

# Defending the Realm: The Appointment of Female Defense Ministers Worldwide

**Tiffany D. Barnes** University of Kentucky  
**Diana Z. O'Brien** Texas A&M University

**Abstract:** *Though the defense ministry has been a bastion of male power, a growing number of states have appointed women to this portfolio. What explains men's dominance over these positions? Which factors predict women's appointments? With comprehensive cross-national data from the post-Cold War era, we develop and test three sets of hypotheses concerning women's access to the defense ministry. We show that women remain excluded when the portfolio's remit reinforces traditional beliefs about the masculinity of the position, particularly in states that are engaged in fatal disputes, governed by military dictators, and large military spenders. By contrast, female defense ministers emerge when expectations about women's role in politics have changed—that is, in states with female chief executives and parliamentarians. Women are also first appointed to the post when its meaning diverges from traditional conceptions of the portfolio, particularly in countries concerned with peacekeeping and in former military states with left-wing governments.*

**Replication Materials:** The data, code, and any additional materials required to replicate all analyses in this article are available on the *American Journal of Political Science* Dataverse within the Harvard Dataverse Network, at: <https://doi.org/10.7910/DVN/TR4OUK>.

In 2014, an informal encounter between four defense ministers made global headlines. This meeting garnered attention not because of the content of the discussion, but due to the composition of the group: Each of the four countries represented—Germany, the Netherlands, Norway, and Sweden—had selected a woman to head its defense portfolio. The widespread interest in these female ministers reflects the degree to which women's nomination to these positions upends traditional expectations about women's role in politics. The remit of the defense minister arguably makes this the most “masculine” position within the executive branch, and as the news coverage suggested, women's presence in this post continues to be viewed as exceptional.

Though female politicians have historically been absent from the defense portfolio, these patterns of exclusion

have begun to change in the post-Cold War era. By 2012, women had been appointed to the ministry of defense in 41 countries. Despite the rapid increase in women's access to power—and growing interest in women's appointments to cabinets and other high-prestige posts (Arriola and Johnson 2014; Escobar-Lemmon and Taylor-Robinson 2005, 2016; Jalalzai 2013)—existing work is largely silent on female defense ministers. No study to date identifies the conditions that perpetuate women's exclusion from the defense portfolio, nor the factors that facilitate their initial inclusion in the post. This is a surprising oversight, given that these portfolios represent one of the last bastions of male political dominance.

We provide the first study of female defense ministers. As previous work struggles to account for women's ascension to high-prestige portfolios, this research program

---

Tiffany D. Barnes is Associate Professor, 1615 Patterson Office Tower, University of Kentucky, Lexington, KY 40506 ([tiffanydbarnes@uky.edu](mailto:tiffanydbarnes@uky.edu)). Diana Z. O'Brien is Associate Professor, 2010 Allen Building, 4348 TAMU, College Station, TX 77843-4348 ([dzobrien@tamu.edu](mailto:dzobrien@tamu.edu)).

We are grateful to Michelle Taylor-Robinson, Karen Rasler, Mirya Holman, Amanda Bittner, Saladin Ambar, Genevieve Kehoe, Rikhil Bhavnani, Christian Welzel, Ferdinand Müller-Rommel, participants of the World Politics Speaker Series at Indiana University, participants of the Center for the Study of Democracy Speaker Series at Leuphana University, Editor William Jacoby, and three anonymous reviewers for invaluable feedback on this research. We owe a special thanks to Martin Christensen, Silvia Claveria Alias, and Ingrid Bego for sharing data on cabinet ministers. We thank Theresa Schroeder for her contributions to the data collection and theoretical development during the early stages of this project. These efforts, and early conversations with her, informed subsequent data collection and were beneficial to the development of several hypotheses. We would also like to thank Kayo Onishi, Jessica Wysocky, and Greg Saxton for excellent research assistance. Earlier versions of this work were presented at the Annual Meeting of the American Political Science Association, the Annual Meeting of the Midwest Political Science Association, and the European Conference on Politics and Gender.

*American Journal of Political Science*, Vol. 00, No. 0, xxxx 2018, Pp. 1–14

demands a new theory of women's access to power. We posit three related sets of hypotheses concerning women's appointments. Focusing first on women's exclusion from office, we argue that women are likely to remain absent from the post when its remit reinforces established beliefs about the masculinity and prominence of the position. To explain women's inclusion in the portfolio, our second and third sets of hypotheses argue that the initial appointment of a female defense minister can be explained by the changing nature both of women's role in politics and also of the ministry itself. In particular, male dominance erodes when politics becomes more feminized and when the meaning and significance of the position diverge from traditional conceptions of the portfolio.

Using our original and comprehensive data set of women's appointments to defense ministries, we test these claims with a discrete-time duration model that predicts women's initial nomination to these posts across 163 states. Consistent with the variable meanings assigned to this portfolio in the post-Cold War era, we find that women are less likely to be appointed in countries engaged in fatal disputes, governed by military dictators, and that invest heavily in military operations while forgoing peacekeeping. By contrast, women are more likely to come to power in states with large numbers of female parliamentarians and female chief executives, as well as in those where the post takes on new meanings—particularly in countries concerned with peacekeeping and in former military states governed by left-leaning parties. Although women's appointment represents an important break from historical patterns of exclusion, women also tend to access these positions only when their meanings have fundamentally changed.

Together, these findings have important implications for descriptive, symbolic, and policy representation. As we elaborate below, the selection of a female defense minister facilitates women's ascension to powerful posts and erodes gendered beliefs about women's roles in politics and society more generally. Equally important, these appointments have consequences for the policymaking process, as the unique conditions under which women are appointed and serve—coupled with their distinct policy preferences—influence the gendered patterns of behavior observed in previous studies (Bashevkin 2014; Koch and Fulton 2011).

Beyond the defense ministry, our theoretical framework provides a more widely applicable approach for understanding women's access to the most masculine and desirable appointments. We demonstrate that the gendered nature of institutions perpetuates women's exclusion; altering the meanings assigned to these positions facilitates women's inclusion. To explain women's access,

it is thus necessary to identify the specific factors that (re)gender different positions across space and time. Our framework suggests a rich vein of future research on the mechanisms that promote women's inclusion and exclusion across a myriad of leadership posts, including powerful party, legislative, and national-level positions (Barnes 2016; Jalalzai 2013; O'Brien 2015).

## **The Importance of Women's Access to Defense Ministries**

Traditionally, the executive was the most masculine branch of government, with men occupying the vast majority of positions as national leaders and cabinet ministers. As scholars increasingly recognize the power vested in the executive branch, a growing body of research seeks to explain women's access to ministerial posts (Arriola and Johnson 2014; Bauer and Tremblay 2011; Claveria 2014). This work is often concerned not only with women's presence in cabinets, but also with the types of portfolios women hold (Bego 2014; Escobar-Lemmon and Taylor-Robinson 2016; Reynolds 1999).

Ministries vary with respect to their influence within the cabinet, the amount of media attention they garner, and the degree to which they provide a pathway to higher office (Krook and O'Brien 2012). Beyond their status and cachet, cabinet assignments also take on different gendered meanings. Some portfolios address policy areas that have historically been linked to the home front and/or to women as a group—such as those addressing youth and education—whereas others cover issues traditionally associated with the public sphere and/or men as a group, including infrastructure, economics, and defense (Escobar-Lemmon and Taylor-Robinson 2009).

Historically, women have been relegated to less prestigious portfolios addressing feminine issue domains (Borrelli 2002; Escobar-Lemmon and Taylor-Robinson 2005, 2009; Krook and O'Brien 2012). Although this gender-based division of labor does not imply that women's assignments are inferior (Trimble and Tremblay 2005), it is especially important to examine women's ascension to the high-prestige and masculine posts from which they have long been excluded. Women's appointment to these prominent portfolios gives them access to the "inner cabinet" (Davis 1997), where they enjoy more resources and visibility, greater access to the head of government, jurisdiction over the executive's primary policy priorities, and lesser legislative oversight (Escobar-Lemmon and Taylor-Robinson 2016). The nomination of women to traditionally masculine ministries also helps to

erode traditional expectations about men's and women's gender roles (Krook and O'Brien 2012).

Among traditionally male-dominated portfolios, women's appointment to the ministry of defense demands particular attention. This post is central to "matters dealing with the roles and missions of the armed forces, the allocation of resources to national defense, the national disposition of military units and entities, decisions related to the use of force by the military, and decisions concerning international commitments and obligations" (Bland 2001, 533). It is vital to ensuring state sovereignty and security. As it is responsible for the operations and regulation of the armed forces, moreover, this position is linked to notions of strength and aggression. It is thus the most stereotypically masculine ministry. Finally, whereas women have made inroads into other high-prestige posts—for instance, interior/home affairs and foreign affairs—defense (along with finance) remains the last bastion of male control (Escobar-Lemmon and Taylor-Robinson 2009, 2016).

Given women's exclusion from this prestigious and masculine position, their nomination to the defense ministry, more than any other portfolio, represents a highly visible break from traditional gendered patterns of governance. Although extremely rare before the 1990s, in recent years a growing number of states have made these pathbreaking appointments. In the post-Cold War era, women have held the defense portfolio in every region of the world except for the Middle East, for a total of 56 appointments in 41 countries. Yet, little is known about why women remain excluded from this post and what facilitates their initial inclusion in the portfolio.

## Explaining Women's Exclusion from the Defense Ministry

Women's presence in the ministry of defense has increased dramatically over time. In the 1990s, female defense ministers served in only five countries. In the subsequent decade, these appointments grew almost fourfold, with 29 countries first naming women to this portfolio. Between 2010 and 2012, seven additional first-time appointments were made. Nonetheless, the vast majority of states—over 75%—have not yet selected a woman for this portfolio. What explains men's dominance of this ministry?

Women's continued exclusion from power can be attributed in part to conventional expectations about the masculinity and prominence of the defense portfolio. The minister of defense is responsible for heading military operations and overseeing national defense policy. Although

the duties of this ministry have changed in some states since the end of the Cold War (Gyarmati and Winkler 2002; Kathman 2013), in others its remit remains largely unaltered. Our first set of hypotheses posits that the appointment of the first female defense minister remains unlikely in those countries where the position continues to be one of the most important and highly masculinized cabinet appointments. This is especially the case in countries actively engaged in international armed conflict, states governed by military dictatorships, and those with large military expenditures.

To begin with, military involvement in international conflict perpetuates the traditional, masculine view of the ministry. Masculinity is "intimately connected to militarism," and maleness is considered essential to "effective and trustworthy soldiering" (Enloe 1993, 52). Conflict participation reinforces the masculine features of the ministry, which run counter to widespread perceptions of women in politics. Women are stereotyped as being compassionate and compromising leaders; men, by contrast, are seen as assertive, aggressive, forceful, and capable of handling crises. Female politicians are perceived as being particularly qualified in soft policy areas and less competent in military, national defense, and foreign policy (Holman, Merolla, and Zechmeister 2011).

These gender stereotypes hold even more weight when military conflict dominates the political agenda (Lawless 2004). During military crises, individuals look for "strong" leaders with masculine characteristics (Holman, Merolla, and Zechmeister 2011, 2016). For this reason, women are generally less preferred to male leaders when there is a national security threat (Falk and Kenski 2006). By this same logic, we anticipate that in the context of an international military dispute, women will be viewed as less appealing—and perhaps less qualified—for the defense portfolio. Instead, leaders will choose strong, aggressive, and masculine nominees. As such, we hypothesize as follows:

*H1:* States involved in international military conflict are less likely to appoint female defense ministers.

A similar argument applies to military dictatorships. These regimes typically emerge from coups against civilian governments. After seizing power, the military establishes a junta as a means of either formally governing the country or informally exercising control over the government's activities (Brooker 2014). The junta, or political council, is composed of members from the inner circle, heads of the armed services, and potential rivals from within the armed forces. Military and civilian dictatorships thus remain distinct. Whereas civilian dictators are

at the “mercy of the armed forces,” military dictators use their organizational apparatus to consolidate their rule (Cheibub, Gandhi, and Vreeland 2010, 85–86).

Given the ties between the armed forces and the government, the ministry of defense is an especially significant post within military dictatorships. This position is likely to be held by a high-ranking official with close ties to the military. Coupled with the feminine stereotypes that govern perceptions of women’s leadership traits and policy expertise, it is unsurprising that Brooker (2014) makes frequent references to “military *men* in government” when describing these regimes. This leads to our second hypothesis:

*H2:* Military dictatorships are less likely to appoint female defense ministers.

Military dictatorships and countries involved in international conflict both have large defense expenditures (Nordhaus, Oneal, and Russett 2012). More generally, investment in the military likely affects the appointment of female defense ministers. When the defense portfolio oversees a large budget, its minister controls significant resources. These resources provide political capital and can be used to influence policy. Large military expenditures may likewise indicate that defense is a priority for the chief executive, thus placing this minister in the inner cabinet (Escobar-Lemmon and Taylor-Robinson 2016). Indeed, states increase military spending in an effort to project political and economic power on the international stage (Perlo-Freeman et al. 2011). Greater defense spending may thus lead domestic and international audiences to view this portfolio as especially important. Together, these factors suggest that larger military expenditures increase the resources and cachet afforded to defense ministers. This policy influence and political capital may in turn limit women’s access to the post.

As well as these direct effects, large military expenditures suggest a political climate that is not conducive to changing norms of female exclusion. First, military expenditures can be an instrument to keep autocratic rulers in power (Brauner 2015). Leaders investing heavily in military spending in an effort to maintain control are unlikely to look beyond their largely male inner circles when naming defense ministers. Second, military expenditures are affected not only by participation in armed conflict, but also by the perceived risk of involvement in a fatal dispute (Nordhaus, Oneal, and Russett 2012). As with countries embroiled in interstate conflicts, the perception of threat reinforces the importance of national defense and the belief that the ministry’s primary function is to protect and secure the state. This bolsters masculine stereotypes about the post. Together, this suggests the following:

*H3:* States with larger military expenditures are less likely to appoint female defense ministers.

## Predicting Women’s Initial Inclusion in the Defense Ministry

Though women largely remain excluded from the defense portfolio, a growing number of governments have nominated female defense ministers. What explains women’s initial inclusion in this conventionally masculine post? We posit that women are likely to first be appointed when the meaning of this portfolio diverges from traditional conceptions of the position. In the following subsections, we identify two mechanisms by which this occurs. First, we discuss the changing perceptions of women’s role in politics, such that women are viewed as plausible appointees. Second, we explain how the changing priorities and remit of the ministry result in the portfolio itself being perceived as less masculine than in previous eras.

### Changing Perceptions of Women’s Role in Politics

Women’s inclusion in the defense portfolio appears to both reflect and result from a new understanding of women’s role in the political sphere. Indeed, politicians and activists alike link the appointment of female defense ministers to broader trends in women’s access to political power. Dutch defense minister Jeanine Hennis-Plasschaert, for example, pointed to her position within the cabinet as a sign of the “erosion of the old boys’ club” in European politics.<sup>1</sup> Observers likewise link the selection of female defense ministers in Latin America to a shift away from a “machismo” political culture.<sup>2</sup> That is, women are likely to be appointed as defense ministers when politics is no longer viewed as a male domain.

These claims suggest that the nomination of female defense ministers is linked to a more widespread “feminization” of politics. Indeed, women’s appointment to (high-prestige and masculine) portfolios is often correlated with women’s access to political office more broadly (Krook and O’Brien 2012). In particular, women’s presence in parliament and as chief executives likely alters both the supply of, and demand for, female defense ministers.

<sup>1</sup>“Female Defence Ministers Pledge to Break Europe’s Old Boys’ Network.” *The Guardian*, <http://gu.com/p/3mcp3/stw>.

<sup>2</sup>“Move Over Machismo: Latin America Sets a Global Example for Women in Power.” *Fox News Latino*, <http://fxn.ws/1jMco32>.

To begin with, bolstering the number of female legislators increases the supply of women eligible to serve in the post. Prior experience in elected office is the principal qualification for cabinet appointments in parliamentary systems (Blondel 1987), where ministers are often drawn directly from parliament. In these cases, female parliamentarians are the “supply force for . . . women in ministerial lines” (Whitford, Wilkins, and Ball 2007, 563). Even in presidential systems, where ministers do not have to come from the national assembly, Escobar-Lemmon and Taylor-Robinson (2005) suggest that the presence of female legislators increases the number of women eligible for cabinet posts.

Increasing the number of female parliamentarians further feminizes politics by fundamentally reshaping the demand for women in cabinets. Davis (1997) links women’s greater presence in legislatures to an “irreversible process of change” that alters institutional culture with respect to ministerial appointments. Women’s heightened descriptive representation, she posits, enables female parliamentarians to “mobilize the resources of the organization or institution to improve the situation for themselves” (64). Together, these supply and demand effects lead to our fourth hypothesis:

*H4:* Countries with greater numbers of female parliamentarians are more likely to appoint female defense ministers.

The presence of a female chief executive likely further affects the selection of female defense ministers. The head of government often controls—or at least exercises significant influence over—ministerial appointments. Female heads of government promote women to their cabinets at higher rates than their male counterparts (Jacob, Scherpereel, and Adams 2014), and thus may be more likely to first select a woman to head the defense portfolio. Female presidents and prime ministers may likewise affect societal acceptance of female defense ministers. Indeed, the (s)election of a female head of government suggests that voters and politicians alike are amenable to women taking on more masculine positions (Alexander and Jalalzai 2016).

Just as female heads of government may bolster the demand for female nominees to traditionally male-oriented cabinet appointments, they can also affect the supply of prospective female defense ministers. In some countries, prime ministers or presidents hold multiple portfolios. This is especially the case in South and South-East Asian countries, as well as some Caribbean states. Self-appointments thus represent an important mechanism by which women can access the defense ministry. In fact, 15% of first-time female defense ministers were

self-appointments.<sup>3</sup> Our fifth hypothesis thus posits the following:

*H5:* Female chief executives are more likely to appoint female defense ministers.

## Changing Nature of the Ministry of Defense

Women’s access to the defense ministry may be shaped not only by the presence of female politicians, but also by the nature of the position itself. A large body of literature suggests that women are more likely to be appointed to less masculine and less prestigious posts (Escobar-Lemmon and Taylor-Robinson 2005; Krook and O’Brien 2012; Reynolds 1999). Though this work necessarily assigns a single coding to each portfolio—such that defense ministries are always considered high-prestige and masculine—in practice the expectations and importance placed upon different portfolios vary over time and space (Bauer and Tremblay 2011). Among cabinet posts, this variation in meaning is especially high for ministries of defense, particularly in the post–Cold War era. Our third set of hypotheses suggests that women gain office when the remit of the portfolio has shifted.

Different regime types have fundamentally different expectations for their ministries of defense. While military dictators are least apt to place women in this portfolio, the appointment of a female defense minister may be especially likely in former military dictatorships led by leftist governments. With the end of military rule, new leaders are tasked with consolidating civilian rule, strengthening state capacity, and addressing a number of other competing interests (Carothers 2002). Many former military dictatorships are thus left grappling with the legacies of military rulers years after regime transition (Roniger and Sznajder 1999). As femininity is often associated with peace, for governments seeking to disassociate themselves from former military abuses of power, the appointment of a female defense minister can offer a visible break from the past and signal change and renewal (Murray 2010).

Left-leaning governments in former military states have particularly strong incentives to nominate women to the defense portfolio. In contrast to right-wing parties—which sometimes bear connections to former military regimes—left-wing parties are more apt to seek to

<sup>3</sup>In these states, both male and female heads of government have held the defense portfolio. Given that this practice is not uncommon, the (s)electorate can anticipate that a female chief executive could assume this post, suggesting that the norms around women’s inclusion have changed. See the supplementary information (SI) for details.

distinguish their own military agenda from their state's history of military dominance. They also tend to favor less spending on the armed forces, greater attention to human rights, and more peaceful approaches to international relations (Koch 2009; Viola and Mainwaring 1984; Whitten and Williams 2011). Together, this suggests our sixth hypothesis:

*H6:* Left-wing governments in former military states are more likely to appoint female defense ministers.

Former military states are not the only countries in which the meanings assigned to this cabinet position have shifted over time. With the end of the Cold War in 1991, governments began to reconsider the priorities of their defense ministries. "Shrinking budgets and indefinable threats," combined with the view that militaries could be essential for peace enforcement, together provoked widespread reevaluations of military goals in a number of states (Gyarmati and Winkler 2002, 5). In many cases, this led to a shift from an exclusive emphasis on homeland defense to a broader interest in international security and the promulgation of peace (Kathman 2013).

Notably, the post-Cold War era has witnessed increased peacekeeping efforts, with militaries from across the globe committing personnel to United Nations missions seeking to create stability in tumultuous regions (Fortna 2004). While a traditional focus on national security represents a stereotypically masculine remit for the defense portfolio, a shift toward international security and peacebuilding signifies a more gender-neutral or even feminine approach to military duties. Conventional wisdom about women in leadership, for example, suggests that "women work for peace, and men wage war—cooperative women, conflictual men" (Caprioli and Boyer 2001, 503). Just as the "gender stereotypes which previously acted as a barrier to female participation in war might actually enhance the potential for women in the military" in countries that emphasize peacekeeping and disaster relief (DeGroot 2001, 24), the same is likely true in the ministry of defense. Specifically, our seventh hypothesis suggests the following:

*H7:* Countries engaged in peacekeeping missions are more likely to appoint female defense ministers.

Finally, it is important to note that countries involved in peacekeeping appropriate some portion of their military expenditures to these efforts. More generally, in countries committed to peacebuilding, military expenditures may be used to bolster the state's reputation as an advocate of international cooperation. Under these conditions,

military expenditures may not be negatively associated with the appointment of a female defense minister. Indeed, peacekeeping may attenuate this relationship. We thus posit our eighth hypothesis:

*H8:* Peacekeeping mitigates the negative relationship between military expenditures and the appointment of female defense ministers.

## Analyzing the Appointment of Female Defense Ministers

We examine the determinants of women's exclusion from—and inclusion in—the defense portfolio across 163 countries in the post-Cold War era.<sup>4</sup> To do so, we built an original and comprehensive data set with information gathered from the Database of Political Institutions (DPI), the Central Intelligence Agency's Directory of Chiefs of State and Cabinet Members of Foreign Governments, and the Worldwide Guide to Women in Leadership (see the SI). Our outcome variable measures the *time until the selection of the first female defense minister* in each of these states. We focus on women's initial promotion to this post because this represents the most important and visible departure from the male-dominated status quo.

We begin our analysis in 1991. We chose this start date to reflect the fundamental shift in the function of the defense ministry that occurred in many countries following the end of the Cold War.<sup>5</sup> This was a period of major political transformation, which altered the values, priorities, and purposes of the armed forces in many states. This era witnessed the decline of military dictatorships and growth in civilian-led regimes (Brooker 2014; Geddes, Wright, and Frantz 2014). Many states now also place greater emphasis on building peace, as opposed to primarily preparing for the threat of war. The vast majority of peacekeeping operations, for instance, have occurred in the post-Cold War period (Kathman 2013).

Trends in women's access to power further reinforce the argument that the defense ministry was fundamentally transformed after 1991. Consistent with our hypotheses, women were virtually absent from these posts prior to the end of the Cold War. Other than Finland's Elisabeth Rehn, who was nominated in 1990, all female defense ministers in this era were self-appointed, as each

<sup>4</sup>See the SI for details on countries with defense ministries.

<sup>5</sup>We use multiple lagged explanatory variables; each is measured in the post-Cold War period starting in 1991. The measure of the outcome variable begins in 1992.

held the chief executive post. Extending our analysis backward in time would thus provide few additional examples of female appointees.

### Predictors of Women's Continued Exclusion

Our first set of hypotheses posits that the defense ministry remains male dominated when its remit reinforces traditional perceptions about the masculinity of the post. We argue that women are excluded from this position in states that are involved in international armed conflict (Hypothesis 1). We test this hypothesis with a covariate capturing whether a country was involved in a *fatal dispute* in the preceding year.<sup>6</sup> Specifically, we use the variable *Fatalities* from the militarized interstate dispute (MID) data compiled by the Correlates of War (COW) Project to create a binary measure that takes a value of 1 for states involved in any international dispute that led to battle deaths in the previous year and 0 otherwise (Ghosn and Bennett 2003; Palmer et al. 2015). There are 330 instances of countries' involvement in fatal disputes. Lending initial support to our hypothesis, in none of these cases was a female defense minister first selected in the subsequent year.<sup>7</sup>

We further contend that military dictatorships are more likely than civilian-led governments to remain male dominated (Hypothesis 2). We use Cheibub, Gandhi, and Vreeland (2010) to create a binary measure capturing whether a *military dictator* currently rules the state. Of the 3,064 total country-years in the data set, 476 are military dictatorships. Again, lending initial support to our theory, only one such regime appointed a female defense minister in this era.

Extending these hypotheses, we argue that states with larger military expenditures are less likely to first appoint a female defense minister (Hypothesis 3). We use data from the Stockholm International Peace Research Institute and the COW National Material Capabilities Dataset to measure *logged military spending in U.S. dollars* (millions). Among countries that appoint female defense ministers, the mean level of military spending is \$3,636 million in the year of appointment and \$6,388 million for all other years in the analysis.

<sup>6</sup>Our theory does not require interstate disputes to escalate to the level of war in order to perpetuate the exclusion of women from the defense ministry. Indeed, theories of militarized conflict suggest that domestic groups will evaluate the executive based on uses of military force short of war (see Johnson and Barnes 2011; Morgan and Bickers 1992).

<sup>7</sup>See the SI for analyses with a measure that includes both international and civil conflict as well as postconflict countries (Krook, O'Brien, and Swip 2010).

### Predictors of Women's Initial Inclusion: Women's Role in Politics

The second set of hypotheses concerns the feminization of politics and focuses on women's access to legislative (Hypothesis 4) and executive (Hypothesis 5) posts. We use data from Paxton, Green, and Hughes (2008; 1991–98 data) and the Inter-Parliamentary Union (1997–2011) to determine the *percentage of parliamentary seats held by women* in each country in the previous year. The average proportion of female legislators in the year prior to the appointment of the first female defense minister is 18.38%, as opposed to 11.90% otherwise. To test the hypothesis that female executives are more likely to appoint female defense ministers, we use information from Jalalzai (2013) to construct an indicator variable that captures *female state leaders*. Women served in this position in 160 of the country-years in our data set. Of initial appointments, eight were made by women and 33 by men.

### Predictors of Women's Initial Inclusion: The Nature of the Defense Ministry

The third set of hypotheses posits that female defense ministers are more likely to emerge after major changes to the traditional role of the military. This is especially likely in states that have transitioned from military-led governments to left-wing civilian-headed regimes (Hypothesis 6). We use data from Cheibub, Gandhi, and Vreeland (2010) to identify former military dictatorships and rely on the DPI to classify left-wing governments—those controlled by communist, socialist, social democratic, or other leftist parties (Beck et al. 2001). To test Hypothesis 6, we include an *interaction effect between former military dictatorships and leftist governments*. Our data set includes 276 country-years fitting this description. Of our 41 female defense ministers, seven were first appointed in these regimes. In each instance, the woman selected was a civilian and, in several cases, a human rights activist.

Next, we argue that countries that have diversified their defense portfolios to include peacekeeping efforts are more likely to first appoint women to these posts (Hypothesis 7). To account for this diversification, we include an indicator variable that distinguishes states that *commit at least one peacekeeping troop* in the previous year from those that do not. This measure from Kathman (2013) is based on data gathered by the UN Department of Peacekeeping Operations. In total, 1,671 country-years in our analysis (or 54.5% of the observations) were involved in peacekeeping assignments. Of the instances in which a female defense minister is first appointed, 33

come from states that were involved in these missions in the year preceding the appointment. Extending this logic, our last hypothesis posits that peacekeeping mitigates the relationship between military spending and women's exclusion from the defense ministry (Hypothesis 8). To test this claim, we include an *interaction effect between peacekeeping and military spending*.

### Other Factors Shaping Women's Appointments

We control for four other factors that might otherwise bias our results. First, over time, leaders become more likely to appoint a female defense minister. Our model therefore includes *mean-centered linear and mean-centered quadratic measures of time*. These time controls constitute the baseline effects of the duration model (see the SI). Next, although our measures of female elites most directly capture the supply of women for the post, we account for domain-specific and societal factors that may increase the number of prospective female nominees. For the former, we created a new variable to identify the country-years in which women were allowed to serve in *frontline combat positions*. We expect that when more women have military training and experience, women are more likely to be perceived as having the military expertise necessary to hold the post. For the latter, we follow Krook and O'Brien (2012) by including a measure of female *labor force participation*. Finally, because advanced industrialized democracies have been shown to have different attitudes toward both women's representation and defense, we control for *membership in the Organization for Economic Co-operation and Development (OECD)*.<sup>8</sup>

### Modeling Strategy

Our outcome variable—the time between the end of the Cold War and the appointment of the first female defense minister—is the survival or duration time.<sup>9</sup> As the exact date of women's nomination to the post is unknown in most cases, this duration time is discretized into years. The time to first female defense minister is thus modeled using a logistic discrete-time duration model. One of our covariates—fatal disputes—perfectly predicts women's continued exclusion from the defense ministry. That is, a country involved in a deadly international

<sup>8</sup>See the SI for a discussion of the results associated with the control variables introduced in this section and a discussion of model specifications including other controls.

<sup>9</sup>See the SI for information on model fit.

conflict has never first appointed a woman to the defense portfolio in the subsequent year. When a covariate perfectly predicts the response—i.e., when we encounter complete separation—its parameter estimate diverges to infinity. To address this complete separation, we use a bias reduction method originally proposed by Firth (1993). Firth's penalized likelihood approach always yields finite estimates of parameters under complete separation, and simulation results indicate that even under extreme conditions, these estimates have relatively little bias (Heinze and Schemper 2002).<sup>10</sup>

## Results

In the following subsections, we discuss the findings from a discrete-time duration analysis estimated using Firth's penalized likelihood approach and reported in Table 1. Interpreting the results from this model is straightforward. The exponentiated coefficient estimates (last column in the table) represent the effect of a one-unit increase in the covariate on the relative odds of first appointing a female defense minister in year  $t_i$  given "survival" as a male-dominated post up to the end of the previous year. A value above (below) 1 indicates a greater (lesser) likelihood of first appointing a female defense minister as the value of the covariate increases. An estimate that is significant and far from 1 thus suggests that a one-unit increase in the explanatory variable has a large effect on the country's survival probability.

### The Nature of the Defense Ministry and Women's Exclusion from Power

We argue that traditional beliefs about masculinity and power facilitate women's continued exclusion from the ministry of defense. Our first hypothesis focuses on state involvement in fatal disputes. To capture the conflicts that are most likely to shape government behavior on this front, we focus on the country's involvement in interstate hostilities with at least one battle death. As posited in Hypothesis 1, when the military is involved in these conflicts, the defense portfolio is significantly more likely to remain male dominated. As compared to cabinets in countries that are not involved in deadly interstate disputes, the relative odds of female appointment for these states are just 0.14 (a sevenfold decrease). In fact, and as noted above, across the entire time period under study

<sup>10</sup>Coefficient estimates, standard errors, and predicted values were generated using the `logistf` and `brglm` packages in R.

**TABLE 1 Logistic Discrete-Time Duration Model (with Firth's Correction) of Women's Appointment as Defense Ministers**

	Estimate	Std. Error	P-value	exp(estimate)
Intercept	-2.68	1.01	0.01	0.07
Time	0.07	0.03	0.04	1.07
Time <sup>2</sup>	-0.01	0.01	0.07	0.99
Fatal Dispute	-1.95	1.31	0.06	0.14
Military Dictatorship	-1.49	0.80	0.03	0.23
% Fem. MP	0.04	0.02	0.05	1.04
Female Executive	1.12	0.41	0.02	3.05
Left Government	-0.19	0.40	0.65	0.83
Former Military Dictatorship	-0.70	0.47	0.14	0.50
Peacekeeping	-1.25	1.00	0.26	0.29
log(Military Spending)	-0.42	0.20	0.04	0.66
OECD	-0.63	0.49	0.22	0.53
Fem. Labor Force Part.	-0.00	0.01	0.78	1.00
Wom. in Combat	0.41	0.51	0.45	1.51
Left-Led Former Military Dictatorship	1.37	0.70	0.06	3.92
Peacekeeping × log(Military Spending)	0.45	0.22	0.05	1.57

Notes: The unit of analysis is the country. The outcome variable is the initial selection of a female defense minister. The time covariates capture the number of years since 1992 (or state founding date if later). Number of Observations = 3,064 country-years.

there are no cases in which a country that experienced a battle death appointed its first female defense minister in the subsequent year.<sup>11</sup>

Lending support to Hypothesis 2, the ministry of defense is also significantly more likely to remain male-led in military dictatorships. As compared to other regimes, the relative odds of female appointment in these countries are just 0.23 (an almost fivefold decrease). Figure 1 plots the survival probabilities for these regimes over time. Like other states, the probability that the defense portfolio in military dictatorships survives as a male-dominated post is near 1 during the first year of the study. Unlike other regime types, however, the survival probability for these states remains high over time (never falling below 0.90). Indeed, the only woman to occupy such a position was Lesego Motsumi, who was selected as acting defense minister of Botswana in 2010.<sup>12</sup> With the exception of this interim appointment in an atypical military dictatorship, women remain wholly excluded from power in these states.

Finally, we posit that larger military expenditures are associated with women's exclusion from the defense ministry (Hypothesis 3), but only among countries that refrain from peacekeeping (Hypothesis 8). Consistent

with our expectations, the marginal effect for military spending is negative and significant when peacekeeping equals 0. That is, states that invest a great deal of resources in defense and do not engage in peacebuilding activities are significantly less likely to select a woman to head this portfolio. The interaction effect, however, is positive. In fact, participation in peacekeeping missions counterbalances the effect of defense spending. The interaction term differentiates countries like Denmark and Canada—which invest in the military with more peaceful aims—from those including Iran and Burma, which are more focused on state security. The latter are especially unlikely to nominate female defense ministers.<sup>13</sup>

### Changing Nature of Women's Role in Politics and Women's Inclusion in Power

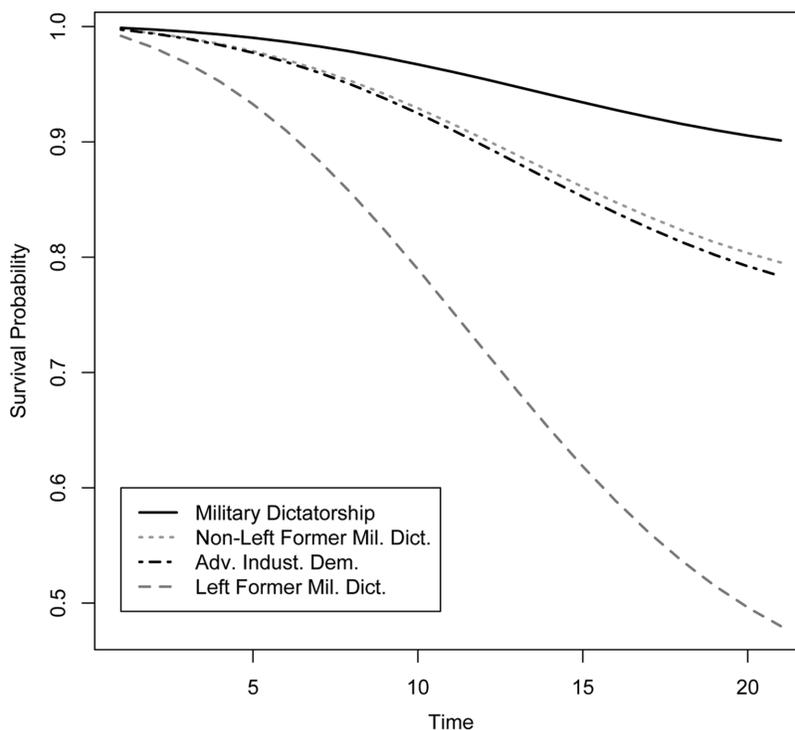
Shifting focus from exclusion to inclusion, the selection of a female defense minister is most likely when beliefs about both women's role in politics and the remit of the ministry have fundamentally changed. With respect to the feminization of politics, the covariates capturing women's presence in elected office affect women's nomination to this post. Consistent with Hypothesis 4, a 10% gain in

<sup>11</sup>This finding holds for other conflict measures (see the SI).

<sup>12</sup>See the SI for coding rules to classify Botswana and alternative specifications that exclude and reclassify this case.

<sup>13</sup>See the SI for analyses with alternative measures of military strength.

**FIGURE 1 Probability of Defense Ministry Remaining Male Dominated Over Time**



Note: Survival probabilities were generated holding all other variables at their median or modal values.

women's seat share in parliament increases the relative odds of appointment by a factor of 1.47. This represents a one-and-a-half-fold increase. Not surprisingly, countries where women's numeric representation far exceeds the global average—including Argentina, Denmark, Finland, the Netherlands, Norway, Spain, and Sweden—have each appointed female defense ministers.<sup>14</sup>

Offering support for Hypothesis 5, the presence of a female chief executive has an even greater effect on the selection of female defense ministers. As compared to their male counterparts, the relative odds of a female appointee increase by 3.05 with a female state leader (a more than threefold gain). This effect, however, is driven almost entirely by self-appointments. In six countries—14.6% of cases—women preside over the defense portfolio while serving as chief executive. As prime minister of Jamaica, for example, Portia Simpson-Miller held the defense portfolio from 2006 to 2007 and again in 2012. When controlling for female self-appointments, the covariate capturing female chief executives loses significance, indicating that the positive correlation shown in Table 1

is explained by supply-side rather than demand-side factors (see the SI).<sup>15</sup> That is, rather than female chief executives letting down the ladder to other women (O'Brien et al. 2015), they are taking the position for themselves. At the same time, self-appointments represent an important mechanism through which women first access the defense ministry.

### Changing Nature of the Ministry of Defense and Women's Inclusion in Power

Beyond the feminization of politics, the covariates capturing the changing nature of the ministry of defense are also significant. First, women's limited access to the defense ministry under military rule stands in sharp contrast to women's appointments in former military dictatorships. The prospect of nominating the first female defense minister increases dramatically in these regimes. This relationship, however, is conditioned on government ideology. Consistent with Hypothesis 6, left-wing governments in former military states are significantly more likely than

<sup>14</sup>See the SI for analyses with alternative measures of the feminization of politics and supply-side factors.

<sup>15</sup>The direction and significance of the other predictors remain largely unchanged.

non-left former military dictatorships to first allocate this portfolio to a woman (though there is no difference between left and right executives in other regimes).<sup>16</sup>

Figure 1 clearly illustrates these findings. Initially, all regimes are likely to remain male dominated, and for many states these survival probabilities remain high over time. Even in former military dictatorships, after 10 years of non-left-party governments the probability of the state surviving without a female defense minister is 0.93, and by year 15 it is still 0.86. In contrast, over time, left-leaning governments in former military dictatorships are much more likely to first appoint a woman to this portfolio than any other type of regime. Their probability of surviving without a female defense minister drops to 0.79 by year 10 and 0.62 by year 15. While left-leaning governments in these states are unlikely to immediately choose a woman to fill this role—in part because of the need to balance competing interests directly following the transition—national history and governing ideology can together create the space for the eventual appointment of women to these posts.

Since the end of the Cold War, women have broken the glass ceiling in seven former military dictatorships now led by left-wing executives. The appointment of Michelle Bachelet in Chile in 2002, for example, was particularly symbolic given the human rights abuses incurred by her family under the brutal former military dictator, Augusto Pinochet. Her selection is thus a clear break from Chile's legacy of military abuse of power. Similar trends are observed in former military states across Latin America, including Uruguay, Argentina, and Ecuador. The appointment of female defense ministers sends a strong signal to domestic and international audiences about the redefined role of the armed forces vis-à-vis the state.

The relationship between peacekeeping forces and time to first female defense minister (Hypothesis 7) further supports our theory. At median levels of defense spending, peacekeeping states are significantly more likely than their non-peacekeeping counterparts to select a female defense minister. Although increasing military expenditures from the first to the third quartile decreases the likelihood of women's appointment among countries that do not engage in peacekeeping operations, the hazard ratio remains effectively unchanged among peacekeepers. Notably, Bangladesh, Sweden, and Canada—which rank among the most frequent contributors to peacekeeping missions in the post-Cold War period—have each nominated female defense ministers.

<sup>16</sup>This result does not hold for former civilian dictatorships (see the SI).

## Other Factors Shaping Women's Access to Power

Finally, our models include four control variables. With respect to time, the linear coefficient is positive, whereas the quadratic term is negative. Plotting the baseline odds suggests that countries were least likely to first appoint a female defense minister in the years immediately following the end of the Cold War. Through the mid-2000s, states became more likely to select women for this role over time. At this point, the baseline probability of women's appointment began to decline. Though the baseline odds of the initial selection of a female defense minister are still greater in 2012 than in 1992, they are lower than they were in 2005. Turning to the other controls, neither the domain-specific nor societal measure of supply is correlated with the appointment of a female defense minister (see the SI for discussion). Likewise, the covariate capturing advanced industrialized democracies is not significant.

## Implications of Women's Appointments to the Defense Ministry

The appointment of female defense ministers has important implications for women's descriptive, symbolic, and substantive representation. With respect to descriptive representation, research examining ministers' career patterns after they exit their initial post demonstrates that both men and women leverage their political capital and experience to maneuver into other influential positions (Claveria and Verge 2015). Serving in the defense ministry helps women gain the credentials necessary to take on other high-profile public- and private-sector posts.

Women's appointments can also shatter the glass ceiling and grant other women access to power. Of the 41 countries appointing a female defense minister, over one-quarter have subsequently nominated another woman to the post. Preliminary analyses further indicate that the appointment of a female defense minister increases the likelihood of women's ascension to other prestigious portfolios, including foreign affairs and finance (see the SI). Women's inclusion in this ministry thus fundamentally alters traditional gendered patterns of governance.

As for symbolic consequences, women's presence in politics engenders political engagement among female citizens (Barnes and Burchard 2013) and fosters trust and satisfaction with the government (Karp and

Banducci 2008). Female political leaders transform gendered ideas about leadership and inspire confidence in women's ability to govern (Alexander 2012; Alexander and Jalalzai 2016; Morgan and Buice 2013). Given that cabinet ministers in general—and defense ministers in particular—are more visible than other politicians (Escobar-Lemmon and Taylor-Robinson 2016), the appointment of women to this portfolio may encourage political participation and feelings of efficacy among female citizens (Barnes and Taylor-Robinson 2018). Likewise, women's nominations may alter perceptions of, and erode gendered beliefs about, the military and national defense.

Finally, ministers are among the most important state policy actors, and women's presence in cabinets has already been shown to influence defense and foreign policy. Yet, the direction of these effects is disputed. The presence of female foreign policy leaders is in some cases associated with gender-focused aid and “pro-feminist [policy] rhetoric” (Bashevkin 2014). At the same time, female defense ministers increase military expenditures and conflict behavior (Koch and Fulton 2011), and female foreign ministers decrease foreign aid spending (Lu and Breuning 2014). Moving forward, more work is needed to elucidate the conditions under which female defense ministers promote hawkish or dovish policies.

Beyond spending and conflict behavior, there are likely other implications associated with women's presence in the defense portfolio. Female ministers, for example, may bring more women into the defense domain, encourage a redefinition of combat roles that includes female soldiers, and alter the procedures for dealing with rape and assault in the military, among other institutional reforms. Indeed, a preliminary analysis suggests that the presence of a female defense minister increases the likelihood that women are allowed to serve in frontline combat roles (see the SI). Women's appointment to this post thus has clear implications far beyond descriptive representation alone.

## Conclusions

Despite the importance of the defense ministry, no study to date has asked when and where women gain access to this position, nor what the growing number of female defense ministers might suggest about the portfolio itself. Our comprehensive study demonstrates that women remain excluded from the post when its remit reinforces conventional expectations about its masculinity and prominence. They are more likely to be appointed to the position, in contrast, when politics is feminized

and when the portfolio has become less masculine and conflict centered.

These results provide cause for optimism and pessimism alike. On one hand, if women continue to make gains in parliament, the feminization of politics will likely erode traditional patterns of male dominance in many arenas, paving the way for women's inclusion in high-profile legislative and executive posts. On the other hand, this does not imply that all cabinet positions are now accessible to women. As we have made clear, the meaning and significance attached to the defense ministry vary considerably across countries. Importantly, it is in states where the portfolio has arguably become less masculine (and less conflict oriented) that women have made the greatest inroads. Thus, even after women have made gains in politics more broadly, they continue to face barriers to the most masculine (and desirable) posts.

Extending this logic, our work highlights the importance of considering the variable meanings attached to political posts over place and time. As with the ministry of defense, the perceptions and remit of other high-prestige and masculine positions likely shape women's access to power. Our theoretical framework encourages scholars to consider the (re)gendering of political appointments. This approach can be used to identify the unique mechanisms promoting women's inclusion in (and exclusion from) the last bastions of male power both within and beyond the executive branch.

## References

- Alexander, Amy C. 2012. “Change in Women's Descriptive Representation and the Belief in Women's Ability to Govern: A Virtuous Cycle.” *Politics & Gender* 8(4): 437–64.
- Alexander, Amy C., and Farida Jalalzai. 2016. “The Symbolic Effects of Female Heads of States: A Global Perspective.” In *The Gendered Executive*, ed. MaryAnne Borrelli and Janet Martin. Philadelphia: Temple University Press, 24–43.
- Arriola, Lenardo, and Martha C. Johnson. 2014. “Ethnic Politics and Women's Empowerment in Africa: Ministerial Appointments to Executive Cabinets.” *American Journal of Political Science* 58(2): 495–510.
- Barnes, Tiffany D. 2016. *Gendering Legislative Behavior*. New York: Cambridge University Press.
- Barnes, Tiffany D., and Stephanie M. Burchard. 2013. “Engendering Politics: The Impact of Descriptive Representation on Women's Political Engagement in Sub-Saharan Africa.” *Comparative Political Studies* 47(7): 767–90.
- Barnes, Tiffany D., and Michelle Taylor-Robinson. 2018. “Women Cabinet Ministers and Empowerment of Women.” In *Measuring Women's Political Empowerment across the*

- Globe*, ed. Amy Alexander, Catherine Bolzendahl, and Farida Jalalzai. Basingstoke, UK: Palgrave Macmillan, 229–55.
- Bauer, Gretchen, and Manon Tremblay, eds. 2011. *Women in Executive Power: A Global Overview*. London: Routledge.
- Bashevkin, Sylvia. 2014. “Numerical and Policy Representation on the International Stage: Women Foreign Policy Leaders in Western Industrialised Systems.” *International Political Science Review* 35(4): 409–29.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. “New Tools in Comparative Political Economy: The Database of Political Institutions.” *World Bank Economic Review* 15(1): 165–76.
- Bego, Ingrid. 2014. “Accessing Power in New Democracies: The Appointment of Female Ministers in Postcommunist Europe.” *Political Research Quarterly* 67(2): 347–60.
- Bland, Douglas L. 2001. “Patterns in Liberal Democratic Civil-Military Relations.” *Armed Forces & Society* 27(4): 525–40.
- Blondel, Jean. 1987. *Political Leadership*. London: Sage.
- Borrelli, MaryAnne. 2002. *The President’s Cabinet*. Boulder, CO: Lynne Rienner.
- Brooker, Paul. 2014. *Non-democratic Regimes*. 3rd ed. Basingstoke, UK: Palgrave Macmillan.
- Brauner, Jennifer. 2015. “Military Spending and Democracy.” *Defence and Peace Economics* 26(4): 409–23.
- Caprioli, Mary, and Mark A. Boyer. 2001. “Gender, Violence, and International Crisis.” *Journal of Conflict Resolution* 45(4): 503–18.
- Carothers, Thomas. 2002. “The End of the Transition Paradigm.” *Journal of Democracy* 13(1): 5–21.
- Cheibub, José Antonio, Jennifer Gandhi, and James Raymond Vreeland. 2010. “Democracy and Dictatorship Revisited.” *Public Choice* 143(1–2): 67–101.
- Claveria, Sílvia. 2014. “Still a ‘Male Business’? Explaining Women’s Presence in Executive Office.” *West European Politics* 37(5): 1156–76.
- Claveria, Sílvia, and Tània Verge. 2015. “Post-Ministerial Occupation in Advanced Industrial Democracies: Ambition, Individual Resources and Institutional Opportunity Structures.” *European Journal of Political Research* 54(4): 819–35.
- Davis, Rebecca Howard. 1997. *Women and Power in Parliamentary Democracies*. Lincoln: University of Nebraska Press.
- DeGroot, Gerard J. 2001. “A Few Good Women: Gender Stereotypes, the Military and Peacekeeping.” *International Peacekeeping* 8(2): 23–38.
- Enloe, Cynthia. 1993. *The Morning After: Sexual Politics at the End of the Cold War*. Berkeley: University of California Press.
- Escobar-Lemmon, Maria, and Michelle M. Taylor-Robinson. 2005. “Women Ministers in Latin American Government.” *American Journal of Political Science* 49(4): 829–44.
- Escobar-Lemmon, Maria, and Michelle M. Taylor-Robinson. 2009. “Getting to the Top: Career Paths of Women in Latin American Cabinets.” *Political Research Quarterly* 62(4): 685–99.
- Escobar-Lemmon, Maria, and Michelle M. Taylor-Robinson. 2016. *Women in Presidential Cabinets: Power Players or Abundant Tokens?* New York: Oxford University Press.
- Falk, Erika, and Kate Kenski. 2006. “Issue Saliency and Gender Stereotypes: Support for Women as President in Times of War and Terrorism.” *Social Science Quarterly* 87(1): 1–18.
- Firth, David. 1993. “Bias Reduction of Maximum Likelihood Estimates.” *Biometrika* 80(1): 27–38.
- Fortna, Virginia Page. 2004. “Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace after Civil War.” *International Studies Quarterly* 48(2): 269–92.
- Geddes, Barbara, Joseph Wright, and Erica Frantz. 2014. “Autocratic Breakdown and Regime Transitions: A New Data Set.” *Perspectives on Politics* 12(2): 313–31.
- Ghosn, Faten, and Scott Bennett. 2003. *Codebook for the Dyadic Militarized Interstate Incident Data, Version 3.10*. <http://correlatesofwar.org>.
- Gyarmati, István, and Theodor Winkler, eds. 2002. *Post-Cold War Defense Reform*. Washington, DC: Potomac Books.
- Heinze, George, and Michael Schemper. 2002. “A Solution to the Problem of Separation in Logistic Regression.” *Statistics in Medicine* 21(16): 2409–19.
- Holman, Mirya, Jennifer Merolla, and Elizabeth Zechmeister. 2011. “Sex, Stereotypes, and Security: An Experimental Study of the Effect of Crises on Assessments of Gender and Leadership.” *Journal of Women, Politics, and Policy* 32(3): 173–92.
- Holman, Mirya, Jennifer Merolla, and Elizabeth Zechmeister. 2016. “Terrorist Threat, Male Stereotypes, and Candidate Evaluations.” *Political Research Quarterly* 69(1): 134–47.
- Jacob, Suraj, John A. Scherpereel, and Melinda Adams. 2014. “Gender Norms and Women’s Political Representation: A Global Analysis of Cabinets, 1979–2009.” *Governance* 27(2): 321–45.
- Jalalzai, Farida. 2013. *Shattered, Cracked, or Firmly Intact? Women and the Executive Glass Ceiling Worldwide*. New York: Oxford University Press.
- Johnson, Jesse C., and Tiffany D. Barnes. 2011. “Responsibility and the Diversionary Use of Force.” *Conflict Management and Peace Science* 28(5): 478–96.
- Karp, Jeffrey, and Susan Banducci. 2008. “When Politics Is Not Just a Man’s Game: Women’s Representation and Political Representation.” *Electoral Studies* 27(3): 105–15.
- Kathman, Jacob D. 2013. “United Nations Peacekeeping Personnel Commitments, 1990–2011.” *Conflict Management and Peace Science* 30(5): 532–49.
- Koch, Michael T. 2009. “Governments, Partisanship, and Foreign Policy: The Case of Dispute Duration.” *Journal of Peace Research* 46(6): 799–817.
- Koch, Michael T., and Sarah A. Fulton. 2011. “In the Defense of Women: Gender, Office Holding and National Security Policy in Established Democracies.” *Journal of Politics* 73(1): 1–16.
- Krook, Mona Lena, and Diana Z. O’Brien. 2012. “All the President’s Men? The Numbers and Portfolio Allocations of Female Cabinet Ministers.” *Journal of Politics* 74(3): 840–55.
- Krook, Mona Lena, Diana Z. O’Brien, and Krista M. Swip. 2010. “Military Invasion and Women’s Political

- Representation: Gender Quotas in Post-Conflict Afghanistan and Iraq." *International Feminist Journal of Politics* 12(1): 65–78.
- Lawless, Jennifer L. 2004. "Women, War, and Winning Elections: Gender Stereotyping in the Post-September 11th Era." *Political Research Quarterly* 57(3): 479–90.
- Lu, Kelan, and Marijke Breuning. 2014. "Gender and Generosity: Does Women's Representation Affect Development Cooperation?" *Politics, Groups, and Identities* 2(3): 313–30.
- Morgan, Clifton, and Kenneth N. Bickers. 1992. "Domestic Discontent and the External Use of Force." *Journal of Conflict Resolution* 36(1): 25–52.
- Morgan, Jana, and Melissa Buice. 2013. "Latin American Attitudes toward Women in Politics: The Influence of Elite Cues, Female Advancement, and Individual Characteristics." *American Political Science Review* 107(4): 644–62.
- Murray, Rainbow. 2010. *Cracking the Highest Glass Ceiling: A Global Comparison of Women's Campaigns for Executive Office*. Santa Barbara, CA: Praeger.
- Nordhaus, William, John R. Oneal, and Bruce Russett. 2012. "The Effects of the International Security Environment on National Military Expenditures: A Multicountry Study." *International Organization* 66(3): 491–513.
- O'Brien, Diana Z. 2015. "Rising to the Top: Gender, Political Performance, and Party Leadership in Parliamentary Democracies." *American Journal of Political Science* 59(4): 1022–39.
- O'Brien, Diana Z., Matthew Mendez, Jordan Carr Peterson, and Jihyun Shin. 2015. "Letting Down the Ladder or Shutting the Door: Female Prime Ministers, Party Leaders, and Cabinet Members." *Politics & Gender* 11(4): 689–717.
- Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." *Conflict Management and Peace Science* 32(2): 222–42.
- Paxton, Pamela, Jennifer Green, and Melanie Hughes. 2008. "Women in Parliament, 1945–2003: Cross-National Dataset." Ann Arbor, MI: ICPSR. <https://doi.org/10.3886/ICPSR24340>.
- Perlo-Freeman, Sam, Julian Cooper, Olawale Ismail, Elisabeth Sköns, and Carina Solmirano. 2011. "Military Expenditure." In *SIPRI Yearbook 2011: Armaments, Disarmament and International Security*. Oxford: Oxford University Press. Retrieved 15 Nov. 2017, from <http://www.sipriyearbook.org/view/9780199695522/sipri-9780199695522-miscMatter-5.xml>, 157–229.
- Reynolds, Andrew. 1999. "Women in the Legislatures and Executives of the World: Knocking at the Highest Glass Ceiling." *World Politics* 51(4): 547–72.
- Roniger, Luis, and Mario Sznajder. 1999. *The Legacy of Human Rights Violations in the Southern Cone: Argentina, Chile, and Uruguay*. New York: Oxford University Press.
- Trimble, Linda, and Manon Tremblay. 2005. "Representation of Canadian Women at the Cabinet Table." *Atlantis: Critical Studies in Gender, Culture & Social Justice* 30(1): 31–45.
- Viola, Eduardo, and Scott Mainwaring. 1984. "New Social Movements, Political Culture, and Democracy: Brazil and Argentina in the 1980s." *Telos* 61: 17–52.
- Whitford, Andrew, Vicky M. Wilkins, and Mercedes G. Ball. 2007. "Descriptive Representation and Policymaking Authority: Evidence from Women in Cabinets and Bureaucracies." *Governance* 20(4): 559–80.
- Whitten, Guy D., and Laron K. Williams. 2011. "Buttery Guns and Welfare Hawks: The Politics of Defense Spending in Advanced Industrial Democracies." *American Journal of Political Science* 55(1): 117–34.

## Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

- 1 Overview of the Outcome Variable
- 2 Overview of the Explanatory Variables
- 3 Supply of Prospective Female Cabinet Ministers
- 4 Recovery from Conflict
- 5 Cabinet Size
- 6 Regime Type
- 7 Government Type
- 8 Importance of the Defense Ministry
- 9 Quota Policies
- 10 Interstate Relations
- 11 Conflict Measure
- 12 Excluding Self-Appointments
- 13 Model Fit
- 14 Predicting Women's Appointment to Other High-Prestige Posts
- 15 Predicting Women in Combat