

# Mobilizing the Women: Conflict and Gendered Security Sector Reform

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*This is a draft version. Please contact the author with any questions or comments.*

## **Abstract**

Security sector reform (SSR) plays a vital role in preventing conflict and promoting long-term peace. In the past thirty years, gendered security sector reforms, or those reforms that seek to increase women's representation within the security sector or make the security sector more responsive to gendered needs, have become increasingly popular. However, little is understood regarding the systematic patterns of adoption of these reforms. This paper examines the influence of conflict on the adoption of national gender balancing and gender mainstreaming policies in the security sector. Specifically, this study analyzes how the experience of intrastate conflict increases the domestic political will, need, and resources available for security sector gender reforms. Further, it explores how international actors influence the character of reforms adopted. Using a unique data set on security sector gender reform between 1988 and 2016, this study strongly demonstrates that conflict and post-conflict states are significantly more likely to adopt gender balancing and gender mainstreaming reforms in the security sector compared to non-conflict states. Additionally, post-conflict states with international intervention are more likely to adopt reforms that address gender equality rather than gender balancing, compared to post-conflict states without international intervention. As the first cross-national quantitative examination of the role of conflict in gender security policy adoption, this study advances our understanding of the dynamic processes that influence security sector reform.

While there are many types of gender reform, the security sector represents an unusually important institution for gender reform given its potential impact on societal norms and behavior, the state's reliance on it for safety and protection from internal and external threats, and the inherent danger the security sector itself can pose to the civilian government. Additionally, the security sector is of particular interest both theoretically and for policy as a test of the relationship between conflict, international actors, and women's rights. On one hand, the effects of militarized masculinity that decrease gender equality should be the strongest within the security sector as the epicenter of the hypermasculine norms developed in preparation for, during, and after conflict to ensure an ample supply of willing soldiers (??). On the other hand, since 2000 and the adoption of UNSCR 1325, which explicitly called for increased women's participation in security, international actors have increasingly focused on gendered security sector reform in conflict-affected states as a tactic to prevent conflict recurrence (?). Further, increased mobilization needs during conflict may give women a unique opportunity to enter the security sector. Given that the security sector is often viewed as a source for social experimentation where new policies and norms can be tested before being implemented more broadly in society and that the provision of security as a public service is often viewed as a prerequisite to full citizenship and the rights that accompany it, gender reform in the security sector is an important source of social change.

Gendered security sector reform incurs costs both in terms of the resources needed to implement the reforms and in the form of social and institutional backlash which may occur if the masculine culture associated with security and by extension broader gender norms are threatened. However, it also has many benefits that satisfy the desires of both the government and the security sector, including increased effectiveness, national security, legitimacy, and accountability. Thus, gendered security sector reform will be adopted when the benefits to the security sector outweigh the costs.

Conflict may offer two conditions under which the benefits of gendered security sector reform outweigh the costs. First, during and after conflict there may be increased mobilization of the population into the security sector. During conflict, manpower demands are high as

the size of the security sector swells to meet the wartime demand. After conflict, although the security sector may shrink somewhat, high levels of personnel recruitment and a desire to rebuild the legitimacy of the security sector may also increase mobilization demands of specifically new recruits. Thus, conflict-affected states may have increased personnel needs in the security sector, leading to an increased likelihood of adopting gendered security sector reform to attract and adapt to the increased recruitment of women.

Second, conflict often increases a state's dependence upon the international community for aid, support, and resources. Since the international community has prioritized gendered security sector reform since 2000, international actors commonly offer resources, funding, and expertise that offset the logistical costs of gendered security sector reform. Additionally, international actors may provide political cover to prevent social backlash on security institutions and the government for gendered security sector reform. Therefore, due to increased personnel needs, conflict-affected states should be more likely to adopt gendered security sector reform and this effect should be magnified in states with a high degree of dependence on international actors.

Using a unique data set on security sector gender reform between 1988 and 2016 in all non-OECD countries, the results demonstrate that conflict and post-conflict states are significantly more likely to adopt gender balancing and gender mainstreaming reforms in the security sector than non-conflict states. Additionally, within conflict states, those that were exposed to international influence in the form of UN multidimensional peacekeeping, World Bank aid, and pressure from culturally similar states were significantly more likely to adopt gendered security sector reform. However, there is variation in the results depending on the type of reform examined. Gender balancing reforms – or those that seek to increase women's physical representation in the police and military relative to men – were less likely to be influenced by international pressure than gender mainstreaming reforms – or those that seek to increase the gender equality of the police or military. This may indicate that gender balancing reforms are primarily driven by personnel needs and not by international pressure in favor of gender equality. In contrast, gender mainstreaming reforms, such as sexual harassment policies within the

police and military, the creation of a gender advisor, or domestic violence training for police, are influenced by international actors. Although the dual impact of international actors and conflict can improve women's rights to some extent, the scope of these changes is limited by other logistic, strategic, or normative concerns.

## 1 Gender Reform in the Security Sector

Although women have long participated in security, security sectors remain highly masculinized, both in the composition of security personnel and the values held by the institution (?). Security is often portrayed as a masculine duty - men are supposed to protect their families and communities, while women are portrayed as the benefactors of security based on gendered stereotypes that women are weak, innocent, or nonviolent (?). In this study, security sector institutions consist of organizations that have the authority to use force to protect individuals and the state, such as the armed forces, police forces, federal agents, border and immigration agents, and intelligence services. The "security sector" refers to the state's security apparatus, including the civil and military personnel that work in these institutions (??).

Highly masculinized security sectors have been increasingly criticized. Scholars connect militarized masculinity with increased interstate and intrastate violence (????????). In other words, masculinized and patriarchal security sectors may be more likely to engage in aggressive and violent behavior (?). Further, masculinized security institutions may be more likely to commit human rights abuses, such as sexual violence (????). Finally, women may conceptualize security differently than men and have differing security needs (???). As a result, security sectors that are predominantly male may provide non-comprehensive security due a limited perspective of and experience with security.

While there are many types of security sector gender reforms, this study categorizes them into two main types. Gender mainstreaming reforms in the security sector seek to promote gender equality by increasing women's representation, decision-making power, and influence. In other words, gender mainstreaming seeks to break down the masculinized values, hierarchies,

and composition of security sectors to create a new institutional culture in which both male and female values, perspectives, bodies, and voices are valued equally.<sup>1</sup> Examples of gender mainstreaming efforts in security sector reform include the recruitment of women, the appointment of women into decision-making roles, the establishment of sexual harassment and gender equality policies, the creation of gender equality offices or units, the building of facilities and equipment for women, the establishment of special units to address gendered security issues, such as sexual and gender based violence (SGBV), the hosting of gender sensitization training, and the creation of a National Action Plan (NAP) to implement UNSCR 1325.

One specific type of gender mainstreaming reform is gender balancing which specifically seeks to increase women's physical representation within a security institution relative to men's representation. Gender balancing reforms are the most common type of gender reform undertaken by states and include actions such as recruitment drives that specifically target women, gender quotas that establish a minimum number or proportion of women that must be in the institution, the creation of gendered units or offices, such as SGBV units or all-female units, the removal of bans of women from certain positions, the promotion of women to high-ranking offices, and the creation of a NAP for 1325. As will be noticed, these reforms are also considered to be gender mainstreaming reforms. Gender balancing is one component of gender mainstreaming, but is not sufficient to complete gender mainstreaming because women's presence alone within a security institution does not guarantee increased gender equality (?).<sup>2</sup> Therefore, gender balancing must take place with other reforms to change the institutional culture in addition to the composition of security personnel.

Largely, calls for gender reform in the security sector argue that gender reform improves the effectiveness of the security sector and promotes national security (?). These claims argue that gender mainstreaming brings a broader range of experiences, skills, and perspectives to

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<sup>1</sup>Gender mainstreaming, according to the UN Economic and Social Council (ECOSOC), is "The process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels" (?).

<sup>2</sup>In other words, a gender balancing reform is an example of gender mainstreaming, but not all gender mainstreaming reforms are specifically gender balancing as some gender mainstreaming reforms, such as the development of sexual harassment policies or the development of training sessions on sexual violence, seek to alter gendered relations within the institution, but do not directly attempt to increase women's representation.

the security sector, which improves its ability to provide security and respond to potential threats. For example, female officers can perform gender sensitive duties, such as female body searches, house searches, and working with female prisoners, suspects, or victims. Moreover, gender reforms may increase the sector's perceived legitimacy as women are perceived to be less corrupt, less threatening, and more empathetic than men (??????). Also, gendered security sector reform may improve responses to sexual violence through increased female representation, the creation of SGBV units, and the prioritization of domestic violence as a serious security concern (??). Finally, gender reform promotes women's right to participate in security and encourages women's empowerment (??).<sup>3</sup>

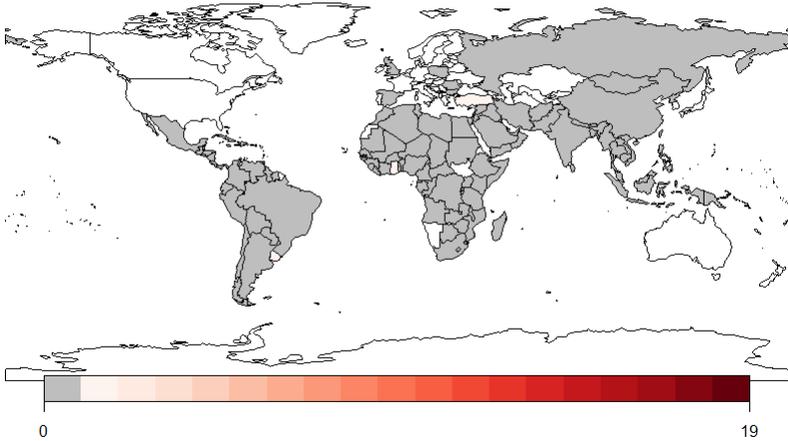
There is some empirical evidence supporting the auspicious claims of gender mainstreaming advocates. For example, ? and ? argue that the presence of an all-female peacekeeping unit in Liberia inspired local women to join the police force, engaged the local community more effectively, and contributed to an anecdotal decrease in local crime. Further, ? finds that gender balancing increases the perceived legitimacy of the security sector among the population. ? and ? find that female peacekeepers and soldiers are better able to relate to local female populations. Similarly, Female Engagement Teams (FETs) with the U.S. army have been credited with decreasing local hostility towards U.S. forces and increasing operational effectiveness (?). Moreover, female peacekeepers may decrease the incidence of rape and prostitution among UN peacekeepers (?).

However, gender mainstreaming is also critiqued. Security institutions often have deeply entrenched and purposefully cultivated masculinized cultures and norms. Therefore, some scholars doubt the effectiveness of gender mainstreaming reforms. For example, ? argues that small token gestures of gender reform are unlikely to have any effect on the institution's larger gendered behavior because women recruited into the security sector are likely to adapt to the masculinized culture. In this perspective, ? found that female peacekeepers are no more likely to report their colleagues' inappropriate behavior than male peacekeepers. Further, ? found

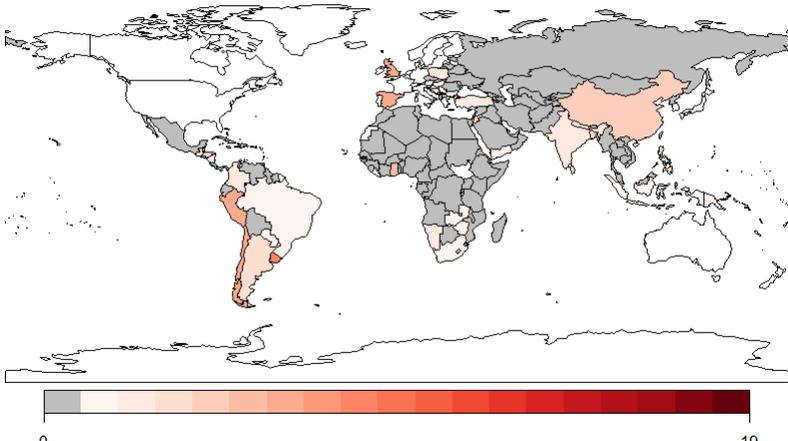
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<sup>3</sup>Please note that this dissertation does not necessarily argue that women's integration into the security sector contributes to women's rights in other sectors. Many feminists argue that women's integration into security does little benefit to women since it only includes them into another patriarchal hierarchy (???)

Number of Gender Balancing Reforms, 1988



Number of Gender Balancing Reforms, 2000



Number of Gender Balancing Reforms, 2016

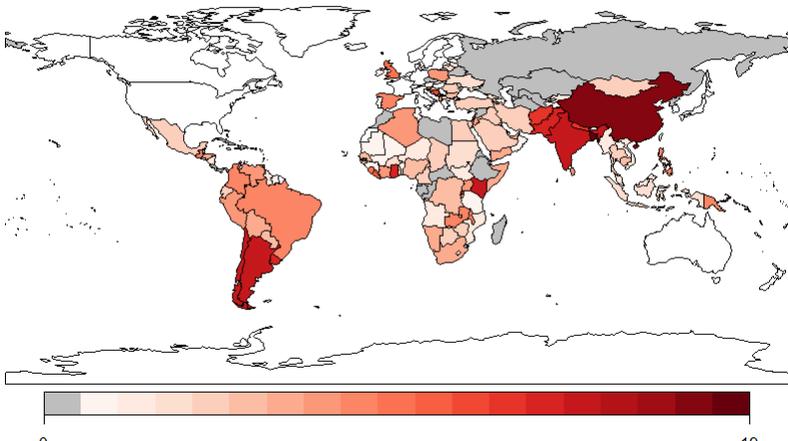


Figure 1: Number of Gender Balancing Reforms Adopted Between 1988 and 2016

that despite the UN’s rhetorical commitment to gendered security sector reform, a culture of patriarchal protection exists and female peacekeepers are often deployed to safer missions. However, despite a lack of consistent, empirical evidence of the positive effects of gendered security sector reforms as of yet, international actors continue to promote their adoption, especially in post-conflict states.

Since 2001, gender reform in security institutions has been declared as a main priority by several IGOs, such as the UN, NATO, the AU, the EU, and the OECD. However, a wide range of compliance with this emerging norm exists (see Figures 1 and 2. Please note that countries in white are not in the data set). For example, women’s representation in police forces ranges from 1% to 54% and their participation in the military ranges from 0.5% to 26%.<sup>4</sup> Further, only 79 states have adopted NAPs for UNSCR 1325. Finally, only 40% of states have publicly recorded security sector gender recruitment targets or quotas to increase women’s representation. Therefore, the question remains as to why do states adopt gender mainstreaming and gender balancing reforms in the security sector and why are some states more likely to adopt these reforms than others?

## **2 Conflict and Gendered Security Sector Reform**

Conflict and international aid may promote women’s increased participation in, protection by, and support in a number of agencies and departments. While the “opportunity structures” literature has focused on women’s political, economic, and social rights, conflict may have a particularly strong influence on women’s participation in security.

On one hand, the effects of militarized masculinity that lead to worsened gender equality should be the strongest within the security sector as the epicenter of the hypermasculine norms developed during conflict (?). Additionally, conflict often worsens public perceptions of the security sector, especially as security sectors are the most common perpetrators of conflict-related sexual violence during the conflict (??). On the other hand, since 2000 and the adoption of

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<sup>4</sup>Data based on 2016 figures from the author’s data.

### Number of Gender Mainstreaming Reforms, 2016

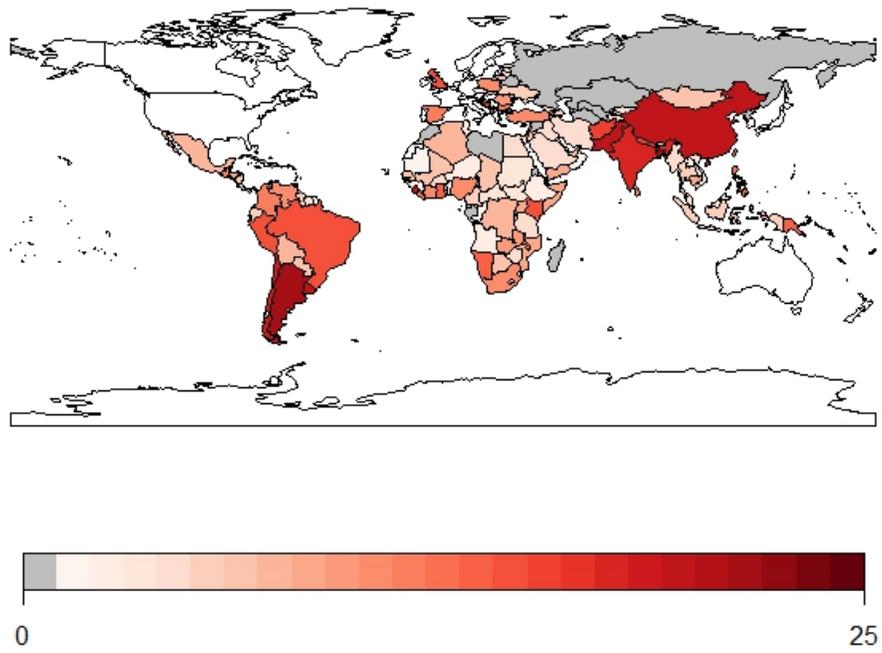


Figure 2: Number of Gender Mainstreaming Reforms Adopted Between 1988 and 2016

UNSCR 1325, which explicitly called for increased women’s participation in security, international actors have emphasized gendered security sector reform in conflict-affected states as a tactic to prevent conflict recurrence.

## **2.1 International Pressure for Gendered Security Sector Reform**

Between 2015 and 2018, the United States spent \$160 million in Afghanistan alone to support women’s participation in the police and military (?). Further, in June 2018, the US launched a \$120 million project to create a “Women’s Police Town” to house 300 Afghan national policewomen and their families. Similar aid targeted at gendered security sector reform in Afghanistan has been disbursed by NATO, the UN, Japan, and Oxfam, among others. While no consistent, reliable statistics exist on the amount of international money spent to increase women’s participation in police and military forces in Afghanistan over the past decade, these two examples demonstrate that international actors are offering material support to bolster women’s participation in the security sector.

Why would international actors incentivize and support women’s participation in foreign police and military forces? Beyond moral or liberal arguments in favor of gender equality, international actors often invoke claims that women’s participation in police and military forces is a matter of national and international security. The font of international concern for women’s rights after conflict, UNSCR 1325, focused specifically on women’s right to participate in peace and security roles and processes. While the language of UNSCR 1325 is broad and encourages women’s participation “at all decision-making levels” that may influence conflict resolution and peace, which may include civil society, economic actors, and politicians, members of the security sector are overwhelmingly responsible for conflict, security, and peace. Thus, the UN and many Member States have focused their implementation efforts of UNSCR 1325 on expanding women’s representation in, protection by, and access to security sector institutions. For example, National Action Plans (NAPs) on Women, Peace, and Security, which are national-level policies or laws focused on implementing UNSCR 1325, often exclusively focus on women’s

participation in police, military, and peacekeeping roles. For example, the US Women, Peace, and Security Act adopted in October of 2017 explicitly recognizes that promoting women’s participation in conflict, security, and peace processes is in the best interests of U.S. security:

“This bill expresses the sense of Congress that: (1) the United States should be a global leader in promoting the participation of women in conflict prevention, management, and resolution and post-conflict relief and recovery efforts; ...[this] is critical to country and regional stability.”

As explained above, there are a number of reasons why women’s participation in security roles may prevent conflict recurrence and contribute to peace. For example, female police are often recruited specifically to search, interrogate, and detain female terrorists. In societies that have traditional gender norms or gender segregation, female police and military officers may increase cooperation with and information gathering from female community members.<sup>5</sup> However, even in countries with less stringent gender norms, female participation in the police and military may improve civilian and community relations, increase efficiency and effectiveness, and increase the legitimacy of security forces (Wood N.d.).

By evoking security rhetoric to support gendered security sector reform, UNSCR 1325 and its subsequent resolutions pushed gender and security toward the top of the international agenda (?). While feminist scholars have critiqued the instrumental and often essentialist logic underpinning the securitization of women’s rights, it has proven to be a very effective tactic to increase international pressure for gender reform in the security sector, especially in post-conflict states which are seen as the greatest threat to national, regional, and international security. For example, ? find that peacekeeping missions increase the likelihood that a post-conflict state will adopt a security sector gender balancing reform.<sup>6</sup> This international influence likely increases as more resources are brought to the country, which can be used to implement

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<sup>5</sup>For example, Female Engagement Teams (FETs) were deployed with US and NATO forces in Afghanistan as it was believed that female community members in Afghanistan would prefer to or only cooperate with female soldiers.

<sup>6</sup>? examine the effect of UN peacekeeping missions on the adoption of security sector gender balancing reforms in *post-conflict* states. This study expands on that research by examining security sector gender balancing *and* mainstreaming in conflict *and* non-conflict states.

state-desired gendered security sector programs or pressure an unwilling government to adopt these programs. Therefore, although international actors may promote women's rights more broadly in post-conflict countries, gendered security sector reforms present both a normative and security concern for international actors, giving them increased incentive to promote gendered security sector reforms in conflict-affected states.

## **2.2 Domestic Pressure for Gendered Security Sector Reform**

Furthermore, in addition to international pressure, conflict may also lead to gendered changes in the security sector as a result of increased mobilization of the population into the security sector and its related institutions. The most prominent mobilization needs are calls for direct participation in the security sector. As mobilization demands begin to outstrip the availability of willing or able men, the government may feel pressured to turn to women to bolster security personnel (?). For example, after the U.S. army became a volunteer force, the U.S. increasingly turned to female recruits during conflicts, such as the Gulf War (1991) or Iraq War (2003) (?). Similarly, during the Korean War, the U.S. Defense Department established the Defense Advisory Committee of Women in the Services to target women for recruitment (?). Further, ? examine how competition for recruits between insurgent organizations and mobilization needs in Eritrea led to the recruitment of women, despite some ideological reluctance. In addition to mobilization directly into the military, there may also be mobilization needs for war-related activities, such as weapons-making and medical care. For example, during World War II, women were famously employed in war-related industries to support the war effort as more men were pulled away from industries to fight in the conflict (?). Therefore, as a conflict rages, especially long or intense conflicts, mobilization needs increase, heightening the probability that the security sector will turn to women to fill its ranks. This effect is likely to be particularly strong during active conflict, although it may also be present after conflict, especially if men who previously participated in the security sector either do not wish to continue after the

conflict or may be barred from participating in it again.<sup>7</sup>

Further, the experience of conflict may also challenge traditional gender roles that bar or dissuade women from joining the security sector. Gender roles are most directly challenged by women's participating in the conflict as combatants. Women's direct participation in violent conflict shatters ideals of feminine innocence, weakness, and nonviolence and demonstrates women's agency in security roles (??). Therefore, female combatants' experiences may break down stereotypical gender norms that women are not suitable for the security sector.<sup>8</sup>

Moreover, although conflict may challenge gender roles to empower women in some aspects of life, it also creates an environment that is particularly insecure for women. This insecurity is most predominantly expressed through increased threat of SGBV (?????). The security sector may feel obligated to address women's unique insecurity by undertaking gender reforms. Finally, during and after conflict, the population may distrust the security sector for its participation in the conflict, especially if it is accused of abusing civilians. The security sector may undertake gender reforms in the hope of leveraging gendered stereotypes that women are less corrupt, less violent, and less militant to decrease its perceived hypermasculinity and distance itself from previous behavior (?).

### **2.3 The Strategic Adoption of Gendered Security Sector Reform**

While the proposed benefits of gendered security sector reform are numerous and there may be high internal and external demand, the process of adopting and implementing gendered security sector reform is costly and multidimensional, requiring the approval and cooperation of a number of civilian and security actors who may disagree on the inherent value and costs of the reform. At its most general, the goal of security sector reform is to increase national security. However, security sector reform also often seeks to promote a security sector that

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<sup>7</sup>For example, if a military is accused of committing atrocities during conflict, many security sector reform programs prevent military members from joining a newly constructed military.

<sup>8</sup>For example, ? found that after the Liberian civil war, Liberians were more comfortable around and evaluated the competency of Liberian female police officers higher than foreign female peacekeepers potentially because they had directly witnessed Liberian women's strength and abilities as security agents during the conflict.

is accountable to the civilian government and population, transparent, bound by rule of law, inclusive, sensitive to the differing needs of members of the population, effective, and efficient.<sup>9</sup> In other words, the goal of security sector reform is to maximize national security at the lowest direct cost to the government, while also increasing the legitimacy of the government's monopoly over the use of force and ensuring continued loyalty of the security sector to the government. The security sector also wishes to maximize its effectiveness, while increasing its perceived legitimacy, influence, and supply of resources (?).

However, the extent to which gendered security sector reforms will support these goals may be disputed. As described above, advocates argue that gendered security sector reform has certain benefits, including increasing the supply of potential recruits to fulfill mobilization needs, increasing the perceived legitimacy of the security forces, increasing the inclusivity of the security forces, increasing the skill set and experiences of security officers, and increasing civilian cooperation. Thus, gendered security sector reform can contribute to the main goals of security sector reform and interests of both the government and the security sector agencies: increased effectiveness, improved national security and increased legitimacy.

However, gendered security sector reforms also incur high costs, including some costs that are higher than experienced with traditional non-gendered security sector reforms. These reforms may include the logistical costs of altering existing training and policies and having to invest greater resources in gender sensitive or gender integrated programming, such as building female barracks, bathrooms, uniforms, or training facilities. Additionally, there may be social resistance to gendered security sector reform, which can lead to decreased public support and cooperation. Finally, some individuals argue that gendered security sector reform, and often specifically the integration of women into security roles, decreases the effectiveness of security forces (?). These arguments most commonly claim that female security agents may disrupt unit cohesion and may be less physically capable of performing in security roles.

While there are many factors and circumstances that may affect the benefits and costs

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<sup>9</sup>For example, see ?. However, it should be noted that some countries may undertake security sector reforms simply to increase the power of the security sector or the government, rather than to make the security sector more legitimate, transparent, and accountable.

of gendered security sector reforms, two predominant influences are mobilization needs during conflict and international intervention and pressure. First, as described above, when mobilization needs increase, especially when they increase rapidly, this may dramatically increase the benefits of gendered security sector reform. When manpower demands increase, the government and security sector may suddenly face a dwindling set of potential recruits. Thus, they often face a trade-off between turning to recruit less qualified or less committed men or expanding their recruiting efforts to women who may be highly qualified, but previously excluded. During times of massive mobilization, such as during the World Wars, countries may both increase their recruitment of men, such as instituting a compulsory universal draft of men, and recruiting more women. Therefore, when there is high mobilization into the security sector, either due to security threats, such as a looming or current war, or due to a large restructuring process of the security sector, the benefit of gendered security sector reform – enabling mass recruitment of women into the security sector to fill the necessary recruitment gaps – may supersede the costs associated with the resources required to recruit, train, house, and retain female officers.

Particularly during conflict, the security sector expands rapidly, often outstripping the supply of available men, causing the government to turn to women. In contrast, after conflict, the size of the security sector may decrease, reducing the need to turn to women to fill these posts.<sup>10</sup> Therefore, while gender balancing should overall be more likely to occur in both conflict and post-conflict states, it should be especially likely to occur in active conflict states.<sup>11</sup> However, even in post-conflict states, the ranks of the security sector may quickly and dramatically decrease as individuals are demobilized and the security sector may hope to distance itself from its participation in the conflict by recruiting a new and reformed force, which may lead to gender balancing efforts. Thus, states that are experiencing or have recently experienced conflict should be more likely to adopt gendered security sector reforms to fulfill increased or

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<sup>10</sup>This may only occur if the government is willing to retain the same troops it used during conflict.

<sup>11</sup>The patterns of gender balancing during conflict illustrate that the adoption of gender balancing reforms does not necessarily signify that the security sector is becoming more gender equitable. This manuscript remains relatively agnostic about the implications of which causal pathway leads to policy adoption. In other words, it is possible that in conflict states, gender reforms in the security sector may be undertaken with little to no intention of undermining the current patriarchal culture (and in fact, may reinforce this culture) and instead are simply responses to mobilization needs.

changing mobilization needs. While this mobilization effect is likely the strongest with gender balancing reforms, it should also affect gender mainstreaming reforms to ensure that women can be recruited, retained, and successful within the security sector.

***Hypothesis 1:*** *Conflict affected states should be more likely to adopt security sector gender balancing reforms than non-conflict affected states.*

***Hypothesis 2:*** *Conflict affected states should be more likely to adopt security sector gender mainstreaming reforms than non-conflict affected states.*

Further, if mobilization drives the adoption of gendered security sector reform, states should be more likely to adopt them after high intensity conflicts where there were more than 1,000 battle deaths compared to low intensity conflicts with between 25 and 999 battle deaths. In other words, if gendered security sector reform occurs partially in response to the need to fill the ranks of the security sector, the security sector either must be growing in size rapidly or when there are high casualty rates, both of which are more likely during high intensity conflicts.

***Hypothesis 1b:*** *States experiencing high intensity conflicts should be more likely to adopt security sector gender balancing reforms.*

***Hypothesis 2b:*** *States experiencing high intensity conflicts should be more likely to adopt security sector gender mainstreaming reforms.*

Second, conflict-affected states with high levels of international involvement should be especially likely to adopt gendered security sector reforms as they have both internal pressure and mobilization needs and the international material incentives to adopt them given the prioritization of these reforms by the international community. As discussed, gendered security sector reforms incur costs on the state and the individual security institution in the form of resources that must be devoted to implementing the reforms and in terms of concerns of potential backlash. Security is commonly viewed as a highly masculine activity and thus, gendered security sector reform may be viewed not only as inappropriate socially for encouraging women to engage in a non-feminine activity, but may also be viewed by some as antithetical to the effective operation of a strong, capable, and cohesive security force. For example, ? describe

how arguments against women’s integration into the military have evolved from originally focusing on the inappropriateness of women’s participation in security as a violation of gender roles to women’s perceived inadequacy as soldiers to the current focus on the disruption of “unit cohesion.” Thus, the government and security sector must be prepared to endure costs in the form of backlash that may include decreased support for politicians that favor gendered security sector reform, decreased male interest in joining the security institution, hazing and discrimination against women in security roles, and at an extreme, disobedience and mutiny from individuals within the security institution that resist gender reform.

International actors can offset both of these costs, while further emphasizing the benefits of gendered security sector reform. With regards to the latter, international actors may share information about the benefits of gendered security sector reform with the government and security sector and may also share best techniques to facilitate these reforms.<sup>12</sup> Therefore, the benefits of gendered security sector reform as a method to improve national security, the effectiveness of the security sector, and its legitimacy may become more clear. Further, international actors may offset the costs of gendered security sector reform. First, they may offer to assist with the direct costs of drafting and implementing the reform. For example, in 2007, the United Nations developed, sponsored, and facilitated the creation of a specialized education program for female police officers in Liberia that helped dramatically boost female representation in the Liberian National Police to almost 20% from 2% in the span of around five years (?). Similarly, in 2017 the Canadian government announced that it was creating a fund specifically to support gendered security sector reforms in other countries with the goal of increasing the number of female peacekeepers. Further, the presence of international actors may offer political cover to the government and the security sector to shift responsibility for the reforms to the international actors in the hopes of decreasing some of the backlash directly faced by the institution (?).

Therefore, although the mobilization demands and domestic sources of pressure for gen-

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<sup>12</sup>For example, several international agencies, such as the UN, NATO, and the Democratic Control of the Armed Forces (DCAF) have released guides with “best practices” and advice to undertake gendered security sector reform.

dered security sector should make conflict affected states more likely to adopt them, this effect will be magnified in states where there is a high level of international influence and increased dependence upon international partners to support the government and the security sector because these actors can offset the high costs of gendered security sector reform, while also highlighting the benefits of them.

***Hypothesis 3:*** *As dependence upon international actors increases, conflict affected states should be more likely to adopt security sector gender balancing reforms than conflict affected states without international influence.*

***Hypothesis 4:*** *As dependence upon international actors increases, conflict affected states should be more likely to adopt security sector gender mainstreaming reforms than conflict affected states without international influence.*

### 3 Research Design

To test these hypotheses, this analysis uses a unique cross-national data set on security sector gender reform in non-OECD states between 1988 and 2016.<sup>13</sup>

#### 3.1 Dependent and Independent Variables

The main dependent variables are *Gender Balance* and *Gender Mainstream*. *Gender Balance* is a dichotomous indicator of whether a gender balancing reform was adopted by the security sector in the state-year. Gender balancing reforms were defined as the adoption of a recruitment target or quota for female personnel, the hosting of a female-focused recruitment campaign, the creation of an office or unit with gendered implications, the removal of barriers to women's participation in certain security roles, the promotion of women to a high-ranking security position for the first time, the establishment of associations for female security personnel, and the

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<sup>13</sup>OECD countries were excluded as these countries often have a relatively higher level of gender equality within their security forces.

creation of a National Action Plan (NAP) for UNSCR 1325.<sup>14</sup>

This indicator varies from year to year, recording a positive instance of gender balancing only if a gender balancing reform was adopted *in that year*. In other words, a state may adopt a gender balancing reform in one year, but not the next year. This distinguishes the adoption of these reforms from the simple existence of them. States may adopt a gender balancing reform that will be implemented for many years. However, the adoption of the gender balancing reform would only be recorded in the year it was adopted, rather than its tenure of existence.<sup>15</sup> The use of a dichotomous indicator allows for an examination of whether the experience of conflict has *any* effect on security sector gender reform, rather than the magnitude of the effect.<sup>16</sup> Gender balancing reforms were relatively rare in the sample, occurring in 16.1% of state-years.

The second dependent variable, *Gender Mainstream* is also a dichotomous variable indicating that the state adopted a gender mainstreaming policy in the security sector in the year. A positive instance of gender mainstreaming was defined as any government led or approved reform or program to increase gender equality within the security sector, increase security forces' awareness of, sensitization to, and response to gendered issues, or create a welcoming environment for all genders in the security sector either as personnel or as recipients of security.<sup>17</sup> All reforms included within the *Gender Balance* variable are also included within this variable, in addition to other reforms, such as gender sensitization trainings, SGBV training, sexual harassment policies or gender equality policies, the building of female facilities or equipment, and policies, procedures, or manuals for gendered crimes or violence, such as SGBV, human traffick-

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<sup>14</sup>Reforms were largely recorded based on newspaper articles or country gender mainstreaming guides or performance reviews, such as those country reports published by the UN or NGOs. This variable expands on the same variable in the ? data set, extending it to non-conflict countries, standardizing the yearly range, and altering some coding rules.

<sup>15</sup>This coding not only allows for an examination specifically of adoption patterns, but also is more reliable since it is difficult to determine how long most gender policies are in place.

<sup>16</sup>However, an alternative measure of the dependent variable as a count of the number of reforms adopted is used with a negative binomial regression in the appendix to analyze the magnitude of the effect. Further, pending the collection of further data, future studies should examine the overall gender reformed status of the security sector.

<sup>17</sup>This coding excludes programs supported entirely by NGOs without the government's direct support and collaboration. This was done to ensure that the variable only recorded programs that were directly supported by the government, rather than programs that are done independently from or without the active involvement of the government.

ing, and domestic violence.<sup>18</sup> *Gender Mainstream* also varies from state-year and is coded as 1 on the state-year in which a policy is first adopted. As to be expected, *Gender Mainstream* is slightly more common than *Gender Balance* with 21.2% of state-years observing the adoption of a gender mainstreaming reform.<sup>19</sup>

To test Hypotheses 1 and 2, two main sets of independent variables to operationalize conflict. The first is a dichotomous indicator of whether the state-year is “conflict affected.” *Conflict Affected* is coded as 1 if the state-year was either experiencing active civil conflict or had experienced active conflict within the last five years (for low intensity conflict) or ten years (for high intensity conflicts).<sup>20</sup> Conflict is defined according to the UCDP/PRIO data set on intrastate conflict as 25 battle deaths in the state-year.<sup>21</sup> This analysis is limited to intrastate conflict since the mechanisms underlying the motivation for conflict affected states to adopt security sector gender reforms are likely to be the strongest in civil conflicts.

Finally, it is important to note that conflict is not randomly assigned across states and certain states are more likely to experience conflict than others. Therefore, common techniques to establish a causal relationship, such as random assignment, experimental manipulation, matching, or difference-in-differences analysis are not feasible options due to issues with data availability, a lack of theoretical justification for the appropriate matching covariates with regards to security sector reform, and concerns of endogenous relationships between conflict, international intervention, and gendered security sector reform. To address this possible bias, several controls are added to the models to account for alternative mechanisms that may influence both whether conflict occurs and whether gendered security sector reform is adopted, each of which is described in detail below. Moreover, despite the inability to make causal claims, this analysis’ ability to identify correlations between gendered security sector reform

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<sup>18</sup>The correlation between *Gender Balance* and *Gender Mainstream* is 0.85. The high correlation is expected given that gender balancing reforms are part of gender mainstreaming reforms and because it is likely that states that adopt gender balancing reforms are also more likely to adopt gender mainstreaming reforms.

<sup>19</sup>It should be noted that instances of gender mainstreaming are likely to be underreported compared to gender balancing. However, there does not appear to be any systematic differences across countries in the degree of underreporting.

<sup>20</sup>Alternative codings of this variable conceptualize post-conflict as five years after the conflict ends or as a permanent state after conflict. These are used as robustness checks.

<sup>21</sup>Alternative codings of this variable with a threshold of 1,000 battle deaths is found in the appendix.

and conflict represents a major improvement in the empirical study of gender reform in the security sector. As the first study to cross-nationally examine the adoption of gender reform, this analysis demonstrates a robust relationship between a state's conflict status, their level of international intervention, and the adoption of gender reform.<sup>22</sup> While previous qualitative studies have examined the adoption of gendered security sector reform in a relatively small sub-set of studies, cross-national patterns have largely been obscured. Moreover, any induced bias from the potentially endogenous relationship between gender reform and conflict is likely to decrease the reported relationship since patriarchal states and security sectors are more likely to experience conflict and are also more likely to resist the adoption of gender reforms (?????????). To address concerns of endogeneity, this variable is lagged by one year. About 34% of the state-years are conflict-affected.

Secondly, *Active Conflict* and *Post-Conflict*, are dummy variables indicating whether the state is experiencing an active conflict with more than 25 battle deaths or not and whether the state has experienced a conflict with more than 25 battle deaths within the last 10 years but is not currently experiencing conflict.<sup>23</sup> These variables are also lagged by one year. Around 19.2% of observations are active conflict state-years and 19.6% are post-conflict years.

Moreover, to test Hypotheses 1b and 2 b, conflict is further subdivided by intensity. According to the UCDP/Prio Data, conflict is defined as high intensity if there were more than 1,000 battle deaths in the state-year and low-intensity if there were between 25 and 999. Post-conflict years are coded according to the highest intensity recorded five years before the end of the conflict.

To test Hypotheses 3 and 4, the data was subset to conflict states in the past five to ten years, five years for lower intensity conflicts and ten years for higher intensity conflicts. The full

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<sup>22</sup>To the author's knowledge, only one previous study has quantitatively studied gendered security sector reform. ? examine the adoption of gender balancing reforms in conflict states. The data used in this analysis expands upon this earlier version of the data set to include non-conflict states. This allows this analysis not only to expand the cross-national coverage, but also to compare patterns of adoption across conflict and non-conflict states.

<sup>23</sup>Alternative measures of post-conflict, namely post-conflict as ending five years after a conflict ends or as a permanent state, are included in the robustness checks. Although not included in the main models, controls for various characteristics of the conflict, including the conflict termination and the presence of female combatants are included in the appendix.

data set could not be interacted with the international actor variables of interest because the main variable, UN peacekeeping, cannot be present in non-conflict states, and thus there is no comparison category for the interaction term. However, subsetting the data largely replicates the same conditions as interactions. To capture the influence of international actors in conflict-states, several proxies for international presence or pressure are used. First, *Multidimensional Mission* is a dichotomous variable indicating whether there was a UN multidimensional peacekeeping mission deployed to the state in the country-year. Multidimensional peacekeeping missions have more expansive mandates than traditional or observational peacekeeping missions that often include assisting the host state with security sector reform. Additionally, given that it was a UN Security Council Resolution that established the importance of women’s participation in security, UN multidimensional peacekeeping missions often explicitly recognize gender in their mandates. Data on peacekeeping missions is gathered from the IPI Peacekeeping Database. 11.3% of conflict-affected-state years had a peacekeeping mission deployed to a post-conflict state.

Second, *Export Context* records the average weighted fertility rate of the state’s exporting partners. Export relationships have been shown to have a strong influence over a state’s respect for human rights as countries leverage trade relationships to transmit standards to their trade partner (???). Data on exports comes from the IMF’s Direction of Trade Statistics Database. As before, there should be an inverse relationship between the average fertility rate of a state’s donors and gender reform adoption. The average Export partner’s fertility rate for conflict affected states is around 4.5.<sup>24</sup>

Third, to capture aid dependence, *World Bank Aid* is the lagged and log transformed amount of aid that a country received from the World Bank in the previous year. The World Bank is the primary aid distributor of the UN and thus, likely shares the UN’s preference for security sector gender reform. Additionally, World Bank Aid is a broader reflection of

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<sup>24</sup>This is a relatively high fertility rate compared to the world average in this time period which varied between 3.3 in 1988 and 2.4 in 2016. However, this likely occurs because more stable, prosperous trade partners, that would also be expected to have lower fertility rates, often decrease trade with unstable states, which increases the average fertility rates of a state’s remaining trade partners.

the country's need for and dependence on other forms of foreign aid, such as other sources of multilateral aid and bilateral aid.

Finally, *Cultural Similarity* is the average weighted measure of the fertility rates of a state's culturally proximate states. Security sector reform is a learned process that often occurs through trial and error and information sharing between states as governments learn which reform investments are the most useful, efficient, and effective. Cultural proximity, such as shared language, shared geography, shared colonial history, and shared religion, increase the ease at which information is shared and allows leaders to make more accurate deductions about how successful a reform will be in their context. In other words, the military in Ghana may view a successful security sector in reform in Liberia as a stronger signal that the same reform would be successful in Ghana than if that same reform were adopted and successful in the United States because the military, political, economic, and cultural contexts of those two countries are very different. As with *Export Context*, we should expect *Cultural Similarity* to have a negative correlation with the adoption of gendered security sector reform.

All independent variables are lagged by one year to account for endogeneity.

## 3.2 Control Variables

A number of control variables are included. First, a state's previous international and domestic commitment to women's rights in international law may influence how sensitive they are to international pressure for further gender reforms. Additionally, states that are more integrated into the international community, especially to the international community that supports women's rights may be more likely to experience both international pressure for security sector gender reform and be less likely to experience conflict (?). Therefore, a control is included for the number of years since the state ratified the Convention for the Elimination of Discrimination Against Women (CEDAW) as recorded by the UN Treaty Collection Database.<sup>25</sup> CEDAW is the main international treaty on women's right to equal opportunities. Although CEDAW does

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<sup>25</sup>The number of years since CEDAW was ratified is used instead of a dichotomous indicator of whether CEDAW was ratified at all to gain greater information about the degree of commitment to and compliance with CEDAW by proxying for the degree of CEDAW's internalization within the state.

not have a enforcement mechanism, which has led to relatively unequal compliance, it signifies a state's willingness to identify women's rights as an international norm (?). Further, *CEDAW Years* also weakly proxies for the presence of women's rights organizations, which may lobby for security sector gender reform (?).<sup>26</sup>

Next, to account for gender equality within the state, which may indicate the need or pressure for security sector gender reform and has also been shown to affect whether conflict occurs (????????), *Fertility* is the one-year lagged measure of fertility rates during the country-year as recorded by the World Bank.<sup>27</sup> This variable reflects previous studies, which have used lagged measures of fertility rates to proxy for gender equality (???). The average fertility rate is 3.8.

Further, while gender mainstreaming and gender balancing in security sector reform have been taking place for decades, the passing of UNSCR 1325 represented the first time that gender reform in the security sector was declared to be an international and national obligation. As a result, gender mainstreaming and gender balancing in security sector reform in conflict states should be especially likely after the passing of UNSCR 1325 in 2000. Additionally, international actors should have increased their pressure in favor of the adoption of gender reform after UNSCR 1325. Therefore, *UNSCR 1325* is a dummy variable indicating whether the state-year is after the passing of UNSCR 1325 in 2000.<sup>28</sup> Slightly more than half of the observations, 57%, take place after 2000.

Regime type may also influence a state's likelihood of adopting gender reforms, the degree of sensitivity to international pressure, and risk of experiencing conflict. For example, democracies are likely more willing to adopt security sector gender reforms to conform with

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<sup>26</sup>The results are robust to the inclusion of a control for transnational women's rights organizational presence in the country.

<sup>27</sup>While fertility rates reflect one of many possible indicators of gender equality, it is the best measure for this analysis as other common indicators, such as labor force participation ratios and secondary school ratios may be endogenous to security sector gender mainstreaming since the security sector makes up the labor force and secondary school graduation is often a requirement to join the security sector. As a robustness check, several alternative measures for gender equality are used, including female-to-male secondary school ratios, female legislative representation, and labor force ratios.

<sup>28</sup>2000 is not included in the dummy variable because UNSCR 1325 was adopted in October, meaning that most states would not have had time to incorporate gender mainstreaming policies in their security sectors by the end of the year.

international norms and are also more likely to be gender equitable (?). Moreover, strongly democratic states are less likely to experience internal conflict compared to both transitional democracies and authoritarian states (?). *Democracy* is the one year lagged Polity II score from the Polity IV data set (?). *Democracy* ranges from -10 to 10, with 10 representing a strong democracy. The sample average is 2.2, indicating the average regime is in a transitional, weak democracy.<sup>29</sup>

Moreover, wealthier states are more capable of adopting gender mainstreaming reforms due to increased budgetary resources. Further, wealthy states may also experience increased gender equality, since the two are correlated. Finally, wealthier states are also less prone to conflict due to their increased capabilities and public good provisions that can prevent violent challenges to state power (??). *GDP per capita* is a measure of the state's gross domestic product per capita. *GDP per capita* is gathered from the World Bank and lagged by one year.

Additionally, Majority Muslims countries have been shown to be reluctant to adopt gender reform (?). Moreover, given that international networks often center around cultural homophily, it is likely that Muslim majority states have closer international ties to other Muslim states, which may decrease the likelihood that international actors in Muslim majority countries will encourage the adoption of gendered security sector reform (??). *Muslim Majority* is an indicator of whether more than 50% of the state's population was Muslim, according to the World Religion's data set.<sup>30</sup> Slightly more than one third of the sample represents a Muslim majority state.

To account for autocorrelation, *Time Gender Balance* and *Time Gender Mainstream* are count measures of the years since the previous gender balancing or mainstreaming reform was adopted, respectively. Gender mainstreaming and balancing reforms are likely to be highly interrelated across years. The cubic polynomial approach by Carter and Signorino (2010)

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<sup>29</sup>A state is a democracy when it has a Polity II score of 6 or higher (?).

<sup>30</sup>The World Religion's data set only includes data on the percentage of Muslims within a country in five year intervals. The coding recorded at each interval was continued for the next four years until the next interval. Since this is a dichotomous interval and the percent of the population which practices Islam is unlikely to change rapidly within a four year period, this coding is likely to be accurate.

captures the hazard rate, including those estimated by parametric duration models, of the state adoption of a new gender reform.<sup>31</sup>

Further, in the conflict state subset, controls for several characteristics of the conflict were included. First, sexual violence during conflict may increase domestic and international attention on the need for gendered security sector reform to prevent such violence from occurring again. Similarly, security forces that commit sexual violence may be more likely to engage in violent behavior that may provoke conflict (?). Therefore a control for the average level of conflict-related sexual violence which occurred during the conflict from the SVAC data set is included (??). This ordinal variable measures sexual violence committed by parties to the conflict as non-existent, limited, widespread, or massive/systematic. Non-conflict countries were coded as having non-existent conflict related sexual violence.

Moreover, the conflict's intensity may increase the likelihood that gendered security sector reforms will be undertaken after the conflict given increases in mobilization needs during high intensity conflict. Additionally, international actors are more likely to intervene during high intensity conflicts. *Intensity* was measured as low if there were between 25 and 1,000 battle deaths in the state-year and high if there were more than 1,000 battle deaths. Data on conflict intensity comes from the UCDP/Prio intrastate conflict data set.

Finally, in addition to the main controls described above, an additional set of models is run on a random subset of the data using the following two controls to account for other security sector reform processes that may be occurring simultaneously with gendered security sector reform and for the level of women's previous integration into the security sector. Results will be shown for the logistic regression models with and without these variables.

First, one possible confounding process is that gendered security sector reforms may be occurring alongside general, non-gendered security sector reforms. While conflict and post-conflict states may be more likely to adopt gendered security sector reform programs, it is also possible that these states are simply more open to all types of security sector reform and that

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<sup>31</sup>Additional robustness checks includes the use of these variables as time variable dummies and the use of a generalized estimation equation (GEE) without time variables. The results remain consistent across these different specifications for autocorrelation across time.

general security sector reform promotes the adoption of gendered policies. This may obscure the unique influence that conflict and international actors have specifically on gender reform by ignoring that these two factors also likely encourage more general security sector reform. *Non-Gender SSR* is a dummy variable indicating whether any large-scale non-gendered security reforms have been adopted in the state-year. Non-gender security sector reform was defined as the establishment of a national or institutional plan for security sector reform, the creation or dissolution of a security institution or office, the institution of an oversight committee, or the creation of funding programs to improve the security sector. This control variable begins to examine whether gendered security reforms are adopted independently from general, non-gendered security sector reform or if they are adopted in conjunction with it. Due to data limitations, this variable is only available for a random sample of 2,473 state-years in the data set.<sup>32</sup>

Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Gender Balance	4,579	0.161	0.368	0	1
Gender Mainstream	4,573	0.212	0.409	0	1
Conflict Affected	3,795	0.342	0.474	0	1
Post-Conflict	3,795	0.140	0.347	0	1
Active conflict	3,795	0.202	0.402	0	1
Multidimensional Mission	1,296	0.113	0.316	0	1
Export Context	1,279	4.464	1.848	1.157	8.713
World Bank Aid	1,296	11.723	9.248	0.000	22.930
Cultural Similarity Context	1,273	4.067	0.695	1.856	6.331
Intensity	3,775	0.395	0.629	0	2
CEDAW Years	3,815	13.424	9.656	0	36
Fertility	3,757	3.800	1.785	1.085	8.713
Post 1325	3,816	0.557	0.497	0	1
Polity 2	3,712	1.160	6.612	-10	10
GDP per Capita	3,573	7.338	1.324	4.546	11.391
Muslim Majority	3,816	0.307	0.461	0	1
Conflict Intensity	1,276	1.168	0.517	0	2
Conflict Sexual Violence	1,035	0.430	0.734	0	3
Time Since Adoption (GB)	4,815	6.462	6.785	0	110
Time Since Adoption (GM)	4,815	5.698	6.567	0	110
Non-Gendered SSR	2,473	0.414	0.493	0	1
Women in Security Years	2,295	19.631	17.739	0	90

<sup>32</sup>This data was coded according to the ? Security Sector Reform data set and supplemented with information from the Democratic Control of the Armed Forces.

Additionally, gender reforms may be dependent upon the existing level of gender equality within the security sector. In other words, countries that have more equitable security sectors may not have to adopt as many gendered security sector reforms compared to countries with less equitable security sectors, confusing the results. This may be particularly concerning if countries that have less equitable security sectors are more likely to enter conflict (??????). While qualitative empirical evidence does not demonstrate a strong correlation between the adoption of gender reform and the relative equality of the security sector – for example, Norway and Sweden which have relatively equitable security sectors compared to other countries in the world, have high rates of adoption of gendered security sector reform – this remains a serious concern. Thus, to proxy for women’s previous level of integration into the police and military, a count of the number of years since women first entered the police or military as officers is included as a control.<sup>33</sup> Although women’s presence alone in an institution does not perfectly proxy for their level of equality or power in that institution, as women gain more experience in the security sector, their presence often becomes more legitimized, they may gain more power and influence, and they may increase their capacity to mobilize to demand reform. Women’s year of integration in the security sector ranges widely in the sample with an average of almost 20 years since integration and a maximum of 90 years.

As the two dependent variables are dichotomous, logistic regression with state-clustered standard errors is used. As mentioned above, the inclusion of cubic polynomial time variables captures the hazard rate within the logistic regression model. Alternative models that use OLS regression and those that restructure the dependent variable as a count of the number of reforms adopted remain robust to the results presented below.

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<sup>33</sup>It is often quite difficult to identify the first year a woman entered the police or military in a security-focused role, rather than in administrative support roles. Thus, this variable measures either the police or military years if one is available. If dates of entry for both the police and the military are found, the earliest date of entry is used.

## 4 Results and Discussion

The results demonstrate that conflict and post-conflict states are significantly more likely to adopt gendered security sector reforms and indicate that international presence in conflict states increases the likelihood of adoption, as expected by the theory.

Tables 2 and 3 present the logistic regression results examining the influence of experiencing active or recent conflict on the adoption of gendered security sector reform on the full sample of country-years between 1988 and 2016. The results demonstrate that “conflict affected” states are significantly more likely to adopt gendered security sector reforms. The positive, statistically significant relationship holds for both the adoption of gender balancing and gender mainstreaming reforms, supporting Hypotheses 1 and 2. Models 1 and 2 examine the adoption of gender balancing reforms and demonstrate that conflict affected states are significantly more likely to adopt gender balancing reforms compared to non-conflict states, even when accounting for a non-gendered security sector reform and previous levels of gendered integration into the military (Model 2). While non-conflict-affected states have a 36.6% likelihood of adopting a gender balancing reform, conflict-affected states have a 46% likelihood. Further, Models 3 and 4 examine the adoption of gender mainstreaming reforms. As with Gender Balancing, Model 3 tests the baseline model, whereas Model 4 is tested on a subset of states to for which there are data on the history of women’s integration into the police and military and non-gendered security sector reform. Conflict affected states are significantly more likely to adopt gender mainstreaming reforms in both models, although the effect size is slightly smaller in Model 4. As can be seen in Figure 3, while non-conflict-affected states have a 50% probability of adopting a gender mainstreaming reform, the likelihood increases to 65% in conflict-affected states.

Table 3 splits “conflict affected” into its two respective components: active conflict states and post-conflict states. Once again, for each type of reform, gender balancing and gender mainstreaming, two models are shown. The first tests the baseline model with controls for CEDAW ratification, UNSCR 1325, fertility rates, regime type, GDP per capita, and Muslim

Table 2: Logistic Regression Results: Gendered Security Sector Reform Between Conflict and Non-Conflict States

	<i>Dependent variable:</i>			
	Gender Balance	(2)	(3)	Gender Mainstream
	(1)	(2)	(3)	(4)
Conflict Affected	0.42*** (0.11)	0.31** (0.15)	0.41*** (0.10)	0.38** (0.15)
Post 1325	0.67*** (0.17)	0.50** (0.22)	0.82*** (0.16)	0.67*** (0.20)
CEDAW Years	0.01* (0.01)	0.02* (0.01)	0.02** (0.01)	0.03** (0.01)
Fertility	-0.08 (0.06)	-0.13 (0.08)	-0.08* (0.04)	-0.07 (0.07)
Polity 2	0.03** (0.01)	0.01 (0.02)	0.04*** (0.01)	0.01 (0.02)
GDP per Capita	0.01 (0.07)	-0.04 (0.12)	0.02 (0.06)	0.05 (0.11)
Muslim Majority	-0.003 (0.15)	-0.12 (0.24)	0.01 (0.13)	-0.25 (0.22)
Time Since Adoption	-0.15*** (0.03)	-0.14*** (0.05)	-0.25*** (0.05)	-0.28*** (0.09)
Time Since Adoption <sup>2</sup>	0.01*** (0.002)	0.01* (0.003)	0.02*** (0.01)	0.02* (0.01)
Time Since Adoption <sup>3</sup>	-0.0000* (0.0000)	-0.0000 (0.0000)	-0.0003** (0.0001)	-0.001 (0.0004)
Non-Gendered SSR		0.17 (0.17)		0.04 (0.14)
Women in Security Years		-0.004 (0.01)		-0.01 (0.01)
Constant	-1.86** (0.73)	-1.06 (1.11)	-1.69*** (0.61)	-1.56 (1.03)
Observations	3,479	1,355	3,476	1,354
R <sup>2</sup>	0.11	0.09	0.18	0.15
χ <sup>2</sup>	234.36*** (df = 10)	80.27*** (df = 12)	435.05*** (df = 10)	141.36*** (df = 12)

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

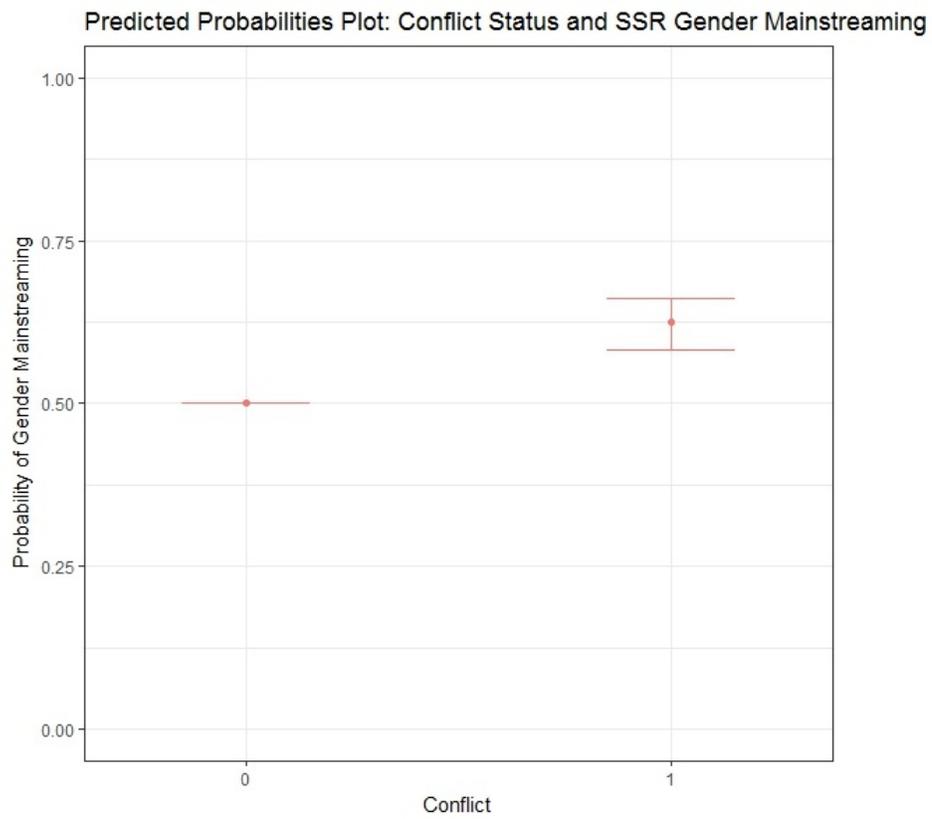


Figure 3: Predicted Probabilities: Conflict Status and Gender Mainstreaming Reform Adoption

Majority. The second model includes controls for women's inclusion into the security sector for the first time and for non-gendered security sector reform. As can be seen, both active conflict states and post-conflict states are significantly more likely to adopt both gender balancing and gender mainstreaming reforms relative to non-conflict states. Model 5 demonstrates that both active and post-conflict states are more likely to adopt gendered balancing reforms compared to non-conflict states, however the effect size is relatively larger in active conflict states. While non-conflict states have a 36% probability of adopting gender balancing reforms, active conflict states have a 47.8% likelihood of adopting gender balancing reforms and post-conflict states have a 45% likelihood. The results are somewhat tempered in Model 6, which may occur due to the smaller sample size, but still find a significant, positive association between active conflict states and the adoption of gender balancing reforms. However, post-conflict remains positive, but falls below significance. This may indicate that in post-conflict states, gender balancing reforms are occurring alongside non-gendered security sector reform or may be partially dependent upon women's pre-existing levels of integration into the police and military.

Models 7 and 8 demonstrate that both active and post-conflict states are significantly more likely to adopt gender mainstreaming reforms in the security sector. Active conflict and post-conflict states have a 43.4% and 43.2% likelihood of adopting gender mainstreaming reforms respectively compared to non-conflict states that have a 33% probability. The results remain robust to the inclusion of controls for non-gendered security sector reform and women's integration. This may suggest that in contrast to gender balancing reforms, more comprehensive and gender equality-focused gender mainstreaming reforms are relatively unique compared to other types of security sector reform and security sector gender norms in post-conflict states.

Further, Table 4 finds some limited support for Hypotheses 1b and 2b, or that high-intensity conflicts should increase the likelihood of gendered security sector reform more than low-intensity conflicts. While high-intensity conflicts are consistently positively associated with the adoption of both gender balancing reforms and gender mainstreaming reforms, low intensity conflicts have a strong, positive correlation with gender balancing reforms and only a weak correlation with gender mainstreaming reforms. As with the previous tables, two models are

Table 3: Logistic Regression Results: Gendered Security Sector Reform Between Conflict and Non-Conflict States, Conflict Factored

	<i>Dependent variable:</i>			
	Gender Balance (5)	(6)	(7)	Gender Mainstream (8)
Active Conflict	0.48*** (0.13)	0.36* (0.18)	0.42*** (0.13)	0.39** (0.18)
Post Conflict	0.33** (0.15)	0.24 (0.21)	0.41*** (0.13)	0.36** (0.18)
Post 1325	0.68*** (0.17)	0.49** (0.22)	0.82*** (0.16)	0.67*** (0.20)
CEDAW Years	0.01* (0.01)	0.02* (0.01)	0.02** (0.01)	0.03** (0.01)
Fertility	-0.08 (0.06)	-0.13 (0.08)	-0.08* (0.04)	-0.07 (0.07)
Polity 2	0.03** (0.01)	0.01 (0.02)	0.04*** (0.01)	0.01 (0.02)
GDP per Capita	0.01 (0.07)	-0.05 (0.12)	0.02 (0.06)	0.05 (0.11)
Muslim Majority	0.003 (0.15)	-0.11 (0.24)	0.01 (0.13)	-0.25 (0.22)
Time Since Adoption	-0.15*** (0.03)	-0.14*** (0.05)	-0.25*** (0.05)	-0.28*** (0.09)
Time Since Adoption <sup>2</sup>	0.01*** (0.002)	0.01* (0.003)	0.02*** (0.01)	0.02* (0.01)
Time Since Adoption <sup>3</sup>	-0.0000* (0.0000)	-0.0000 (0.0000)	-0.0003** (0.0001)	-0.001 (0.0004)
Non-Gendered SSR		0.15 (0.18)		0.03 (0.15)
Women in Security Years		-0.004 (0.01)		-0.01 (0.01)
Constant	-1.85** (0.73)	-1.03 (1.11)	-1.69*** (0.61)	-1.55 (1.03)
Observations	3,479	1,355	3,476	1,354
R <sup>2</sup>	0.11	0.09	0.18	0.15
χ <sup>2</sup>	235.28*** (df = 11)	80.56*** (df = 13)	435.06*** (df = 11)	141.38*** (df = 13)

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

run for each type of gendered security sector reform, one with baseline controls and one with the two sub-set controls for the gendered and non-gendered state of security sector reform in the state.

Models 9 and 10 generally find a significant, positive relationship between both high intensity and low intensity conflicts and the adoption of gender balancing reforms. Compared to non-conflict states that have a 38% likelihood of adopting gender balancing reforms, low intensity conflicts and high intensity conflicts have a 46% and 60% chance of adopting gender balancing reforms respectively. In other words, states that have experienced major conflicts are almost twice as likely to adopt gender balancing reforms compared to non-conflict states and are 30% more likely to adopt them compared to states experiencing minor conflicts. However, it is important to note that when other security sector reforms are considered in Model 10, low intensity conflicts lose significance. This provides partial support for Hypothesis 1b by demonstrating that high intensity conflicts have a more robust association with the adoption of gender balancing reforms than low intensity conflicts. This supplies further support to the theory that gendered security sector reforms are in part driven by increased mobilization needs.

A similar pattern emerges when examining the adoption of gender mainstreaming reforms. While Model 11 demonstrates that both high and low intensity conflicts are more likely to adopt gender mainstreaming reforms compared to non-conflict states, low intensity conflicts drop to a 10% significance level in Model 12 when full control are included, once again demonstrating that the relationship between low intensity conflicts and gender mainstreaming reform adoption is not as robust as the that of high intensity conflicts. While non-conflict states have a 33% probability of adopting gender mainstreaming reforms, states with low- and high-intensity conflicts have a 42% and 50.5% likelihood of adopting them.

Additionally, across all the models, after the adoption of UNSCR 1325, both conflict affected and non-conflict affected states became more likely to adopt gender balancing and gender mainstreaming reforms. This provides partial evidence that after gendered security sector reform became prioritized on the international agenda, countries were responsive to

the shift in international demand. Similarly, there is a weak, significant, positive relationship between the number of years since a state signed CEDAW and the adoption of gendered security sector reform. This indicates that as states increase their commitment to international reforms dedicated to women's rights, they are more likely to comply with international pressure to adopt gendered security sector reform. Additionally, since countries that have signed CEDAW tend to have more well-established and mobilized women's movements, this may indicate greater internal domestic pressure for gendered security sector reform. As expected, more democratic states are more likely to adopt gender balancing reforms and gender mainstreaming reforms. This relationship falls below significance though in the full model with controls for non-gendered security sector reform and women's integration into the military. This likely occurs because non-gendered security sector reform may be a proxy for democratization efforts within countries. Surprisingly, although in line with some qualitative evidence, there is no relationship between a country's level of gender equality, both more generally in society as measured by fertility rates or within the security sector, and the adoption of gendered security sector reform. This supports qualitative and anecdotal evidence that countries that adopt gendered security sector reform are not only being driven by concerns for gender equality, but may be responding to personnel needs or to international pressure and thus, societal gender equality is not always significantly correlated with the adoption of these reforms. Additionally, because the security sector is highly masculinized, even in countries with relatively high levels of gender equality, ample opportunities for gender reform remain and thus, it is unlikely that there is currently an upper limit preventing more equitable states from adopting gender reform.

Overall, it appears that conflict affected states, both active and post-conflict, are more likely to adopt gendered security sector reforms compared to non-conflict states, even when we account for the higher likelihood of nongendered security sector reforms in conflict affected states. What drives the increased adoption of gender balancing and gender mainstreaming reforms in conflict affected states? To explore the influence of international actors in conflict states on the adoption of gendered security sector reform, Table 5 presents the results of a logistic regression model examining the effects of international presence on gendered security

Table 4: Logistic Regression Results: Gendered Security Sector Reform Between Conflict and Non-Conflict States, Intensity Factored

	<i>Dependent variable:</i>		
	Gender Balancing (9)	(10)	Gender Mainstreaming (11) (12)
Low Intensity	0.31*** (0.12)	0.19 (0.16)	0.37*** (0.11)
High Intensity	0.88*** (0.18)	0.74*** (0.25)	0.71*** (0.17)
Post 1325	0.60*** (0.17)	0.46** (0.21)	0.80*** (0.15)
CEDAW Years	0.02** (0.01)	0.02* (0.01)	0.02** (0.01)
Fertility	-0.07 (0.06)	-0.13 (0.09)	-0.07 (0.08)
Polity 2	0.03* (0.01)	0.01 (0.02)	0.04*** (0.01)
GDP per Capita	0.01 (0.07)	-0.04 (0.13)	0.01 (0.06)
Muslim Majority	0.03 (0.16)	-0.05 (0.24)	0.02 (0.14)
Time Since Adoption	-0.15*** (0.03)	-0.14*** (0.05)	-0.23*** (0.09)
Time Since Adoption <sup>2</sup>	-0.0000*** (0.0000)	-0.0000* (0.0000)	0.01** (0.01)
Time Since Adoption <sup>3</sup>	-0.0000*** (0.0000)	-0.0000* (0.0000)	-0.0001 (0.0004)
Non-Gendered SSR		0.18 (0.17)	0.05 (0.15)
Women's Security Years		-0.004 (0.01)	-0.01 (0.01)
Constant	-1.90** (0.76)	-1.08 (1.20)	-1.65*** (0.61)
Observations	3,404	1,360	1,359
R <sup>2</sup>	0.11	0.10	0.15
χ <sup>2</sup>	222.19*** (df = 11)	85.40*** (df = 13)	403.76*** (df = 11) 141.41*** (df = 13)

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

sector reforms in conflict affected states.

International presence in conflict affected countries often has a significant, positive correlation with the adoption of gender mainstreaming reforms (Models 15 and 16) in support of Hypothesis 4. However, the relationship with gender balancing is less apparent. In both Models 13 and 14, with the exception of cultural proximity, other forms of international influence, including UN peacekeeping, trade ties, and World Bank aid, do not have a significant relationship with the adoption of gender balancing reforms. Thus, there is not much support for Hypothesis 3.

In contrast, international influence has a strong, positive, significant relationship with the adoption of gender mainstreaming reforms. In both Models 15 and 16, the presence of UN multidimensional peacekeeping mission and lower fertility rates among a state's culturally proximate neighbors significantly increase the likelihood of the adoption of gender mainstreaming reforms. The presence of a multidimensional peacekeeping mission increases the probability of the adoption of a gender mainstreaming reform by around 40% from a 50% probability to a 70% likelihood.<sup>34</sup> The substantive effect is even more dramatic with a state's cultural proximity. As a state's culturally proximate neighbors' fertility rates increase from the maximum of 6.3 (indicating low levels of gender equality) to the minimum of 1.8, its likelihood of adopting gender mainstreaming reforms increases from 17% to 83.6%.<sup>35</sup> Further, in Model 16, which includes the full set of controls, including non-gendered security sector reform and women's historical inclusion in the police and military, the relationship grows even stronger between peacekeeping missions and cultural proximity and the adoption of gender mainstreaming reforms. Additionally, in Model 16, states that receive World Bank Aid also are significantly more likely to adopt gender mainstreaming reforms. However, there is no significant relationship between export ties and the adoption of gender mainstreaming reforms in either model. This is in line with findings by ? that trade relationships often fail to significantly motivate changes in human rights.

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<sup>34</sup>According to the results of Model 15.

<sup>35</sup>According to the results of Model 15.

Interestingly, as can be seen in the Appendix, international presence only influences the adoption of gendered security sector reform in low intensity conflicts. This may indicate that in high-intensity conflicts, gendered security sector reform is primarily driven by mobilization needs, regardless of international pressure. While this does not mean that international actors do not advocate for and incentivize the adoption of gendered security sector reform in high-intensity conflict states, these states are already inclined to adopt them to fulfill personnel needs. In contrast, in low-intensity conflicts, there is not as a great of a mobilization need for gendered security sector reforms. Therefore, these states need to be incentivized to adopt gendered security sector reform, which may explain the increased influence of international actors in these states.

The differing results between the adoption of gender balancing and gender mainstreaming reforms is interesting and demonstrates that international actors may have limited influence in altering the behavior of conflict states in some contexts. Gender balancing reforms are primarily driven by personnel needs, rather than concerns for gender equality. Therefore, these results indicate that international actors have relatively little influence in impacting the decisions of conflict states regarding the composition and recruitment of men and women into the security sector. However, if we recall that conflict affected states are more likely to adopt gender balancing reforms than non-conflict states, this may indicate that the increased balancing of security forces in conflict states is occurring due to logistical mobilization needs rather than in response to international pressure to conform with the Women, Peace, and Security agenda.

In contrast, gender mainstreaming specifically attempts to increase the level of gender equality and gender sensitivity in the security sector. Gender equality is often not viewed as a priority for security forces during conflict. Unlike gender balancing which may be seen as self-evidently necessary given manpower shortages during and after conflict, gender mainstreaming may need to be incentivized by international actors. In other words, to many conflict states, gender mainstreaming may incur costs on the security sector, such as implementation costs of adopting new policies, designing new trainings on gender, creating new equipment for women, or holding current soldiers or police accountable for sexual harassment or assault, whose ben-

Table 5: Logistic Regression Results: Gendered Security Sector Reform International Influence in Conflict States

	<i>Dependent variable:</i>		
	Gender Balance	(14)	Gender Mainstream
	(13)	(15)	(16)
Multidimensional Mission	1.23** (0.53)	0.82 (0.79)	1.33*** (0.38)
Export Context	-0.01 (0.12)	-0.02 (0.14)	-0.002 (0.09)
World Bank Aid	0.02 (0.01)	0.02 (0.02)	0.02* (0.01)
Cultural Similarity Context	-0.73*** (0.24)	-0.92*** (0.33)	-0.67*** (0.18)
Post 1325	0.27 (0.41)	0.10 (0.42)	0.25 (0.37)
CEDAW Years	-0.03 (0.02)	-0.04 (0.02)	-0.02 (0.02)
Polity 2	0.04 (0.03)	-0.02 (0.04)	0.05 (0.03)
GDP per Capita	0.13 (0.14)	0.25 (0.19)	0.07 (0.12)
Muslim Majority	-0.69 (0.44)	-0.83* (0.47)	-0.57 (0.36)
Time Since Adoption	-0.13 (0.09)	-0.004 (0.09)	-0.22** (0.10)
Time Since Adoption <sup>2</sup>	0.01	-0.003	0.01*
Time Since Adoption <sup>3</sup>	(0.01)	(0.01)	(0.01)
Conflict Intensity	-0.0000 (0.0000)	0.0000 (0.0001)	-0.0001* (0.0001)
Conflict Sexual Violence	0.53*** (0.24)	0.59** (0.27)	0.41 (0.26)
Non-Gendered SSR	-0.03 (0.20)	-0.04 (0.21)	-0.09 (0.20)
Women in Security Years		0.45 (0.36)	0.33 (0.36)
Constant	0.25 (1.14)	0.01 (0.01)	0.004 (0.01)
		-0.09 (0.99)	-0.46 (1.07)
Observations	509	341	341
R <sup>2</sup>	0.17	0.17	0.20
χ <sup>2</sup>	52.69*** (df = 14)	40.17*** (df = 16)	64.57*** (df = 14) 49.93*** (df = 16)

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

efits are not always immediately obvious in the highly militarized and masculine culture of conflict-affected security sectors. Thus, international actors play a key role in incentivizing the adoption of these reforms by applying pressure and by offering to offset the costs of these reforms. For example, the UN often sponsors, hosts, and facilitates trainings on domestic violence prevention and investigation for police forces, which decreases the government's financial burden of adopting gender mainstreaming. Thus, these results demonstrate that international actors play a key role in promoting gender reform after conflict. However, their influence is limited in scope to only influence reforms that are often seen as secondary concerns.

## 4.1 Robustness Checks

The results generally remain robust to the different operationalizations of conflict. The results for all models shown remain robust when the post-conflict period is defined according to conflict termination type and when conflicts that occurred due to coups are removed. While the results of the full sample models fall below significance when interstate conflicts with at least 25 battle deaths is used, the conflict sub-sample results remain the same. This may indicate that for interstate conflicts, the presence of international actors is necessary to lead to gender balancing and gender mainstreaming reform adoption.

Additionally, an alternative measure of gender mainstreaming which excludes reforms that primarily recruit more women produced consistent results.<sup>36</sup> Further the models are robust to GDP instead of GDP per capita, alternative measures for gender equality,<sup>37</sup> majority Catholic or Christian controls, communist controls, regional controls, and an individual empowerment index (Cingranelli, Richards, and Clay 2014), although *World Bank Aid* loses significance at times. Additionally, the results remain robust without state clustered standard errors and when a Negative Binomial Model is used to examine the number of reforms adopted. The results are also robust to the inclusion of a categorical measure of the number of UN staff in the country instead of the dichotomous measure of UN multidimensional peacekeeping missions and in fact,

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<sup>36</sup>This meant that recruitment campaigns, female promotion, and recruitment gender quotas were excluded.

<sup>37</sup>Such as women's legislative representation and labor force ratios.

it becomes significant in the gender balancing models and *Export Context* gains significance in these models.

Finally, there may still be some concern of an endogenous relationship between security sector gender reform and the occurrence of conflict. (????????????). While the lagged independent variables address this endogeneity to some extent, an additional proxy for the theoretical mechanisms that is more exogenous to the dependent variable is used as a robustness check – natural disasters. While natural disasters do not necessarily cause conflict, they are associated with decreased state capacity and create social and political upheaval (Berrebi and Ostwald 2011, 2016). Further, a natural disaster would prompt several of the theoretical mechanisms underlying the relationship between conflict and gendered security sector reform, including increased insecurity for women as women tend to be the worst affected by disasters,<sup>38</sup> altered gender roles as disaster may disrupt established daily life and women may have to take a more active role in re-establishing and rebuilding homes, businesses, and communities, increased international attention and pressure as countries, NGOs, and IGOs send aid, and increased mobilization into security institutions if the military and police are deployed to assist after the disaster. However, natural disasters are unlikely to be highly correlated or endogenous to gendered security sector reform. Therefore, an additional set of models are run on a random subset of the data with a dichotomous indicator for whether a natural disaster has occurred within the state-year as the independent variable. Data on natural disasters comes from the Emergency Events Database (EM-DAT).<sup>39</sup> The results remain robust.

## 5 Conclusion

The security sector is a key, recognizable component of government power. While previous studies have primarily focused on how conflict affects women’s political participation and em-

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<sup>38</sup>The international community has increasingly recognized that natural disasters often have more harmful consequences for women than men. For more information, see the summary of the World Conference on Disaster Reduction in 2005 <http://www.unisdr.org/2005/wcdr/wcdr-index.htm>

<sup>39</sup>The occurrence of a natural disaster is defined as any one or more of a geophysical, meteorological, hydrological, or climatological disaster in the state-year.

powerment, it is unclear how exactly women's increased agency and rights translates into the longer term improvements in gender equality.

In the wake of the adoption of UNSCR 1325, the international community rallied to increase women's representation and equality in security roles and conflict decision-making. Although women had been slowly integrating into the police and military forces beginning in the early 20th century, after 2000, there has been a rapid increase in the adoption of gendered security sector reforms in response to the adoption of UNSCR 1325. While the UN and its Member States committed to improving women's rights more generally since the adoption of CEDAW in 1970, UNSCR 1325 was the first time that women's rights were securitized. However, the focus on the implementation of UNSCR 1325 has been specifically on the security sector. Additionally, although all UN Member States are legally required to implement UNSCR 1325 in their own countries, the main focus of implementation has been on countries which are currently experiencing or have recently experienced conflict. Since gendered security sector reform has been proposed as a tool to prevent conflict recurrence and spillover, it has become a major security concern and priority. Therefore, gender security sector reform should be a "most likely" case of international actors offering material incentives in exchange for the adoption of women's rights reforms after conflict, this is an important test of how conflict and international influence interact to influence gender equality.

Using a unique data set on the adoption of gendered security sector reform in all non-OECD states between 1988 and 2016, this analysis demonstrates that conflict affected states, both states currently experiencing conflict and states that have recently experienced conflict, are significantly more likely to adopt gendered security sector reform. Moreover, conflict-affected states that are susceptible to international pressure, such as countries hosting UN multidimensional peacekeeping missions, those that receive World Bank aid, and those who are culturally similar to gender equitable countries, are significantly more likely to adopt gender mainstreaming reforms compared to conflict states that do not have these international influences present. However, these indicators of international pressure do not significantly increase the likelihood of the adoption of gender balancing reforms in the police or military. Thus, international ac-

tors in conflict-affected environments often can increase gender equality. However, the scope of this reform is limited by other factors. In this case, gender balancing reforms, which are primarily the result of manpower shortages during and after conflict, are not influenced by international actors. This may occur because these types of reforms are driven primarily by logistical demands and thus, are seen as self-evidently necessary by conflict-affected security sectors regardless of international presence. In contrast, gender mainstreaming reforms are often viewed as a secondary concern by security sectors compared to gender balancing reforms. In other words, security sector institutions are more likely to understand the need to integrate more women into the military when they are facing security concerns that increase the need to mobilize the population than they are to perceive the need to adopt a sexual harassment policy in times of a crisis. Therefore, the often highly masculinized and militarized security sectors of conflict-affected states are unlikely to be willing to spend the necessary resources to adopt gender mainstreaming reforms. However, international actors are more likely to prioritize these types of reforms, given the popularity of the UNSCR 1325 Women, Peace, and Security agenda and may offer material incentives and support to conflict-affected states to adopt gendered security sector reforms as a conflict containment strategy. Thus, international actors play a key role in increasing the political will and resources to incentivize the adoption of gender mainstreaming reforms in particular.

In the past five years, scholars have increasingly argued that the disruption of normal political and social hierarchies during conflict can create opportunities for women to gain increased political power. However, although the dual impact of international actors and conflict can improve women's rights to some extent, the scope of these changes is limited by other logistic, strategic, or normative concerns.