reforms. Constraint-increasing reforms are operationalized through civilian oversight and/or a constitutional ban on the military's involvement in politics. About 21% of conflict and post-conflict years included such reforms.

A combination of capacity-increasing and constraint-increasing reforms include the adoption of either a new operational unit or increased presence and a ban on the military from politics or civilian oversight. Reforms that are both capacity-increasing and constraint-increasing are operationalized through new academies and/or female ratio balancing.

Table 5.1 shows the distribution of each of these variables. The table shows that states are not that likely to implement a combination of capacity and constraint-increasing reforms nor reforms that are both capacity and constraint increasing. Depending on the combinations of reforms, states implement these types of reforms between 13–28% of conflict/post-conflict years. Thus, as a first cut, it would appear that states are not that concerned about implementing reforms that address past security failures nor that maximize the state security force's legitimacy.

Table 5.1: Summary Statistics: Dependent Variables

Variable	Mean	Std. Dev.	N
<b>Capacity-Decreasing (DDR)</b>	<b>0.19</b>	<b>0.39</b>	<b>1216</b>
<b>Capacity-Increasing</b>	<b>0.61</b>	<b>0.49</b>	<b>1195</b>
New Operational Unit	0.44	0.50	1195
Increase Presence	0.38	0.49	1218
<b>Constraint-Decreasing</b>	<b>0.82</b>	<b>0.39</b>	<b>987</b>
Defense Minister in Military	0.41	0.49	1208
Militia	0.66	0.47	991
<b>Constraint-Increasing</b>	<b>0.21</b>	<b>0.41</b>	<b>1195</b>
Ban on Military in Politics	0.52	0.50	1199
Civilian Oversight	0.14	0.35	1189
<b>Combination Capacity and Constraint Increasing</b>	<b>0.13</b>	<b>0.34</b>	<b>1218</b>
<b>Capacity and Constraint Increasing</b>	<b>0.28</b>	<b>0.45</b>	<b>1175</b>
Female Ratio Balancing	0.17	0.37	1203
New Academy	0.14	0.35	1188

Table 5.2 shows the summary statistics for the independent variables and the control variables. In order to measure whether states respond to prior security failures, we look at prior levels of state and non-state-perpetrated violence by state and non-state perpetrated violence (rape and fatalities).<sup>24</sup> The variable for external actors is the presence of a multilateral UN peacekeeping mission. Regime type is included as democracy. Four indicators measure the threat level. A conflict year suggests that the state is still battling an insurgency. Involvement in a militarized interstate dispute (MID) suggests involvement in a conflict with another state. A high number of battle deaths suggests that the state is losing the conflict. And if the outcome is low-scale conflict, there may still be threats (Kreutz 2010) (as is the case for 8% of conflict termination).<sup>25</sup>

<sup>24</sup>State-perpetrated fatalities includes an outlier (Rwanda in 1994). If this is removed, the results below do not change.

<sup>25</sup>About 10% of conflict and post-conflict years include a negotiated settlement/peace agreement, 2% of conflict and post-conflict years end in government victory, and 1% end in rebel victory.

Table 5.2: Summary Statistics: Independent and Control Variables

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>N</b>
Peacekeeping Mission	0.08	0.28	1219
Non-State-Perpetrated Rape	0.15	0.49	1151
State-Perpetrated Rape	0.30	0.60	1150
State-Perpetrated Fatalities	2216	45,173	979
Non-State-Perpetrated Fatalities	321	2153	979
Post-Conflict Year	0.36	0.48	1219
Militarized Interstate Dispute	0.61	0.489	1216
Battle Deaths	2875	8132	1124
GDP (Billions)	173.9	453.1	1135
State Life	67.1	47.8	1218
Composite Index of National Capability	0.01	0.02	1026
Democracy	-0.15	0.67	1207
Transition to Democracy	0.02	0.20	885

## 5.5 Results

The first set of hypotheses suggests that the state may be concerned about past security failures, and may correct for them through reform adoption. If there were high levels of state-perpetrated violence, the state should enact constraint-increasing reforms. If there were high levels of non-state-perpetrated violence, the state should implement capacity-increasing reforms. Higher levels of violence in general may lead to the adoption of both types of reforms. Table 5.1 shows preliminary evidence that states do not appear to be motivated to implement reforms in order to address past failures, as few states adopted both capacity and constraint-increasing reforms. To corroborate the descriptive data, Table 5.3, Table 5.4, Table 5.7, and Table 5.8 show that states do not adopt security sector reforms with an eye to redress past violence. The coefficients for state-perpetrated violence (rape and fatalities) and non-state-perpetrated violence (rape and fatalities) are mostly insignificant.

One exception may be that states appear to increase capacity if there are higher



levels of non-state-perpetrated fatalities, as indicated in Table 5.3. A closer look at the reforms that make up the capacity-increasing variable shows that much of this positive relationship is driven by expanding the security sector's presence (the creation of a sub-national police authority). Table 5.10 in the Appendix shows that as non-state-perpetrated fatalities increase, the likelihood of having sub-national authority increases. However, the same Table shows that as non-state-perpetrated rape increases, the state is *less* likely to expand its security presence into the rural periphery. This indicates that protection may be gendered—states are more likely to expand the security sector's presence when the violence is more oriented toward men. Additionally, the state is more likely to expand the security sector's presence when there were higher levels of state-perpetrated rape. Thus, when it comes to protecting women from rape by non-state actors and addressing fear of rape by state actors, on average, states appear to be doing the opposite of what is necessary to address prior violence.

To further demonstrate this point about “gendered protection,” we can compare the reforms against one another using a multinomial logit model. Table 5.12 in the Appendix provides the log odds of adopting capacity-increasing reforms relative to no reforms and the other types of reforms.<sup>26</sup> Using capacity-increasing reforms as the base, states are more likely to implement capacity-decreasing (and constraint-increasing) reforms when non-state actors perpetrated rape, suggesting that states are taking the opposite approach necessary with respect to protection when violence was more prone to affect women. Thus, even though, in some cases, states appear to

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<sup>26</sup>The model is pooled and uses the same control variables as the logit models.

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be responding to higher levels of non-state-perpetrated fatalities, they also appear to be ignoring the security needs of women.

The second set of hypotheses predicts that states adopt capacity-increasing, capacity-decreasing, constraint-increasing reforms, a combination of capacity and constraint-increasing reforms, or reforms that are both capacity and constraint increasing when peacekeepers are present. Table 5.3, Table 5.4, Table 5.7, and Table 5.8 demonstrate that there is strong support for hypotheses 2a-2c, as the coefficients for peacekeeping are positive and significant. Table 5.9 shows the predicted probabilities for reform adoption when there is a peacekeeping mission. With the presence of a peacekeeping mission, states are 11% more likely to adopt a capacity-decreasing reform, 22% more likely to adopt a capacity-increasing reform, and 12% more likely to implement a constraint-increasing reform.

Using a multinomial logit model, we can also compare the likelihood of adopting each type of reform against other reforms. Table 5.12 and Table 5.13 (in the Appendix) show that when capacity-increasing and constraint-increasing reforms are the reference category, the log odds of enacting no reform are negative with peacekeeping presence. This supports the results from the logit models above. Using these same models, Table 5.12 shows that with peacekeeping presence, states are no more likely to adopt capacity-increasing reforms over constraint-increasing or capacity-decreasing reforms. The log odds are negative, suggesting that they are more likely to adopt capacity-increasing reforms than the other reforms, but the results are not significant. However, with peacekeeping presence, states are more likely to adopt capacity-increasing reforms over constraint-decreasing reforms. Table 5.13 demonstrates that,

Table 5.3: Capacity-Increasing Reforms

	<i>Dependent variable:</i>			
	Capacity-Increasing Reforms: New Operational Unit and/or Increased Presence			
	(1)	(2)	(3)	(4)
Peacekeeping	1.15** (0.46)	1.09** (0.46)	1.11** (0.51)	1.23*** (0.47)
State Rape	-0.14 (0.20)	-0.15 (0.20)	-0.16 (0.21)	-0.14 (0.20)
State Fatalities	-0.19 (0.17)	-0.19 (0.17)	-0.19 (0.18)	-0.19 (0.17)
Non-State Rape	0.06 (0.21)	0.04 (0.21)	0.05 (0.21)	0.05 (0.21)
Non-State Fatalities	0.56* (0.32)	0.54* (0.32)	0.52 (0.34)	0.59* (0.32)
Post-Conflict Year	-0.21 (0.38)			
MID		0.30 (0.25)		
Battle Deaths			0.03 (0.03)	
Peace Agreement				-0.50 (0.38)
Ceasefire				-0.08 (0.80)
Ceasefire Agreement				-4.09 (4.64)
Government Victory				-0.63 (1.34)
Low-Scale Conflict				0.78 (0.50)
Peace Duration	0.05 (0.03)	0.04* (0.02)	0.04 (0.02)	0.04* (0.02)
GDP	0.36 (3.24)	0.01 (3.17)	0.40 (3.52)	0.73 (3.58)
State Life	6.30* (3.29)	6.66** (3.28)	7.00** (3.52)	6.93** (3.37)
Military Capacity	87.53 (55.70)	89.64 (56.44)	85.15 (62.21)	78.03 (56.12)
Democracy	0.07 (0.23)	0.07 (0.23)	0.12 (0.25)	0.05 (0.25)
Trans. to Democracy	-0.90* (0.54)	-0.85 (0.54)	-0.96* (0.55)	-0.94* (0.56)
t squared	-2.36*** (0.25)	-2.36*** (0.25)	-2.29*** (0.26)	-2.39*** (0.26)
t cubed	0.45*** (0.06)	0.46*** (0.06)	0.43*** (0.06)	0.46*** (0.06)
Constant	-0.02*** (0.004)	-0.02*** (0.004)	-0.02*** (0.004)	-0.02*** (0.004)
Observations	1.20*** (0.36)	0.99*** (0.38)	1.06** (0.43)	1.22*** (0.36)
Log Likelihood	539	539	520	539
Akaike Inf. Crit.	-220.68	-220.12	-214.46	-214.69
Bayesian Inf. Crit.	475.35	474.24	462.91	475.38
	548.28	547.16	535.23	574.05

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01  
Random Effects Models

Table 5.4: Constraint-Increasing Reforms

	<i>Dependent variable:</i>			
	Constraint-Increasing Reforms: Civilian Oversight and/or Military Ban from Politics			
	(1)	(2)	(3)	(4)
Peacekeeping	1.44** (0.65)	1.45** (0.65)	1.16* (0.67)	1.14* (0.66)
State Rape	0.39 (0.26)	0.38 (0.26)	0.42 (0.27)	0.37 (0.26)
State Fatalities	0.004 (0.02)	0.004 (0.02)	0.004 (0.02)	0.004 (0.02)
Non-State Rape	0.24 (0.27)	0.23 (0.28)	0.29 (0.27)	0.21 (0.28)
Non-State Fatalities	0.20 (0.22)	0.20 (0.22)	0.26 (0.23)	0.19 (0.22)
Post-Conflict Year	0.01 (0.50)			
MID		0.04 (0.33)		
Battle Deaths			-0.03 (0.03)	
Peace Agreement				0.79* (0.42)
Ceasefire				0.49 (0.78)
Ceasefire Agreement				1.05 (1.31)
Government Victory				1.87* (1.02)
Rebel Victory				-0.62 (1.65)
Low-Scale Conflict				0.17 (0.56)
Peace Duration	0.04 (0.04)	0.04 (0.03)	0.04 (0.03)	0.04 (0.03)
GDP	-0.39 (1.43)	-0.42 (1.42)	-0.11 (1.51)	-0.31 (1.44)
State Life	12.38* (7.39)	12.47* (7.40)	11.24 (7.40)	13.07* (7.43)
Military Capacity	-27.82 (30.43)	-28.19 (29.80)	-24.56 (29.55)	-33.96 (31.07)
Democracy	1.01** (0.47)	1.01** (0.47)	0.95** (0.48)	1.10** (0.46)
Trans. to Democracy	0.10 (0.70)	0.11 (0.70)	-0.12 (0.71)	0.05 (0.70)
t squared	-0.20 (0.21)	-0.20 (0.22)	-0.21 (0.22)	-0.23 (0.22)
t cubed	0.03 (0.03)	0.03 (0.03)	0.03 (0.03)	0.04 (0.03)
Constant	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
	-2.82*** (0.83)	-2.85*** (0.86)	-2.65*** (0.83)	-2.90*** (0.75)
Observations	551	551	531	551
Log Likelihood	-232.49	-232.48	-224.45	-229.23
Akaike Inf. Crit.	498.98	498.96	482.90	504.46
Bayesian Inf. Crit.	572.28	572.26	555.57	603.63

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models

Table 5.5: Capacity-Decreasing Reforms

	<i>Dependent variable:</i>			
	(1)	(2)	(3)	(4)
	Capacity-Decreasing Reforms: DDR			
Peacekeeping	1.44** (0.65)	1.45** (0.65)	1.16* (0.67)	1.14* (0.66)
State Rape	0.39 (0.26)	0.38 (0.26)	0.42 (0.27)	0.37 (0.26)
State Fatalities	0.004 (0.02)	0.004 (0.02)	0.004 (0.02)	0.004 (0.02)
Non-State Rape	0.24 (0.27)	0.23 (0.28)	0.29 (0.27)	0.21 (0.28)
Non-State Fatalities	0.20 (0.22)	0.20 (0.22)	0.26 (0.23)	0.19 (0.22)
Post-Conflict Year	0.01 (0.50)			
MID		0.04 (0.33)		
Battle Deaths			-0.03 (0.03)	
Peace Agreement				0.79* (0.42)
Ceasefire				0.49 (0.78)
Ceasefire Agreement				1.05 (1.31)
Government Victory				1.87* (1.02)
Rebel Victory				-0.62 (1.65)
Low-Scale Conflict				0.17 (0.56)
Peace Duration	0.04 (0.04)	0.04 (0.03)	0.04 (0.03)	0.04 (0.03)
GDP	-0.39 (1.43)	-0.42 (1.42)	-0.11 (1.51)	-0.31 (1.44)
State Life	12.38* (7.39)	12.47* (7.40)	11.24 (7.40)	13.07* (7.43)
Military Capacity	-27.82 (30.43)	-28.19 (29.80)	-24.56 (29.55)	-33.96 (31.07)
Democracy	1.01** (0.47)	1.01** (0.47)	0.95** (0.48)	1.10** (0.46)
Trans. to Democracy	0.10 (0.70)	0.11 (0.70)	-0.12 (0.71)	0.05 (0.70)
t	-0.20 (0.21)	-0.20 (0.22)	-0.21 (0.22)	-0.23 (0.22)
t squared	0.03 (0.03)	0.03 (0.03)	0.03 (0.03)	0.04 (0.03)
t cubed	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Constant	-2.82*** (0.83)	-2.85*** (0.86)	-2.65*** (0.83)	-2.90*** (0.75)
Observations	551	551	531	551
Log Likelihood	-232.49	-232.48	-224.45	-229.23
Akaike Inf. Crit.	498.98	498.96	482.90	504.46
Bayesian Inf. Crit.	572.28	572.26	555.57	603.63

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models

Table 5.6: Constraint-Decreasing Reforms

	<i>Dependent variable:</i>			
	Constraint-Decreasing Reforms: Defense Minister in Military and/or Parallel Militia			
	(1)	(2)	(3)	(4)
Peacekeeping	-0.31 (1.12)	-0.49 (1.15)	-0.54 (1.10)	-0.60 (1.14)
State Rape	-0.47 (0.52)	-0.39 (0.49)	-0.14 (0.55)	-0.52 (0.55)
State Fatalities	1.30 (0.84)	1.11 (0.86)	1.18 (0.85)	1.64* (0.91)
Non-State Rape	0.69 (0.68)	0.75 (0.69)	0.32 (0.74)	0.88 (0.71)
Non-State Fatalities	0.09 (0.44)	0.01 (0.44)	0.11 (0.40)	0.03 (0.49)
Post-Conflict Year	-1.46 (0.89)			
MID		0.93 (0.59)		
Battle Deaths			-0.03 (0.06)	
Peace Agreement				-1.25 (0.96)
Ceasefire				-1.21 (1.89)
Government Victory				-1.79 (1.72)
Low-Scale Conflict				-0.88 (1.06)
Peace Duration	0.02 (0.07)	-0.04 (0.05)	-0.05 (0.05)	-0.12** (0.06)
GDP	-0.03 (1.41)	-0.90 (1.32)	-0.55 (1.42)	0.26 (1.42)
State Life	10.14 (7.20)	10.26 (6.99)	11.10 (7.14)	12.16 (7.52)
Democracy	-1.23* (0.69)	-1.02 (0.69)	-1.12 (0.69)	-1.67** (0.83)
Trans. to Democracy	-1.57 (1.39)	-1.44 (1.32)	-1.96 (1.25)	-1.03 (1.42)
t	-7.77*** (1.04)	-7.61*** (1.00)	-7.29*** (0.98)	-8.88*** (1.32)
t squared	2.01*** (0.33)	1.96*** (0.32)	1.82*** (0.30)	2.45*** (0.44)
t cubed	-0.14*** (0.03)	-0.14*** (0.03)	-0.13*** (0.03)	-0.19*** (0.04)
Constant	4.98*** (0.82)	4.20*** (0.81)	4.73*** (0.80)	5.77*** (1.06)
Observations	535	535	515	535
Log Likelihood	-52.67	-52.81	-50.80	-46.69
Akaike Inf. Crit.	137.35	137.63	133.60	137.39
Bayesian Inf. Crit.	205.87	206.14	201.51	231.60

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01  
Random Effects Models

with peacekeeping presence, states are no more likely to adopt constraint-increasing reforms over capacity-increasing reforms or capacity decreasing reforms, but that they are more likely to adopt constraint-increasing reforms over constraint-decreasing reforms.

Peacekeeping missions also enable states to adopt more capacity-increasing and constraint-increasing reforms—confirming hypothesis 2c. States with peacekeeping missions are 24% more likely to adopt a combination of capacity and constraint-increasing reforms, as well as 27% more likely to adopt capacity and constraint-increasing reforms. Thus, peacekeeping presence helps ensure that states adopt the reforms that may help make states more legitimate.

Moreover, not only do peacekeeping missions ensure that states adopt reforms to make them more legitimate, but they may also aid in ensuring that states that would otherwise be reluctant to adopt constraint-increasing reforms do so. Authoritarian states are unlikely to adopt constraint-increasing reforms (we see evidence for this below), which means that peacekeeping missions could help institute constraint-increasing reforms in states that have the potential to turn autocratic, thereby tying their hands from being repressive in the future. In other words, peacekeeping missions, by increasing the probability that states adopt constraint-increasing reforms, could help mitigate state-perpetrated violence even if states become authoritarian in the future.

Table 5.7: Combination of Capacity and/or Constraint-Increasing Reforms

	<i>Dependent variable:</i>			
	New Operational Units or Increased Presence and Military Ban from Politics or Civilian Oversight			
	(1)	(2)	(3)	(4)
Peacekeeping	2.44*** (0.85)	2.05*** (0.77)	2.24** (0.90)	1.83** (0.77)
State Rape	-0.15 (0.34)	-0.16 (0.34)	-0.24 (0.36)	-0.16 (0.34)
State Fatalities	-0.003 (0.04)	-0.01 (0.26)	-0.004 (0.08)	-0.005 (0.10)
Non-State Rape	0.11 (0.33)	0.16 (0.33)	0.25 (0.33)	0.18 (0.32)
Non-State Fatalities	0.35 (0.26)	0.35 (0.25)	0.37 (0.26)	0.35 (0.25)
Post-Conflict Year	-1.10* (0.66)			
MID		0.10 (0.42)		
Battle Deaths			-0.03 (0.04)	
Peace Agreement				0.25 (0.52)
Ceasefire				-0.82 (1.28)
Ceasefire Agreement				1.29 (1.49)
Government Victory				0.56 (1.47)
Low-Scale Conflict				0.58 (0.63)
Peace Duration	0.15*** (0.06)	0.09** (0.04)	0.09** (0.04)	0.09** (0.04)
GDP	0.03 (1.48)	-0.15 (1.42)	0.74 (1.63)	-0.05 (1.40)
State Life	18.59** (8.45)	17.79** (7.87)	16.17* (8.26)	18.42** (7.78)
Military Capacity	-15.14 (31.05)	-8.87 (29.06)	-3.33 (29.17)	-10.15 (30.00)
Democracy	1.42** (0.68)	1.24* (0.64)	1.09* (0.65)	1.13* (0.64)
Trans. to Democracy	-1.62* (0.95)	-1.45 (0.92)	-1.38 (0.95)	-1.51 (0.94)
t squared	-0.47 (0.32)	-0.47 (0.33)	-0.51 (0.36)	-0.54 (0.34)
t cubed	0.10** (0.04)	0.10** (0.05)	0.11** (0.05)	0.11** (0.05)
t cubed	-0.004** (0.002)	-0.004** (0.002)	-0.004** (0.002)	-0.004** (0.002)
Constant	-5.18*** (1.33)	-5.07*** (1.29)	-5.11*** (1.39)	-4.95*** (1.28)
Observations	554	554	534	554
Log Likelihood	-159.26	-160.90	-154.30	-158.96
Akaike Inf. Crit.	352.52	355.80	342.59	363.92
Bayesian Inf. Crit.	425.91	429.20	415.36	463.21

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models



Table 5.8: Capacity and Constraint-Increasing Reforms: Female Ratio Balancing and/or Academy

	<i>Dependent variable:</i>			
	Capacity and Constraint-Increasing Reforms: Female Ratio Balancing and/or Academy			
	(1)	(2)	(3)	(4)
Peacekeeping	1.02*** (0.39)	0.91** (0.38)	1.14*** (0.39)	1.02*** (0.39)
State Rape	0.01 (0.19)	-0.0004 (0.20)	-0.03 (0.20)	0.01 (0.20)
State Fatalities	-0.22 (0.22)	-0.22 (0.21)	-0.24 (0.23)	-0.19 (0.21)
Non-State Rape	0.25 (0.20)	0.22 (0.20)	0.26 (0.21)	0.26 (0.20)
Non-State Fatalities	0.02 (0.13)	0.04 (0.13)	-0.01 (0.13)	0.02 (0.14)
Post-Conflict Year	-0.54 (0.37)			
MID		0.67*** (0.24)		
Battle Deaths			0.02 (0.02)	
Peace Agreement				-0.31 (0.36)
Ceasefire				0.76 (0.62)
Ceasefire Agreement				0.07 (1.20)
Government Victory				-0.65 (0.88)
Low-Scale Conflict				-0.27 (0.46)
Peace Duration	0.09*** (0.03)	0.07*** (0.02)	0.06*** (0.02)	0.06*** (0.02)
GDP	-0.56 (0.69)	-0.90 (0.69)	-0.61 (0.71)	-0.81 (0.70)
State Life	3.71 (2.31)	4.26* (2.28)	3.58 (2.35)	4.32* (2.34)
Military Capacity	6.75 (8.70)	4.78 (8.65)	7.14 (9.01)	9.03 (9.05)
Democracy	0.63*** (0.23)	0.66*** (0.24)	0.75*** (0.25)	0.60** (0.24)
Trans. to Democracy	0.31 (0.56)	0.41 (0.57)	0.50 (0.57)	0.31 (0.58)
t	-0.76*** (0.16)	-0.74*** (0.17)	-0.73*** (0.16)	-0.76*** (0.17)
t squared	0.09*** (0.02)	0.09*** (0.03)	0.09*** (0.02)	0.09*** (0.03)
t cubed	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
Constant	-0.37 (0.34)	-0.90** (0.38)	-0.50 (0.34)	-0.42 (0.34)
Observations	526	526	506	526
Log Likelihood	-263.86	-261.14	-252.39	-262.23
Akaike Inf. Crit.	561.71	556.28	538.78	570.47
Bayesian Inf. Crit.	634.22	628.79	610.63	668.57

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models

Table 5.9: Predicted Probabilities for Reform Adoption

<i>Predicted Probabilities:</i>			
Security Sector Reform Implementation			
Variables	No Peacekeeping	Peacekeeping	Change in Percentage
Capacity-Decreasing Reforms (DDR)	0.15 (0.10–0.21)	0.26 (0.08–0.43)	0.11 (-0.04–0.21)
Capacity-Increasing Reforms New Operational Unit	0.63 (0.55–0.72) 0.37 (0.25–0.49)	0.85 (0.72–0.98) 0.50 (0.30–0.72)	0.22 (0.03–0.29) 0.13 (-0.04–0.29)
Constraint-Increasing Reforms	0.25 (0.16–0.34)	0.37 (0.17–0.56)	0.12 (-0.07–0.28)
Combination Capacity and/or Constraint Increasing Reforms	0.11 (0.05–0.18)	0.35 (0.13–0.57)	0.24 (0.04–0.40)
Capacity and Constraint Increasing Reforms (Female Ratio Balance/Academy)	0.22 (0.18–0.26)	0.49 (0.30–0.68)	0.27 (0.07–0.40)
Academy	0.13 (0.09–0.18)	0.27 (0.11–0.44)	0.14 (-0.02–0.29)
Female Ratio Balancing	0.10 (0.05–0.14)	0.36 (0.17–0.55)	0.26 (0.08–0.42)

*Note:*

Predicted Probabilities with 95% CI  
 All other variables held at their means

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The third set of hypotheses suggests that democratic states are more likely to adopt constraint-increasing reforms and that autocratic states are more likely to adopt constraint-decreasing reforms. Table 5.4 and Table 5.6 show that there is support for these hypotheses. The coefficient for democracy is positive and significant in all the models in Table 5.4, and democracy is negative and significant in two out of the four models in Table 5.6. Furthermore, Figure 5.1 shows how as the Unified Democracy Score increases, the predicted probability for states to adopt constraint-increasing reforms also increases. Figure 5.2 shows that autocratic states are much more likely to adopt constraint-decreasing reforms than democratic states. The results suggest that regime type conditions whether states are likely to adopt reforms that ensure that the security forces mitigate state-sanctioned and non-sanctioned violence by the security forces.

While the logit models show that there is support for the hypotheses, using a multinomial logit model and using constraint-increasing reforms as the reference category, Table 5.13 shows that as states are more democratic, they are actually more likely to adopt no reforms than constraint-increasing reforms, more likely to adopt capacity-increasing reforms than constraint-increasing reforms, but less likely to adopt constraint-decreasing reforms than constraint-increasing reforms. These results do not completely negate the models above, as democratic states are still more likely to adopt constraint-increasing reforms over constraint-decreasing reforms, but they imply that democratic states do not adopt constraint-increasing reforms over all other reforms nor over “no reforms.”

Table 5.7 and Table 5.8 show that democracies are also more likely to adopt

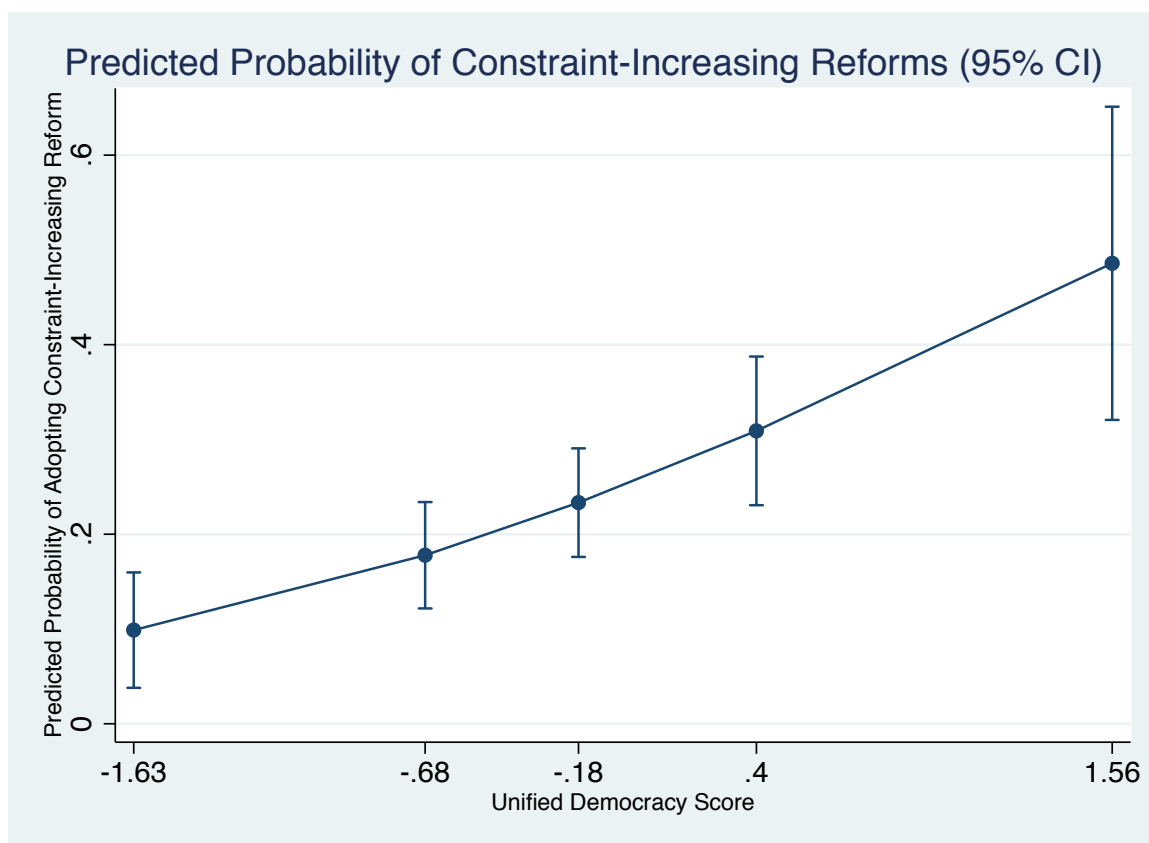


Figure 5.1: Predicted Probability of Adopting Constraint-Increasing Reforms by Unified Democracy Score

This figure shows the higher the Unified Democracy Score (UDS), the more likely states are to adopt constraint-increasing reforms. The points mark the minimum, 25% percentile, median, 75% percentile, and maximum UDS scores. The bivariate model only includes random effects and the cubic polynomial.

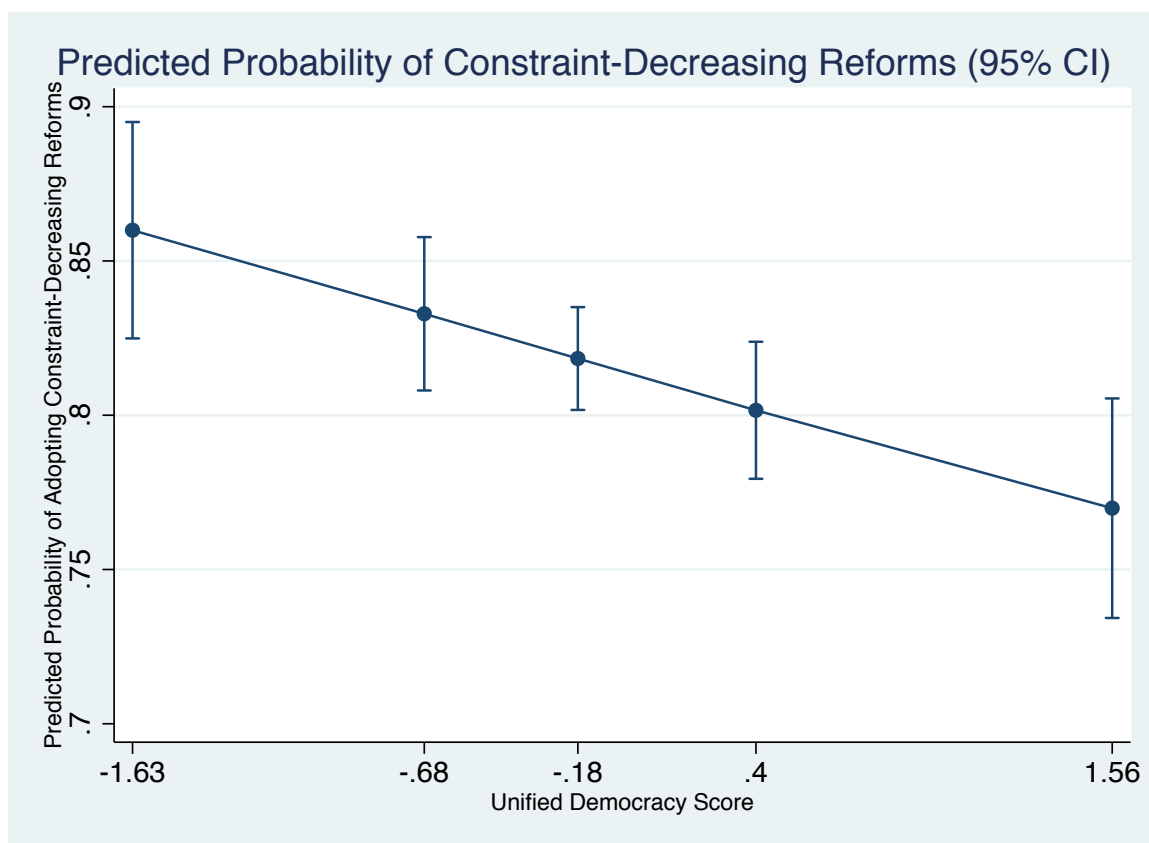


Figure 5.2: Predicted Probability of Adopting Constraint-Decreasing Reforms by Unified Democracy Score

This figure shows the lower the Unified Democracy Score (UDS), the more likely states are to adopt constraint-decreasing reforms. The points mark the minimum, 25% percentile, median, 75% percentile, and maximum UDS scores. The bivariate model only includes random effects and the cubic polynomial.

constraint and capacity-increasing reforms.<sup>27</sup> The evidence provides further support for hypotheses 3a and 3b, but it also means that the type of regime in place when decisions are being made about reforms affects the type of reforms states adopt related not only to constraint, but also to capacity-increasing reforms as well.

The hypotheses above do not touch on why democracies may have a tendency to adopt capacity-increasing reforms, but one possibility may be similar to findings by Reiter and Stam (2002)—once democracies enter into wars, they tend to fight harder. This intuition may apply to internal wars and insurgencies as well—once democracies decide to engage in fighting rebels instead of negotiating with them, they fight harder than non-democracies. Fighting harder may mean implementing reforms that make them more likely to win. Regardless, more work should be done on the connection between regime type and capacity-increasing security sector reforms.

Finally, the last hypothesis on threat suggests that states adopt capacity-increasing reforms when they face higher levels of threat—when they are involved in ongoing conflict, militarized interstate disputes, experience higher casualties, or when there is ongoing violence. There is not much support for this hypothesis. Looking at Table 5.3, the coefficients for post-conflict year, MID, battle death, and low-scale conflict are insignificant. Thus, surprisingly, a state's threat environment does not appear to affect whether states adopt reforms that would increase their effectiveness to fight their enemies.

One notable exception to this is that states appear to implement female ratio

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<sup>27</sup>Table 5.13 suggests that democracies are more likely to adopt capacity-increasing reforms than constraint-increasing reforms.

balancing and training academies when they face militarized inter-state disputes. States are about 7% more likely to adopt a female ratio balancing reform and about 8% more likely to build a new training academy if they are in a militarized interstate dispute. Table 5.11 shows the results for these findings. From this evidence, it appears that states may respond to inter-state threats by adopting capacity and constraint-increasing reforms, but may not necessarily respond in this way to intra-state threats. The disparity warrants future investigation.

## 5.6 Conclusion

This chapter has assessed the conditions under which states adopt constraint-increasing and capacity-increasing reforms. Specifically, it has looked at whether states adopt reforms to address prior security failures, whether external actors affect reform adoption, and whether regime type or threats affect reform implementation. At first glance, there is not much evidence to support the idea that states address past failures through reforms. The one exception may be that states implement capacity-increasing reforms when non-state-actor violence was higher, but this is not the case if the violence was rape. Rather, states appear to take measures to decrease their capacity when incidents of rape were higher. Thus, violence that is more prone to affect women may be ignored in decisions about security sector reform adoption.

Instead, the chapter finds strong evidence that peacekeeping missions largely influence the extent to which states adopt the “right” set of reforms. States are more likely to adopt capacity-increasing and constraint-increasing reforms—both individ-

ually and also in combination—with peacekeeping presence. They are also more likely to adopt capacity-decreasing reforms, mostly in the form of DDR. Additionally, states are more likely to adopt capacity-increasing and constraint-increasing reforms over constraint-decreasing reforms. Thus, there is strong evidence that peacekeeping missions have been successful in promoting three of the main international agendas established for peace building—good governance, DDR, and “responsibility to protect.” Given that peacekeeping missions go to the most difficult cases (Fortna 2008), the evidence here suggests that they appear to be effective in rebuilding security institutions so that they may be more—and are perceived to be more—effective, and may be more—and are perceived to be more—restrained. Moreover, peacekeeping missions could ensure that states that would not otherwise implement constraint-increasing reforms actually do so, so that states that might be prone to turning autocratic tie their hands from future repression against their own citizens.

In addition to peacekeeping missions, regime type also conditions the likelihood that states adopt constraint-increasing as well as constraint-decreasing reforms. Democracies are more likely to adopt constraint-increasing reforms, whereas autocracies are more likely to adopt constraint-decreasing reforms. These findings should be treated with some caution, as democracies are likely to adopt constraint-increasing reforms over constraint-decreasing reforms only, and not necessarily over capacity-increasing reforms or no reforms. Regardless, that democratic states are more likely to adopt constraint-increasing reforms over constraint-decreasing reforms makes sense given that democracies are more likely to adopt reforms that both minimize the principal-agent problem and the credible commitment problem, because they need



public approval for regime survival. In contrast, autocracies may be more likely to adopt reforms that give them leeway to use the security forces to commit violence, and also allow the security forces to shirk, because they are less concerned about maintaining good rapport with their citizens.

When it comes to threats, states do not appear to adopt capacity-increasing reforms in response to ongoing conflict. This could be because when states are in the middle of conflicts, it is more difficult to implement reforms, as they are concerned with utilizing the resources that they already have instead of making changes to their security sectors. Regardless, given the null results, more work should be done to unpack the relationship between threats and security sector reform, particularly the difference between inter-state and intra-state threats.

This chapter has found that peacekeeping missions, and to a lesser extent, democratic regimes contribute to states adopting particular reforms—professionalization and female ratio balancing—for which there is some evidence of enhancing perceptions of effectiveness and restraint. More broadly, peacekeeping missions and democratic regimes influence the adoption of capacity-increasing and constraint-increasing reforms. These reforms could be considered the “right” set of reforms for restoring the social contract. We turn to the implications from these findings and those from previous chapters in the concluding chapter.

## 5.7 Chapter 5: Appendix

Table 5.10: Increasing State Presence (Sub-National Police)

	<i>Dependent variable:</i>		
	(1)	(2)	(3)
	Increasing State Presence		
Peacekeeping	1.67 (1.83)	1.47 (1.41)	2.15 (2.02)
State Rape	1.56* (0.94)	1.33* (0.72)	1.63* (0.94)
State Fatalities	-0.002 (0.27)	-0.0002 (0.03)	0.0002 (0.13)
Non-State Rape	-3.12** (1.31)	-2.93** (1.20)	-2.83** (1.42)
Non-State Fatalities	1.61* (0.91)	1.54** (0.75)	1.74* (0.95)
Post-Conflict Year	-1.24 (1.57)		
MID		1.54** (0.74)	
Battle Deaths			-1.58 (1.68)
Peace Agreement			-1.55 (10.35)
Ceasefire Agreement			-3.59 (2.72)
Rebel Victory			1.47 (1.68)
Peace Duration	2.23 (25.64)	10.37 (14.94)	7.24 (24.58)
GDP	68.87* (40.45)	39.20 (36.32)	66.99 (41.55)
Military Capacity	1.94 (1.30)	1.41 (1.25)	1.13 (1.37)
Democracy	-0.15 (1.44)	-0.34 (1.36)	1.10 (2.29)
Trans. to Democracy	-13.23*** (3.81)	-11.66*** (2.40)	-13.70*** (3.96)
Observations	554	554	554
Log Likelihood	-73.12	-72.17	-69.78
Akaike Inf. Crit.	174.25	172.33	179.56
Bayesian Inf. Crit.	234.69	232.77	265.90

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models

Table 5.11: Female Ratio Balance and New Academy

	<i>Dependent variable:</i>	
	Female Ratio Balance	New Academy
	(1)	(2)
Peacekeeping	1.82*** (0.54)	0.86* (0.47)
State Rape	-0.12 (0.29)	0.14 (0.23)
State Fatalities	-0.004 (0.03)	-0.56 (0.44)
Non-State Rape	0.51* (0.28)	-0.26 (0.28)
Non-State Fatalities	0.29* (0.17)	0.01 (0.17)
Post-Conflict Year	-0.32 (0.54)	-0.54 (0.51)
MID	0.81** (0.38)	0.77** (0.32)
Battle Deaths	0.002 (0.03)	0.04* (0.02)
Peace Agreement	-0.18 (0.49)	-0.27 (0.44)
Ceasefire	1.35* (0.76)	0.83 (0.72)
Ceasefire Agreement	0.53 (1.34)	0.64 (1.29)
Government Victory	-0.47 (1.28)	-0.17 (0.94)
Low-Scale Conflict	1.12** (0.55)	-1.16 (0.81)
Peace Duration	0.09** (0.04)	0.11*** (0.04)
GDP	-2.53* (1.31)	-0.23 (0.90)
State Life	10.76** (4.77)	7.11* (3.68)
Military Capacity	21.01 (17.73)	-27.40 (17.54)
Democracy	1.08*** (0.41)	0.63* (0.34)
Trans. to Democracy	-1.49** (0.70)	1.85*** (0.71)
Constant	-3.97*** (0.61)	-2.96*** (0.43)
Observations	525	515
Log Likelihood	-174.22	-203.57
Akaike Inf. Crit.	394.45	453.14
Bayesian Inf. Crit.	492.51	550.76

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Random Effects Models

Table 5.12: Multinomial Logit Model of SSR Adoption (Capacity-Increasing Reforms)

	<i>Reference Category: Capacity-Increasing Reforms</i>			
	No Reform	Capacity-Decreasing	Constraint-Decreasing	Constraint-Increasing
Peacekeeping	-3.12*** (1.09)	-1.55 (1.04)	-2.51*** (0.60)	-0.55 (0.42)
Non-State Rape	0.37 (0.35)	0.91** (0.36)	0.30 (0.30)	0.60** (0.27)
State Rape	0.11 (0.28)	-0.67 (0.49)	-0.24 (0.23)	0.11 (0.21)
State Fatalities	-0.0006 (0.0006)	-0.00 (0.00002)	0.00 (0.00)	-0.00 (0.00)
Non-State Fatalities	-0.0007 (0.00006)	0.0001 (0.0002)	-0.0004 (0.0003)	-0.00 (0.0001)
Constant	1.51*** (0.42)	-0.60 (0.67)	-0.62 (0.38)	-0.45 (0.35)
Observations	534	534	534	534

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Pooled Models, Full Model Not Shown

Controls include: GDP, conflict outcome, post-conflict year, state life, military capacity, transition to democracy, MID

Table 5.13: Multinomial Logit Model of SSR Adoption (Constraint-Increasing Reforms)

	<i>Reference Category: Constraint-Increasing Reforms</i>			
	No Reform	Capacity-Decreasing	Capacity-Increasing	Constraint-Decreasing
	Log Odds			
Peacekeeping	-2.57*** (1.08)	-1.00 (1.02)	0.55 (0.42)	-1.96*** (0.57)
Non-State Rape	-0.22 (0.29)	0.31 (0.31)	-0.59*** (0.27)	-0.29 (0.23)
State Rape	-0.001 (0.26)	-0.77 (0.48)	-0.11 (0.21)	-0.35* (0.21)
State Fatalities	-0.001 (0.26)	0.00 (0.00002)	0.00 (0.00001)	-0.00 (0.00)
Non-State Fatalities	-0.0006 (0.0006)	0.0001 (0.0003)	0.00 (0.00)	-0.0004 (0.0002)
Democracy	0.87*** (0.33)	0.05 (0.52)	0.69** (0.30)	-1.89*** (0.33)
Constant	1.97*** (0.43)	-0.14 (0.67)	0.46 (0.35)	-0.16 (0.38)
Observations	534	534	534	534

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Pooled Models, Full Model Not Shown

Controls include: GDP, conflict outcome, post-conflict year, state life, military capacity, transition to democracy, MID

# Chapter 6

## Conclusion

### 6.1 Summary and Implications

Returning to the original question posed at the beginning of this manuscript: how can post-conflict states ensure long-term security in the life and dignity of their citizens? They can begin to do so by implementing certain types of security sector reforms, particularly ones that are capacity and constraint-increasing. While relying solely on the implementation of such reforms will not lead to “quality” peace immediately, the reforms can pave the way for enhancing perceived security from violence perpetrated by non-state actors and by states themselves.

This manuscript has built on the traditional understanding of the “negative peace” or conflict recurrence to one that addresses “quality peace.” For long-lasting security of life and dignity, states must be able to not only prevent future conflict, but also provide security, governance, and other public goods to its citizens. Failure to provide such public goods results in weak and failed states that breach the social contract.

Long-term stability and order depend on the social contract functioning. States that breach the social contract pose a threat not only to the safety of their own citizens but also to the international system.

Lake (2016) has argued for a return to studying state power as the solution to weak and failed states. Building from this approach, this dissertation has argued that security sector reforms are an integral part of restoring the social contract. When citizens once again find the security sector legitimate, they may start to regain trust in the overall state and to believe that it can ensure long-term security in life and dignity. However, not all security sector reforms are beneficial to the state. Thus, to sort among the myriad reforms states can implement, this manuscript has created a categorization scheme for security sector reforms based on two dimensions: capacity and constraint.

Reforms that augment capacity increase the security sector's resources and efficient use of those resources. Constraint-increasing reforms minimize the principal-agent problem—the security sector could shirk by committing unsanctioned abuse against the population—as well as the credible commitment problem between states and their citizens—once the state is invested with power, it could use that power to repress the population and extract resources from it. Reforms can be categorized based on both dimensions, although they tend to have one “dominant” dimension. Thus, security sector reforms can be capacity-increasing, capacity-decreasing, constraint-increasing, or constraint-decreasing.

Reforms, or combinations of reforms, that have both capacity-increasing and constraint-increasing dimensions are perhaps most likely to prevent violence in the



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state, as they could augment the state's ability to prevent attacks by non-state actors and while restraining the state and its security sector from inflicting violence on its own citizens. Citizen views could resemble these outcomes. Citizens that experience capacity-increasing reforms could perceive the security sector as more effective in preventing non-state-actor violence, and citizens that experience constraint-increasing reforms could perceive the security sector as more restrained.

These positive perceptions could then also translate into support for the state, and thus to overall legitimacy of the states's security forces. Enhanced perceptions of the state's security sector could lead to more support or costly compliance on the part of citizens. When citizens incur some cost on behalf of the state's security forces, whether monetary or social, they may support the state and confer legitimacy onto it.

When security sector reforms are capacity or constraint-increasing, but also capacity or constraint-decreasing, they could result in an "effectiveness-restraint" trade-off. One of the dimensions perhaps leads to better outcomes and perceptions, but the other dimension could lead to violence and negative perceptions. If a reform is capacity-increasing, but constraint-decreasing, it could lead to the prevention of violence by non-state actors and perceived effectiveness, but the constraint-decreasing dimension also implies that it could lead to abuse against the population and perceived abuse by the security forces. Similarly, if a reform is capacity-decreasing but constraint-increasing, then it could lead to a decrease in state-perpetrated violence and enhanced perceptions of security sector restraint, but also to an increase in non-state-perpetrated violence and perceptions of security sector ineffectiveness. Such

reforms are sub-optimal for regaining legitimacy of the security forces, as are reforms that decrease both capacity and constraints.

The assertions about different types of security sector reforms and public opinion about and support for the security sector were tested in rural Liberia, a country that has experienced several security sector reforms including professionalization of the police through a police academy and female ratio balancing of the police force (a 30% quota for female police officers). Professionalization is considered capacity-increasing and constraint-increasing, whereas female ratio balancing is perhaps constraint-increasing, but more ambiguous with respect to whether it is capacity-increasing or decreasing. Perceptions and support for the Liberian National Police were tested using a randomized controlled trial, whereby exposure to reforms was operationalized through police-community outreach in rural villages in Grand Kru County.

Based on the results from the randomized controlled trials in Grand Kru County, we can draw six main conclusions. First, when Liberian citizens from villages in Grand Kru County were exposed to professionalized police officers, they were more likely to perceive the security forces as restrained and effective. This was true regardless of whether the officers were male or female. This indicates that professionalized male and female officers are equally likely to elicit positive perceptions when conducting community policing. While there was strong and consistent support for enhanced perceptions of restraint, the evidence for perceptions of effectiveness was less consistent. It is possible that if police officers do not visit every household in a village, those omitted from receiving the service feel excluded, leading to negative perceptions

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of effectiveness. There appears to be some indication for this, as the baseline levels of perceptions of effectiveness were much lower among households from villages that received visits by police officers when compared to the baseline levels of effectiveness in households from villages that did not receive any visits. Thus, it is possible that when comparing treated households with households in villages that police did not visit at all, perceptions of effectiveness are not enhanced. There was no such inconsistency for perceptions of restraint when comparing the treated households to the two different control groups. Overall, based on the evidence, professionalization, classified as a capacity and constraint-increasing reform, appears to enhance perceptions of restraint, and less consistently, effectiveness.

Second, while exposure to professionalization enhanced perceptions, it did not directly increase monetary support for the police. Rather, direct exposure to professionalization through the household visits led to less monetary support for the police. One reason for this could be that citizens are reluctant to contribute to programs that appear to be well funded already. However, individuals who perceived the security sector as effective, and who were exposed to the treatment, were more likely to contribute monetary resources to the police, suggesting that under some conditions citizens may contribute more resources to the police force. It is possible that when security sector reforms enhance perceptions, they also increase support. If security sector reforms do not change perceptions, they may not increase support for the state's security forces. Thus, it becomes increasingly important to understand which reforms enhance perceptions of the security forces, as the evidence seems to indicate that support is accrued via changed perceptions. If reforms are unsuccessful

in changing perceptions, they may be harmful for accruing monetary support.

Third, female ratio balancing reforms, operationalized through visits by female police officers, enhance perceptions of effectiveness and restraint. As mentioned above, male and female police officers appear to equally enhance perceptions of effectiveness and restraint, but they were perceived as slightly less effective than their male counterparts in providing security. Nevertheless, when it comes to eliciting support from citizens, female police officers were more likely to be offered a place to stay, whereas male officers were more likely to get information from community members. Moreover, female police officers tended to perform more effectively during the household visits, as they were able to minimize citizens' fear over the course of their visit, hold the attention of the household members, and have others stop and listen to the message. This means that male and female police officers contribute to the overall tactical goals of the police force, and that female ratio balancing should be implemented not because female police officers bring added benefits, but because together, male and female officers maximize perceptions of and support for the police. Policing is, thus, perhaps best done with both male and female police officers represented.

Fourth, one of the main findings from Chapter 4 was that when comparing household visits by male and female police officers, female police officers were no less and sometimes even more likely to enhance perceptions of police abuse. This goes against much of the literature on gender stereotypes, which has found that women are perceived to be more restrained when it comes to violence. The explanation provided by enumerators on the ground was that during the civil war in Liberia, women took on combat positions, which went against traditional gender norms in the country.

As a result, many became more fearful of women who assume security roles. The implication is that gender is a fluid concept and that gender is not synonymous to sex. This point is further demonstrated by evidence from Chapter 4 that showed that perceptions of women were not fixed. The results indicated that female officers were able to gain the trust of the residents in the households during and after the visit and to alter perceptions throughout the course of their visit. The war might have caused the public to fear women in uniforms, but visits by female police officers were able to overturn these beliefs.

Fifth, security sector reforms have a particular effect on those that have experienced previous violence, whether during the war or after the war. For such a group, security sector reforms could be implemented to address past grievances and fill security gaps. This would mean implementing capacity-increasing reforms if civilians experienced violence by non-state actors, and it would mean implementing constraint-increasing reforms if survivors experienced violence by the state. Yet the evidence from the “professionalism” randomized controlled trial suggests that exposure to reforms that address these grievances did not restore faith in the security sector. When survivors of conflict and post-conflict violence were exposed to professionalization, they were less likely than non-survivors to perceive the security sector as effective and restrained. This implies that the household visits had the effect of reminding survivors of the past ineptitude of the security forces rather than restoring confidence in them. As such, states have to do much more than expose survivors to new reforms in order to gain their trust. It also means that implementing security sector reforms with an eye to addressing grievances may not be an effective strategy to regain legit-

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imacy from survivors, but implementing capacity and constraint-increasing reforms should still be considered an effective strategy for restoring legitimacy of the security forces among the general population.

Finally, though there was less attention devoted to this finding in the individual chapters, exposure to professionalization and female ratio reforms increased values for gender equality. Professionalization enhanced beliefs about women having equal rights, about women as leaders, and about women as security providers. Importantly, household visits by both male and female officers led to these outcomes, and exposure to female police officers particularly enhanced the perception that women should provide security. At a first glance, this may not seem like an important contribution, but put in the context of a growing body of literature that has consistently linked gender equality to peace (Bjarnegård and Melander 2011, Caprioli 2000, 2003, 2005, Caprioli and Boyer 2001, Hudson 2013, Hudson and Den Boer 2002, Melander 2005*a,b*), the results imply that security sector reforms could have important side benefits in addition to improving overall legitimacy of the security sector.

Given that there is some evidence that capacity-increasing and constraint-increasing reforms help improve perceptions of the security sector for a more general population and may have added side benefits, it becomes important to understand when states adopt this “right set of reforms.” This is the topic of the final chapter. Specifically, the chapter looked at whether states address previous violence, whether external actors such as peacekeeping missions drive decisions, whether regime type affects adoption, and whether security threats determine implementation. The chapter found evidence for peacekeeping missions and regime type—peacekeeping missions

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increased the probability of states adopting capacity-increasing and/or constraint-increasing reforms, and the more democratic a state, the higher the probability that it adopted a constraint-increasing reform over a constraint-decreasing reform. Additionally, autocratic states were more likely to adopt constraint-decreasing reforms.

There is consistent evidence that peacekeeping missions go to the most difficult cases, and in these cases, that they are successful in preventing renewed conflict. The evidence from the manuscript suggests that they do much more than just prevent conflict. As state builders, peacekeeping missions help ensure that states adopt the “right” set of reforms. This is particularly important for states that might not otherwise adopt these types of reforms, such as non-democracies. Thus, peacekeeping missions may institute reforms that tie the hands of states from repressing their population in the future.

Yet the finding that peacekeeping missions appear to positively influence the policymaking decisions of host states should be treated with some caution. Third parties may not always understand the local context or know what works best in particular countries, and this could lead to the implementation of reforms that do not always work. For example, Autesserre (2010, 2014) has found that international peace building efforts have not always been successful in the Democratic Republic of the Congo (DRC) and have sometimes even been detrimental to local peace building efforts. Moreover, host countries are sometimes at the whim of international trends—good governance and civilian protection are trends today, but these priorities may change based on donor interests tomorrow. Thus, with peacekeeping missions, states may not always adopt the “right” set of reforms, or the “right” set of reforms may not al-

ways be best for the host country. Consequently, third-party involvement in security sector reform should proceed, but with an eye toward ensuring that the reforms are actually beneficial to host countries.

In addition to peacekeeping missions, democratic countries are more likely to adopt constraint-increasing reforms than constraint-decreasing reforms, and they are more likely to adopt constraint and capacity-increasing reforms. This makes sense given the institutional design of democracies. Because democracies are more concerned about the opinion of their electorates than non-democracies are, they are more likely to implement reforms that address state-sponsored violence, but also non-state violence. Nevertheless, adopting these reforms is part of what it means to be a democracy, which means that democratization is not necessarily a short-term policy tool to ensure the adoption of “right” reforms. In other words, if the provision of security is more important than democratization in state building, as suggested by Lake (2016) and others, relying on democratization as a means to implement the “right” reforms is unhelpful.

The null findings for the “past security failures hypothesis” indicate that states do not decide about security sector reform based on previous levels of violence; they do not implement reforms to correct for past failures. While this could be problematic because states don’t appear to be “updating” based on previous events, the randomized controlled trial results from Chapters 3 and 4 seem to indicate that survivors of previous levels of violence are not swayed even if reforms were implemented that did remedy violence in the future. This means that adopting reforms to address grievances may not enhance the security sector’s legitimacy among survivors of



violence. However, it does appear to enhance perceptions among the general public.

Furthermore, the null results for security threat suggest that states do not implement security sector reforms when they are engaged in conflict, when they are involved in a militarized inter-state dispute, when there are ongoing internal threats, nor when there are high levels of combatant casualties. These results are somewhat puzzling given that states sometimes make changes in their strategies during a war, which often requires changes in the security sector. But it is also possible that the scale of change needed for a security sector reform is difficult to administer during a conflict or dispute. Regardless, as mentioned below, the relationship between security sector reforms and security threats warrants further, detailed investigation.

Overall, security sector reforms that are capacity and constraint-increasing have perhaps the best chance at restoring the social contract. If states have a choice about what types of reforms to implement, they may be better off adopting reforms that fall into these categories. Nevertheless, while this manuscript has provided a much-needed framework for categorizing reforms and developing expectations about which types of reforms are more likely to yield positive outcomes related to restoring the social contract, there are several limitations, and more research on security sector reform is needed to develop concrete recommendations to post-conflict states about how best to implement reforms so that they maximize outcomes.

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## 6.2 Limitations and Future Areas for Research

Overall, the manuscript has provided a way to categorize security sector reforms; has found some evidence at the micro level that capacity-increasing and constraint-increasing reforms enhance perceptions and legitimacy for the state's security sector; and has found evidence that peacekeeping missions help ensure that states implement these types of reforms. Nevertheless, there are limitations to what the empirical evidence from this manuscript can tell us. First, the randomized controlled trials in Grand Kru County, Liberia are not necessarily generalizable to other parts of Liberia nor to other post-conflict countries. Thus, it is possible that if the same experiment were conducted in another post-conflict country, it would produce different results. The lack of generalizability, however, does not preclude proof of concept. Had the majority of the results been null or if the evidence contradicted the stated hypotheses, then this could be taken as evidence against the theoretical framework, but the positive results indicate that there is support for capacity and constraint-increasing reforms resulting in enhanced perceptions of the security sector. Moreover, Liberia and Grand Kru county were chosen because they represent weak post-conflict countries—where reforms are most likely to make a difference in perceptions of and support for the state. Grand Kru County is one of the most remote counties in Liberia and has minimal state presence. Thus, changes in state presence are likely to be noticeable. Consequently, the fact that evidence supporting the theoretical framework was found in a “most-likely” case suggests the possibility that states that resemble Liberia (other weak post-conflict states) or parts of states that resemble Grand Kru County (rural

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peripheries) could yield similar results.

Another limitation is that only two reforms were tested at the micro-level. Professionalism represented a “most likely” reform to test, as there is minimal ambiguity about its placement in the capacity-increasing and constraint-increasing categories (Quadrant A). Female ratio balancing represented a reform that is more ambiguous with respect to whether it is capacity-increasing or decreasing (with some contestation about whether it is also constraint-increasing due to arguments that gender stereotypes do not generalize). Thus, female ratio balancing could be considered either another test of an “ideal reform,” or one that exacerbates the “effectiveness-restraint tradeoff.” In order to fully test the theoretical framework described in this manuscript, micro-level tests would need to be conducted on capacity-decreasing reforms and constraint-decreasing reforms. However, doing so using the same empirical method—a randomized controlled trial—proves to be more difficult because randomizing these types of reforms or information about them could lead to potentially adverse consequences, which could do more harm than good. Thus, other methods are needed to test the effect of constraint and capacity-decreasing reforms on perceptions of and support for the security sector. Nevertheless, at the very least, testing the reforms here demonstrates that reforms do have an impact on public perception and support for the state’s security forces.

Limitations notwithstanding, given the dearth of research on security sector reform previously, the framework developed here to categorize security sector reforms provides the groundwork for important future research. First and foremost, is a need to understand the link between the four types of security sector reforms and actual

outcomes related to violence. Do capacity-increasing reforms contribute to less non-state-perpetrated violence, and do capacity-decreasing reforms lead to more violence? And do constraint-increasing reforms contribute to less state-sanctioned and/or unsanctioned security-force-perpetrated violence, and do constraint-decreasing reforms lead to more of such violence? Given that security sector reforms are not randomly distributed across states, selection bias presents a problem in testing this relationship cross-nationally. However, the previous chapter indicated that peacekeeping missions and regime type condition state adoption, which means that biases from the way states select reforms can be factored into any future analysis on outcomes.

Additionally, more research is needed to understand the impact of security sector reforms in other contexts, given that the experiments here were tested as a “most-likely” case. The next step is to move beyond case studies of weak post-conflict states to states that are more consolidated such as Peru, India, Northern Ireland or the Basque region in Spain, to name a few. Additionally, categorization of reforms along capacity and constraint dimensions is not limited to just post-conflict countries—the framework for sorting reforms can extend to non-conflict states as well. It is possible that security sector reforms adopted by non-conflict states also enhance perceptions of and support for the security sector. Given that police-citizen relationships are a contentious issue in many countries, including the U.S., more research is needed to understand how reforms affect the state’s legitimacy in a broader set of countries.

The macro-level analysis revealed that security threats do not affect security sector reform adoption. This result warrants further scrutiny, as there was some evidence that states adopt certain capacity and constraint-increasing reforms when there is

an inter-state dispute. Future analysis should include differentiation of the nature of the threat—whether it is internal or external. Moreover, any further analysis at the cross-national level should also include other reforms such as ethnic balancing (power sharing), conscription, and restructuring command and control, among other reforms.

The micro-level analysis points to a need to understand how to redress the grievances of citizens who have experienced violence, as capacity-increasing and constraint increasing-reforms were shown not to have an effect on this group of people. Under what conditions do survivors of violence begin to support the state? This is an important question moving forward, especially for states that have experienced mass atrocities.

Furthermore, the randomized controlled trials revealed that citizens only support the state's security forces if reforms enhance perceptions, and that they might even contribute less monetary resources if they are exposed to reforms that don't elicit positive perceptions. Thus, more work should be done to understand why monetary support decreases if citizens are exposed to reforms directly, and whether there is consistent evidence for such results in other contexts. In-depth research on this issue is particularly important because the implications from the results suggest that if reforms are unsuccessful in changing perceptions, they may be harmful for generating wider support.

The micro-level analysis also demonstrated that there are other perceptual benefit when citizens are exposed to professionalization and female ratio balancing reforms. Citizens exposed to the reforms were less likely to perceive the security forces as cor-

rupt and discriminatory, but more likely to perceive the police as friendly. They were also likely to have a higher value for gender equality. Thus, further research is needed on uncovering other positive dividends from reforms (as well as negative externalities).

It is possible that civilians' exposure to reforms is not necessary, but rather that the dispersion of *information* about reforms could enhance perceptions of and support for the state and its security sector. That is, if civilians spread information about reforms, the results from the randomized controlled trial in this study could yield similar results. As such, another experiment is necessary to test whether information campaigns help improve perceptions and support, or whether actual exposure to reforms is necessary for such outcomes.<sup>1</sup> It is particularly important to assess the relevance of information campaigns, because not all security sector reforms can be embodied by personnel. For example, if the state implements civilian oversight bodies, this reforms is likely communicated through the media or through other informational outreach, and not by police personnel. Thus, if reforms cannot be experienced via interactions with (reformed) security force personnel, then other channels are needed to communicate changes in the security sector.

Finally, Chapter 3 mentioned that there are both “proactive” and “reactive” ways through which citizens can be exposed to security sector reforms. Proactive programs, such as community policing through the household visits here, enhance perceptions of the security sector. However, less is known about “reactive” measures or incidents

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<sup>1</sup>The field experiments in Grand Kru included an “information” intervention and found that there are no changes in perception or support when citizens provide the same information as police officers that embodied the professionalization and female ratio balancing reforms. These results are preliminary and not included here.

where citizens interact with the security forces due to some form of emergency—such as when the police respond to a crime. Here, the way that the security forces react could condition perceptions and support for the state’s security forces. In the context of post-conflict states, much more research is needed on how this type of exposure to reforms affects the security force’s legitimacy, and on how security sector reforms condition the way security forces respond. Does security force response to incidents condition citizens’ perceptions of and support for the security forces? Do constraint-increasing reforms ensure that the security forces are restrained when they respond to incidents? These are important questions, because most citizen exposure to the security sector and reforms within the security sector tend to be from “reactionary” responses.

Ensuring the long-term security and dignity of citizens in a post-conflict state is a formidable task, but one that is necessary, as a narrow focus on negative peace is insufficient for preventing state failure. With numerous weak and failed states threatening overall global security, finding ways to restore the social contract continues to be a pressing matter. Security sector reform is part of a broader state building strategy that serves to shore up the institutions of post-conflict states. But surprisingly little academic attention has been devoted to studying the security sector when compared to state building activities related to political and economic institutions. Hopefully this manuscript has provided a strong foundation from which to move forward on this important research agenda.

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