Rising to the Top: Gender, Political Performance, and Party Leadership in Parliamentary Democracies

Abstract

Party leaders are the main actors controlling campaign strategies, policy agendas, and government formation in advanced parliamentary democracies. Little is known, however, about gender and party leadership. In order address this gap in our knowledge, I examine gendered leadership patterns across 55 political parties in 10 parliamentary democracies between 1965 and 2013. I show that men and women have different access to, and experiences in, the party leadership and that these gendered political opportunity structures are largely determined by parties' political performances. Women are more likely to both enter into and leave leadership posts when their parties are performing poorly. Though women have gained greater access to the party leadership, the results expose the persistent gender biases facing female politicians.

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Women's entrance into politics has fundamentally transformed the face of political parties in the modern era. Though once excluded from national-level positions, women's presence in parliament has markedly risen in advanced industrial democracies. Indeed, few parties in these states would now consider forwarding an exclusively, or even predominantly, male slate of candidates. While women are now more likely to participate in legislative politics, power is progressively shifting from the parliamentary delegation to the party leader (Poguntke and Webb 2005). These leaders are increasingly central to parties' vote-, office-, and policy-seeking behavior, making women's inclusion in these posts necessary to ensure their full access to power.

Though not widely studied, there is reason to believe that men and women do not enjoy the same opportunities with respect to the party leadership. To begin with, a number of left-leaning organizations with many female MPs and supporters have yet to select a woman for the post, including the British Labour Party and German Social Democrats.[1] Additionally, several of the most well known cases of women ascending to power involve opposition parties facing major challenges. Consider, for example, Margaret Thatcher in the British Conservative Party and Angela Merkel in the German CDU. Finally, even after gaining office, female leaders must endure continued focus on their sex. Indeed, there are well-documented incidences of female leaders encountering both implicit and explicit sexism.

In this paper, I show that men and women do, in fact, have differential access to, and experiences in, the party leadership. These gendered political opportunity structures are fundamentally shaped by parties' political performances. The party's performance determines the attractiveness of the post and the organization's willingness to deviate from the status quo with respect to leadership selection. In this way, it helps shape women's initial access to power. Leaders, in turn, are evaluated based on their ability to bolster their party's political performance. These evaluations, however, are not

[1]While women have twice briefly led the British Labour party, this was only in an interim capacity after being automatically promoted from the deputy leader post.

gender neutral and thus differentially impact men's and women's tenure in the post.

In exploring the link between gender, political performance, and the party leadership, I first outline the importance of women's access to these positions and present data on female party leaders from across 10 parliamentary democracies between 1965 and 2013. I then introduce four hypotheses linking women's initial ascension to the post to parties' political performance. The results from the discrete time duration model suggest that women are most likely to first come to power in minor parties that are in opposition and in parties that are losing seat share. Extending this research, I posit two additional hypotheses concerning gender, political performance, and leaders' tenure in office. The empirical analysis suggests that when political parties are losing seat share, female party leaders are more likely to leave the post than similarly situated men.

The results thus present a nuanced portrait of the role gender plays in politicians' inclusion in leadership posts. The data show that women have gained greater access to these positions in recent years. Indeed, a majority of parties have now been female-led. There is also no difference between female and male leaders' tenure in office when parties maintain their seat-share. Despite these positive movements, women continue to face additional barriers in their entrance to, and survival in, office. Women's initial access to power increases when the post is least attractive. When the position is most desirable, men are more likely to retain control. After gaining office, moreover, female leaders are also more likely than men to leave the position when facing an unfavorable electoral trajectory. Women's exclusion from desirable posts and greater punishment for poor performances is normatively problematic. It suggests that biases against women remain entrenched in intra-party politics.

The Importance of Women's Access to the Party Leadership

The women and politics literature has dedicated significant attention to outlining the institutional and cultural factors that determine women's presence in legislatures. A grow-

ing number of studies also focus on explaining women's access to executive branch positions, including women's presence among national leaders (Jalalzai 2008, 2013) and cabinet ministers (Davis 1997, Escobar-Lemmon and Taylor-Robinson 2005, Krook and O'Brien 2012, Reynolds 1999). In contrast to this wide body of research, and despite the important role played by party leaders, to date there has been comparatively little research on women's access to these positions.

Much of the existing research of female leaders focuses on individual women, often highlighting the exceptional circumstances that led to their selection (Harris 1988, McKay 2004, Wiliarty 2008). The studies that aim to make more general claims examine variation within a single country (O'Neill and Stewart 2009) or across a limited set of states in which women rarely come to power (Cross and Blais 2012*b*). The most comprehensive study thus far focuses on parties' national executive committees, rather than party leaders (Kittilson 2006).

While women's access to party leadership is important in all contexts, it deserves special attention in advanced parliamentary democracies. In these states, political parties represent "*the* central mechanism" by which the democratic processes of delegation and accountability work in practice (Müller 2000, 309, emphasis in the original). Within these parties, the leader plays an especially important role. During elections, there is significant leader-centered campaigning and media coverage (Poguntke and Webb 2005). Evaluations of party leaders influence vote choice and the (un)popularity of the party leader can determine an organization's electoral success (Bittner 2011, Stewart and Clarke 1992). After elections, governments are established, sustained, and terminated based on the decisions of party leaders (Laver and Schofield 1990). The leader also typically holds the most prestigious government post available to the party when in office, including the position of prime minister. In fact, to understand when and why women become heads of government, it is first necessary to know how they came to lead their parties.

Beyond shaping access to office, the leader also helps determine the policies his or her party aims to implement once in government (Wilson 1994, Harmel and Janda 1994). Leaders' unique talents and visions influence their parties' electoral manifestos, with changes in leadership altering party policy (Harmel et al. 1995). The increasing personalization of politics in parliamentary democracies has further enhanced this power. Leaders now enjoy even greater autonomy in both the national political executive (Poguntke and Webb 2005) and intra-party policy-making processes (McAllister 2007).

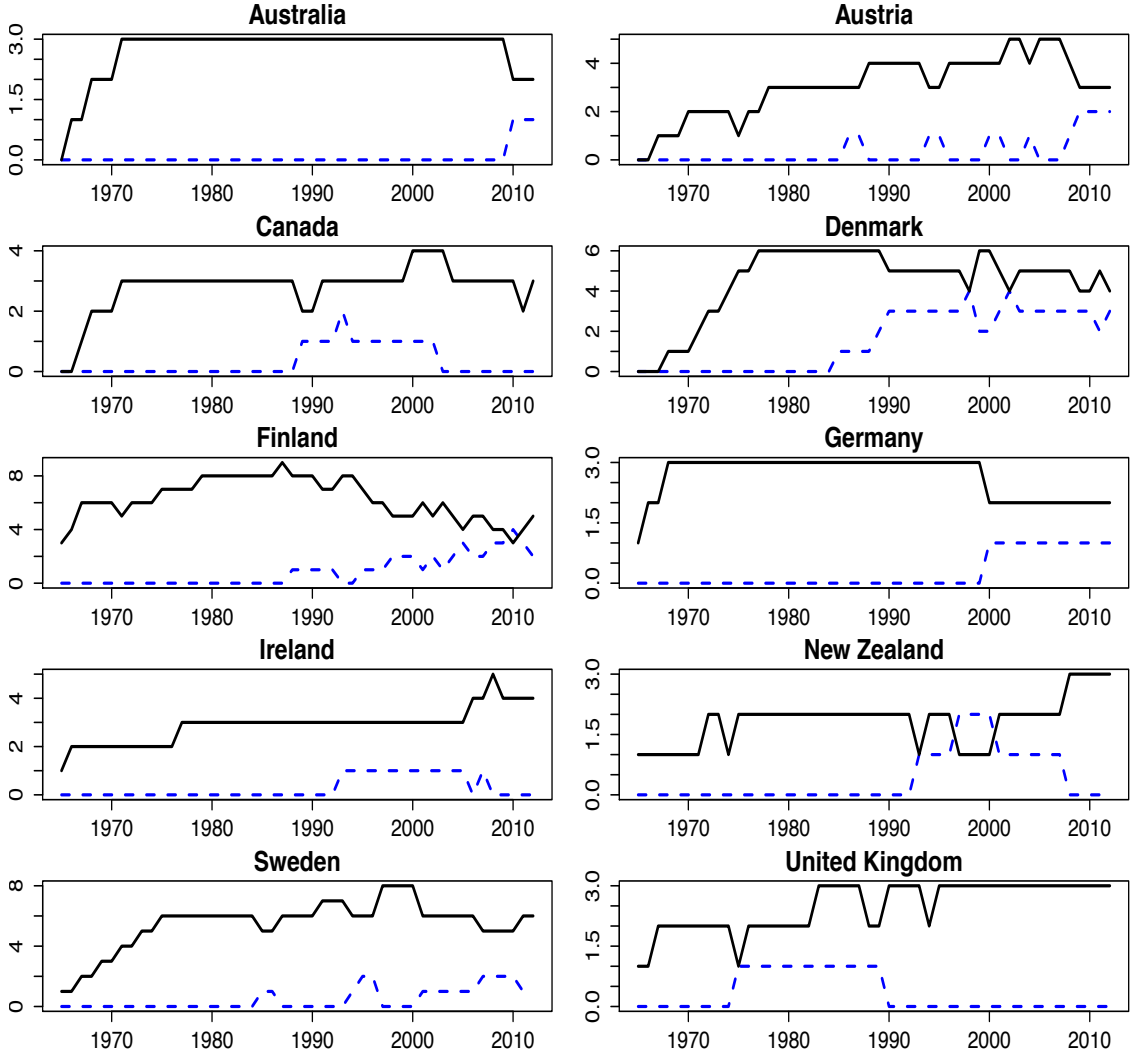
Since leaders shape parties' vote-, office-, and policy-seeking behavior, for those concerned with gender equality in politics it is crucial to determine the circumstances under which women can access and retain these powerful positions. In particular—and in contrast to backbench MPs—female leaders can exert significant influence over women's descriptive, substantive, and symbolic representation. Women's presence among party elites, for example, increases the number of female candidates and elected officials (Cheng and Tavits 2011, Kunovich and Paxton 2005). Parties with greater numbers of female internal officeholders are also more likely to adopt affirmative action policies for female candidates (Caul 2001, Kittilson 2006). As well as bolstering women's presence in office, female party leaders may also shape women's policy representation. The greater the number of women on parties' executive committees, for example, the more likely the party is to discuss social justice issues on its platform (Kittilson 2011). Finally, the selection of a female leader may shatter the glass ceiling, not only allowing other women to ascend to the post (Jalalzai and Krook 2010) but also improving voters' perceptions of female leaders' effectiveness and weakening traditional gender stereotypes about women's role in the public and private sphere (Beaman et al. 2009, 2012).

The Prevalence of Female Party Leaders

While significant attention has been dedicated to a small number of high-profile female leaders, the selection of women for this position continues to be viewed as a rare event.

Studies of women's descriptive representation thus rarely consider party leaders, and work on the selection and removal of party leaders often does not address gender. Despite this assumption, Figure 1 shows that there have been many more female leaders than previously assumed.

Figure 1: Time Series Plots of Male and Female Party Leadership by Country



Note: The plot graphically depicts the number of male (solid line) and female (dashed line) party leaders per country over time.

Based on an original dataset containing information on 55 parties between January 1965 through July 2013, Figure 1 illustrates the patterns of men's and women's access to the party leadership in 10 countries: Australia, Austria, Canada, Denmark, Ger-

many, Finland, Ireland, New Zealand, Sweden, and the United Kingdom.[2] Of the 328 leaders in the dataset, 45 (or 14%) are women. A bare majority of organizations have also selected at least one female leader, with women reaching the top position in 29 of the 55 total parties included in the analysis. Just as female leadership is not restricted to a small group of parties, neither is it limited to a few states. All 10 countries have had at least one female-led party.

While illustrating that female leadership is more common than often assumed, Figure 1 also shows that there are large differences in women's leadership both across and within states. Only one Australian and one German party in the dataset have had a female leader. In Ireland, women remain excluded from the leadership of all major parties. The Progressive Democrats are the only party to have ever chosen a female leader. In contrast, a woman has led seven of the eight Danish parties included in the analysis. Even within a single country, women's access to power can vary widely by party. In Sweden some organizations (such as the Christian Democrats and the Moderate Party) have never selected a female leader. Others have only once been led by a woman—including the Social Democrats and Liberal People's Party. Still other parties have had multiple female leaders.

Getting In: Women's Entrance into Party Leadership

Across these 55 parties, different trends emerge with respect to women's initial ascension to the party leadership. Some select a female leader relatively early. Margaret Thatcher became leader of the British Conservatives in 1975, for example. In others, women first came to power only recently. The Australian Labour Party, for instance, selected its first

[2]Data on party leaders in the five Westminster systems and the German organizations was provided by Cross and Blais (2012*a*,*b*) and Andrews and Jackman (2008). This was augmented with additional information on the Austrian, Danish, Finnish, and Swedish parties taken from the "World Political Leaders 1945-2005" database (de Zárate 2011). This data was supplemented with (and verified against) information from additional secondary sources (see supplementary information for a full list of parties in the dataset).

female leader in 2010. Finally, nearly half of all parties remain male-dominated.

What explains this variation in women's access to power? I argue that parties' political performances create distinct opportunity structures for male and female would-be leaders. In particular, I posit that women are likely to continue to be excluded from power when parties are performing well. A poor political performance, in contrast, makes the post less desirable to potential competitors and increases parties' willingness to deviate from the status quo and select new types of leaders. This creates opportunities for female aspirants to first enter into the party leadership.

To begin with, not only are women underrepresented in the upper echelons of power, but when they do access top positions they often occupy less sought-after posts than their male colleagues. It is not only the case, for example, that there are fewer female than male candidates nominated for elected office. Women are also less likely to run in winnable seats (Murray, Krook and Opello 2012, Ryan, Haslam and Kulich 2010). Similarly, just as women hold fewer cabinet positions than men, they are also more likely to be offered low-prestige portfolios and relegated to the least powerful positions in government (Escobar-Lemmon and Taylor-Robinson 2009, Reynolds 1999). To the extent that women have served as national leaders, they rarely lead the most internationally powerful countries (Jalalzai 2013) and are especially likely to act as ceremonial figureheads with real authority concentrated in their male counterparts (Jalalzai 2008, 2013).

Across political institutions, there is thus evidence that "women do best where competition is least" (Randall 1987, 146). That is, women are more likely to come to power in less attractive positions. For prospective party leaders, desirability is largely a function of their party's political performance. When the party is performing well, leaders are more likely to access the benefits of office and there may be many qualified male aspirants waiting to assume the post. When the party is performing poorly, the leadership position offers fewer benefits and comes with much greater costs.

Under these circumstances, there are likely to be fewer viable male challengers.

Indeed, Bynander and 't Hart (2008) note that when parties are in decline an accepted heir apparent to the incumbent leader is less likely to emerge. Poor performances thus present greater opportunities for women to first enter power. Consistent with this claim, Beckwith (2013) argues that crisis conditions within the party combined with candidacy deferral by quality male replacements can lead to the ascension of a female prime minister. More generally, a growing body of research suggests that women are likely to face a "glass cliff"—that is, they are more likely to be selected for leadership posts when there is a high risk of organizational and leadership failure (Ryan and Haslam 2005, 2007).

Beyond suppressing the number of competitors, a poor political performance may encourage parties to select new and different types of leaders. When a party is performing well, it has little incentive to deviate from the male-dominated status quo. When a party is performing poorly, it may be willing to pursue alternative strategies in an attempt to turn the tide in its favor. Poor performance may in fact not only make parties less wedded to male leadership, but may actually make female nominees more attractive to the selectorate. As comparative outsiders to electoral politics, women are less likely to be tarnished by "business-as-usual" politics and corruption (Dolan 1998). Women are thus often associated with change and renewal (Murray 2010) and the selection of a female leader can offer a visible break from the past (McKay 2004, Wiliarty 2008). For this reason, it is not surprising that experimental research finds that women are the preferred candidates for hard to win positions (Ryan, Haslam and Kulich 2010).

Taken together, this broad set of research suggests that the weaker a party's political performance, the sooner a woman will ascend to the top post. Drawing on this logic, I posit four hypotheses concerning time to selection of a female leader. In particular, I focus on parties' position in government, status in the party system, and electoral trajectory as the central determinants of this gendered political opportunity structure.

Hypothesizing about Performance and Women's Entrance into Power

The position of party leader is more desirable, and parties are more likely to adhere to the gendered status quo, when the organization is in government rather than opposition. At the most basic level, government participation provides parties with access to state resources that are necessary for their continued survival (Katz and Mair 1995). Serving in government also allows parties to enjoy the spoils of office and to implement their policy agendas. For these reasons, party leaders are chiefly motivated by office-seeking aims (Strøm 1990). Leaders within these parties have access to "plum jobs within the executive" (Bowler, Farrell and Katz 1999, 10) that can be allocated strategically among party members. Government participation similarly increases their capacity to shape legislative outcomes. Within the organization, leaders gain more power and autonomy when their parties enter government (Poguntke and Webb 2005).

Parties in government may have more men willing to compete for the post of party leader and few incentives to deviate from historical leadership patterns. Opposition parties, in contrast, provide fewer of the benefits that would attract qualified male candidates and may be more open to new types of leaders. Consequently, I expect:

> **H1:** Female party leaders are more likely to first emerge in opposition or unaligned parties.

Beyond government participation, willingness to select a female leader is further dictated by major or minor party status. The leadership post is more visible in major parties, as they receive much more media attention during elections than their smaller counterparts (Norris 2003). Major parties also have more resources at their disposal than minor organizations, including greater organizational strength, higher incomes, and more central staffers (Katz and Mair 1992, Webb, Farrell and Holliday 2002). The degree of authority granted to leaders further differs across party-types. Major parties concentrate policy-making authority with their leadership, while minor party leaders are

more likely to share this power with legislators and/or activists (Laver and Hunt 1992). In countries with highly fragmented party systems, large parties have in fact exhibited greater "presidentializing tendencies" than smaller parties (Poguntke and Webb 2005).

Together the heightened visibility, larger pool of resources, and greater policy-making authority afforded to major party leaders make this a particularly attractive post. At the same time, because the stakes are higher, major parties may be more risk averse than minor parties with respect to leadership selection. This suggests:

H2: Female party leaders are more likely to first emerge in minor parties.

Extending the first two hypotheses, the effect of government participation on women's access to power will likely vary based on party status. Across all party-types, a female leader may be least likely to first emerge in major parties that are in government. These parties are already significantly less likely to remove their current leader (Andrews and Jackman 2008) and have few incentives to deviate from existing gender norms when selecting someone new for the post. Competition for this position, moreover, is likely to be especially fierce. In major governing parties, the leader is likely to hold the most highly prized political post: prime minister. As head of the executive branch, this position confers the leader a great deal of power not only in his or her party and government, but also within the state and even the international community. Indeed, the authority invested in the prime minister has only grown over time. Even in multiparty systems with consensus models of politics, leaders' power, resources, and autonomy within national political executives have markedly increased in recent years (Poguntke and Webb 2005).

It similarly follows that women have greater opportunities to first come to power in minor opposition parties. These doubly disadvantaged parties may be most receptive to new types of leaders who might turn the tide of public opinion in their favor. At the same time, these posts may draw fewer strong challengers. When heading an opposition or unaligned party, a minor party leader does not enjoy any of the benefits of serving in

office. Unlike their counterparts in major opposition parties, these leaders cannot even hope to be prime minister. Even if their party enters office following the next election, it will only be as a junior coalition partner. Consequently, I anticipate:

> **H3:** Female party leaders are more likely to emerge in minor parties in opposition than major parties in government.

Finally, women's access to power is likely to be further influenced by their party's electoral trajectory. Irrespective of status or position in government, parties have few incentives to deviate from existing patterns of leadership selection when they appear to have found a winning strategy. Losing seat share, in contrast, may encourage parties to alter their approach and select a female leader. At the same time, the leadership post is also more attractive when seat share is increasing. Prospective leaders in these parties are more likely to believe that they will gain or retain the benefits of office. Even if government participation is unlikely, leading a competitive party improves the leader's career prospects, as those who preside over parties that have a positive electoral trajectory have longer tenures than their less successful counterparts (Andrews and Jackman 2008, Ennser-Jedenastik and Müller 2011). As parties become more competitive, it may be more difficult for women to ascend to the top post. This leads to a fourth hypothesis:

> **H4:** Female party leaders are more likely to emerge in parties that have an unfavorable electoral trajectory.

While Cross and Blais (2012*b*) argue that women's access to power is unrelated to the party's position in the electorate, the four political performance hypotheses find support in the literature on Canadian party leaders. Parties' competiveness has been viewed as a principal factor explaining women's access to leadership positions in these organizations (Bashevkin 2009). In particular, the "firmness of a party's grip on power [in government] or its proximity to power in opposition" have been inversely related to women's leadership success (Bashevkin 2010). Women have thus been most likely to

serve as leaders of minor parties (O'Neill and Stewart 2009) and opposition parties that are unlikely to serve in government in the near future (Bashevkin 1993). In fact, Trimble and Arscott (2003) argue that the most common pathway to power for Canadian female party leaders is take control of "electorally decimated and moribund parties" (77). While female challengers are not guaranteed a victory in weaker organizations, no Canadian woman has won a leadership contest in a competitive party (Bashevkin 2009).

Although these hypotheses have never been broadly tested outside of the Canadian case, there are a number of examples of female challengers ascending to the party leadership when their organizations are comparatively weak. Margaret Thatcher famously challenged and defeated Conservative leader Edward Heath after the party lost two general elections in quick succession. Like Thatcher, Helen Clark became head of New Zealand's Labour party when she deposed Mike Moore after two consecutive electoral defeats. Even when the party is in office, declining popularity can open a space for female aspirants. In particular, some women leaders have been selected for the post based on the belief that they can generate support for troubled parties and revive faltering governments (Jensen 2008). Jenny Shipley, for example, gained the top position in New Zealand's governing party when its future electoral success was increasingly in doubt. Similar explanations have been given for the ascension of Gro Brundtland in Norway and Kim Campbell in Canada.

Testing the Effect of Performance on Women's Entrance into Power

Using the original dataset presented in Figure 1, I examine the relationship between political performance and women's ascension to power in 55 parties. The 10 countries included in the analysis were selected because the head of government (prime minister) is also typically the leader of his or her party. Beyond this criteria, I also aimed to maximize institutional variation in order to ensure that I would observe sufficient variation in parties' political performances.

The event of interest is parties' initial selection of a female leader.[3] The time between entry into the process and occurrence of the first female leader is the survival or duration time. As information on the exact date of leaders' entrance to office is often unavailable, this duration time is discretized into years. Time to first female leader is therefore modeled using discrete time duration analysis with a complementary log-log transformation. This approach is analogous to the Cox proportional hazards model used for continuous time data (see supplementary information for details).

For parties entering the political system after 1965, I consider the years from their founding date until their initial selection of a female leader. For parties founded before this date, I use 1965 as the starting point. The first female executive (Sirimavo Bandaranaike of Sri Lanka) came to power in 1960. Among the advanced industrial democracies considered in this study, this is also the period in which women's movements began engaging with formal politics. This start date thus represents the beginning of the era in which parties could reasonably be expected to select a female leader.

Measuring Parties' Political Performance

Theoretically, women's access to the party leadership is expected to vary based on their party's political performance. The first three hypotheses concern opposition and minor parties. Based on the ParlGov database (Döring and Manow 2010), I first constructed an indicator variable distinguishing between the party (or parties) in the *governing coalition* and opposition or unaligned parties (H1). I also used this data to classify major and minor parties (H2). Following Andrews and Jackman (2008), I identify major parties as

[3]All analyses exclude interim leaders. This paper also focuses exclusively on parties' first female leader. This is because the causal mechanisms leading parties to select subsequent women for the post may be fundamentally different than those motivating their initial selection of a female leader. In particular, parties' willingness to be female-led may increase after the first woman "shatters the glass ceiling." Jalalzai and Krook (2010) suggest, for example, that once a country has had a female executive it is more likely to elect other women to the post. Future research should assess whether the first female leader does in fact alter the relationship between performance and women's access to power, creating new opportunities for other women to attain this position.

those that have *controlled the office of prime minister* at least once during this era.[4] To determine whether the effect of government participation is conditioned on major or minor party status (H3), the model also includes the *interaction of these two measures*.

The fourth hypothesis posits that women are more likely to first come into power when their party has an unfavorable electoral trajectory. The model thus includes a covariate capturing the *change in party seat share*. Once again drawing on the ParlGov data, this measure calculates the difference between the percentage of seats won by the party at the last election (at time t) from the seat share of the preceding election (at time t-1). The change in seat share for Ireland's Fine Gael in 2012, for example, is the percentage of seats won in the 2007 general election (30.7%) subtracted from their seat share following the 2011 election (45.8%). This 15.1% increase reflects the party's strong upward trajectory.

Beyond the main predictors, I also control for factors that may otherwise bias the results. Over time parties become more likely to select a female leader. The model thus includes a linear measure accounting for the passage of *time*. Since newer parties may be more likely to select a female leader than those with established patterns of male dominance, I account for *parties founded after 1980*. Existing research also suggests that female leaders may be more likely to emerge in left-leaning parties (Kittilson 2006, O'Neill and Stewart 2009). To avoid potential omitted variable bias, I control for *party family* using data from the Comparative Manifestos Project (Klingemann et al. 2006).[5] Similarly, increasing the number of female legislators can alter both the supply of—and demand for—women in the party leadership. The model thus includes a covariate capturing the *percentage of seats held by women in the party's parliamentary caucus*. Finally, to account

[4]To be characterized as "major," the party must have held the prime ministerial position at least once directly after a general election. This measure excludes, for example, the Swedish Liberal People's Party, which held the post only once following the collapse of a Centre Party led government.

[5]Due to the small number of observations in the Nationalist (70), Ethnic-Regionalist (90), and Special Issue (95) party families, I combine each of these party-types into a single category. Additionally, after excluding parties that mandate the dual selection of a man and woman as party leader, I was left with only two green parties (in Ireland and Austria). I included these parties in the social democratic party family, though all results are robust to their exclusion.

for baseline differences in countries' propensities to select women for the top post, each model has *country-level fixed effects*.

Results from the Analysis of Women's Entrance into Party Leadership

Table 1 presents the findings from the discrete time duration analysis. Unlinking the coefficient estimates provides an interpretation that is analogous to that for the Cox proportional hazards model. A value above 1 indicates a greater likelihood of first selecting a female leader as the value of the covariate increases. Values below 1 mean that female leaders are less likely to be selected. Values close to zero indicate large decreases in the probability of observing the event, while values much larger than one point to large increases in this probability. That is, a Cox hazard ratio that is significant and far from 1 suggests that a one-unit increase in the explanatory variable has a large effect on the survival probability of the party or leader.

As predicted, the results suggest that the initial selection of a female leader is shaped by the party's political performance. Consider, for example, the organization's position in government and status in the party system. The Cox hazard ratio for major parties in government as compared to minor parties in opposition is 0.122, representing an eight-fold decrease (90% CI: 0.015 to 0.323).[6] Similarly, a 10% increase in seat share decreases the Cox hazard ratio by a factor of 0.349. This represents a three-fold decrease in the likelihood of first selecting a female party leader conditioned on survival up until that point. When the party is performing well, the likelihood of selecting a female leader decreases.

[6]The 90% confidence intervals are highest posterior density intervals computed using the Laplace approximation to the posterior density.

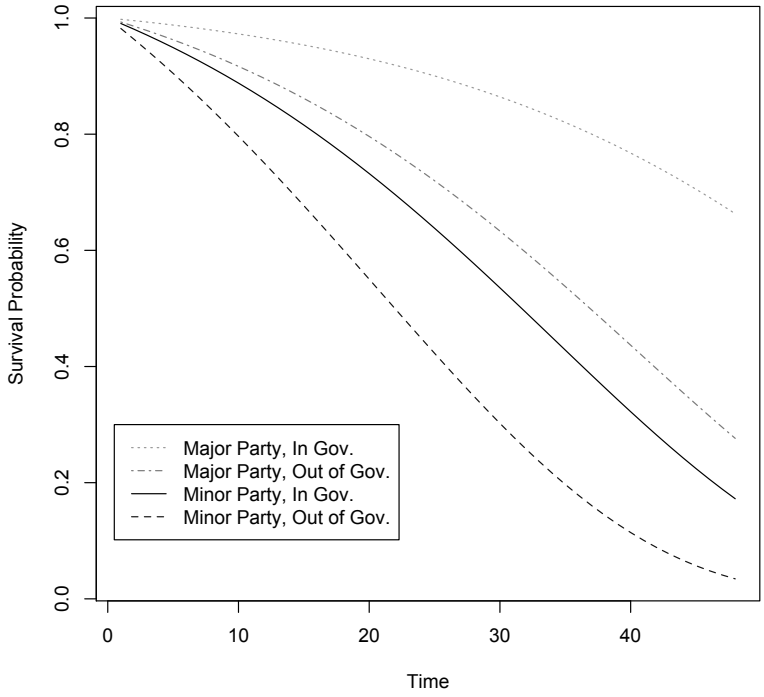
Table 1: Discrete Time Duration Model of Women's Entrance into Party Leadership

	Estimate	Std. Error	z value	Pr(>|z|)	CHR
(Intercept)	-7.963	1.441	-5.525	0.000	—
Government	-0.650	0.693	-0.939	0.348	0.522
Major Party	-0.963	0.636	-1.514	0.130	0.382
Gov × Major Party	-0.491	0.940	-0.523	0.601	0.612
Δ Seat Share	-0.105	0.027	-3.871	0.000	0.900
Time	0.048	0.020	2.433	0.015	1.050
Founded Post-1980	3.476	0.857	4.055	0.000	32.338
% Fem MP	0.032	0.015	2.134	0.033	1.033
Social Democrats	2.275	0.915	2.487	0.013	9.732
Liberals	1.667	0.925	1.802	0.072	5.295
Christian Democrats	1.301	0.946	1.375	0.169	3.673
Conservatives	2.054	1.051	1.955	0.051	7.799
Agrarian	2.897	1.095	2.645	0.008	18.116
Other	0.663	1.038	0.639	0.523	1.940
Austria	2.219	1.288	1.723	0.085	9.198
Canada	-0.473	1.482	-0.319	0.750	0.623
Denmark	2.628	1.235	2.128	0.033	13.847
Finland	1.738	1.180	1.472	0.141	5.686
Germany	0.430	1.520	0.283	0.777	1.537
Ireland	-0.760	1.538	-0.494	0.621	0.468
New Zealand	-0.943	1.522	-0.620	0.535	0.389
Sweden	1.175	1.252	0.938	0.348	3.237
United Kingdom	-0.771	1.597	-0.483	0.629	0.463

Notes: The unit of analysis is the political party. The outcome variable is the initial adoption of a female party leader. Baseline categories include: minor parties in opposition, Communist parties, and Australian parties. Number of Observations=1,807 party-years.

Figure 2 plots the survival probabilities for the four party-types over time. The probability of surviving one year without a female leader is near one for all parties. As time passes, however, minor opposition parties are much more likely to first select a female leader. Their probability of surviving without a woman in the post drops to 0.796 in year 10, 0.550 in year 20, and 0.302 in year 30. In contrast, at year 10 the probability of surviving without a female leader is 0.973 for major parties in power. At year 20 it is still 0.930 and by year 30 the probability falls only to 0.864. Major parties in office are much more likely to remain male-led than minor parties that are excluded from government.

Figure 2: Probability of Parties Remaining Male-Led Over Time as a Function of Party Status

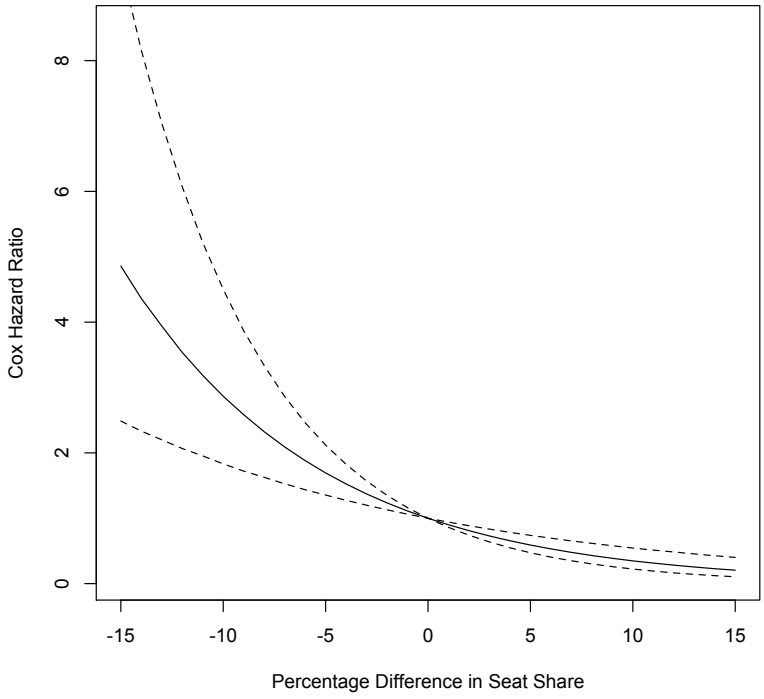


Note: The survival probabilities were generated holding all other variables at their median or modal values.

Women are clearly much less likely to first come to power in major parties that are in government. As suggested by H2, major parties also "survive" for significantly longer without a female leader than minor parties. For parties in government, moving from major to minor status increases the Cox hazard ratio by a factor of 0.234 (90% CI: 0.016 to 0.733). For opposition parties, shifting from a major to a minor party increases the Cox hazard ratio by a factor of 0.382 (90% CI: 0.0693 to 0.874). Among major parties, governing status also affects women's initial access to power. As theorized by H1, when in government these parties are significantly more likely to remain male-led (0.320, 90% CI: 0.066 to 0.726). This effect, however, is conditioned on party-status. Minor parties are no more likely to select female leaders when in opposition than when in government. The model thus provides partial support to H1 and strong support to H2 and H3.

The relationship between electoral trajectory and time to first female leader further bolsters the political performance claim. Figure 3 plots the Cox hazard ratio as a function of electoral trajectory, comparing the hazard for different values of change in seat share to a baseline of no change. Moving from a 10% gain in seat share to a similarly large loss increases the Cox hazard of first selecting a female leader by a factor of 0.122 (90% CI: 0.033 to 0.251). As posited in H4, losing parties are significantly more likely to first select a female leader than their winning counterparts.

Figure 3: Cox Hazard Ratio for Parties' Selection of First Female Leader as a Function of Electoral Trajectory



Notes: The Cox hazard ratio was generated holding all other variables at their median or modal values. The ratio was calculated using 0 (no change in seat share) as the baseline. The dotted lines represent 90% confidence intervals.

Turning to the control variables, the results suggest that parties are less likely to remain exclusively male-led over time. Women are also more likely to first come to power in parties founded after 1980.[7] The covariate capturing female MPs shows that women's

[7]These results are robust to different break points, including 1965, 1970, and 1975.

presence in the parliamentary delegation is associated with the ascension of a female party leader. Comparing the discrete Cox proportional hazard ratios suggests, however, that a 1% decrease in seat share has a greater effect on parties' likelihood of survival than a 1% increase in women's descriptive representation.

While the covariate capturing women's presence in parliament behaves as expected, the measure controlling for party family yields unanticipated results. In contrast to the strong relationship between left ideology and women's presence in parties' parliamentary delegations, this link does not hold for parties' top positions. Though social democratic organizations are more likely to first select a female leader than communist parties, they are not significantly different from Christian democratic, conservative, and liberal, and nationalist, ethnic-regionalist, and special issue parties.

Staying In: Women's Tenure in the Party Leadership

Thus far I have shown that political performance creates different opportunity structures for male and female would-be leaders. Just as women's entrance into office is shaped by parties' political successes and failures, tenure in office is likely to be similarly gendered. Existing research on gender and duration in office, however, generates conflicting findings. Once controlling for country-level effects, Cross and Blais (2012*b*) argue that the leader's sex has no effect on his or her survival in office. Yet, O'Neill and Stewart (2009) show that women leaders serve for shorter periods than their male counterparts in major Canadian parties. Research on women's tenure in other posts generates similarly equivocal conclusions. Women serve in European executive positions for just as long as men (Jalalzai 2013). In Latin America, women's and men's cabinet careers are virtually identical with respect to career duration, continuity, mobility, and mode of exit (Escobar-Lemmon and Taylor-Robinson 2009, 2013). Yet, Gagliarducci and Paserman (2012) show that the probability of early termination of Italian city councils increases when the mayor is female. More generally, Jalalzai (2013) notes that women come to

power in posts that have shorter average career durations.

These mixed results suggest that while gender may influence leaders' duration in office, the link between sex and survival may be indirect. In particular, I posit that the effect of leaders' sex is conditioned on their parties' political performance. In the same way that a female leader is more likely to ascend to power when the position is less desirable, her performance in office is also likely be judged more harshly than that of her male counterparts. As a consequence, female leaders may be more likely to leave the post if the party shows signs of electoral weakness. At the same time, because women who serve as party leaders have overcome significant obstacles to attain the post, those who succeed in the position may enjoy longer tenures than similarly situated men.

Hypothesizing about Performance and Women's Tenure as Leaders

Most leaders do not leave their post voluntarily; instead, they are often pushed out of office (Bynander and 't Hart 2007, Cross and Blais 2012*b*). The survival of the leader, in turn, rests largely on his or her electoral appeal. Bad election results are the most frequent exit trigger for party leaders (Bynander and 't Hart 2007). Indeed, parties now readily dispatch with leaders who are perceived as an electoral liability (Poguntke and Webb 2005). By the same token, the chance that the leader will be removed decreases as the parties' seat and vote share increases (Andrews and Jackman 2008, Ennser-Jedenastik and Müller 2011).

Party members' evaluations of leader performance are unlikely to be gender neutral. Just as it is more difficult for women to attain leadership roles, they also face greater difficulties in being recognized as effective in these posts (Eagly and Karau 2002). When proving their ability, minority group members are often held to higher standards than members of the majority group. To be considered highly able in the workplace, for example, a woman is often required to display a greater level of competence (Ridgeway 2001). Female leaders are especially likely to be devalued relative to men when they occupy

leadership roles that are traditionally male dominated or associated with masculinity (Eagly, Makhijani and Klonsky 1992).

Executive positions are often associated with masculinity and the role of party leader is among the most traditionally male-dominated political posts. The literature on gender and leader evaluations thus suggests female leaders are likely to be held to higher standards than their male counterparts. As a consequence of these heightened expectations, parties are unlikely to tolerate female leaders who they perceive as harming, rather than helping, their performance. In particular, I expect that:

> **H5:** When faced with an unfavorable electoral trajectory, female party leaders are more likely to leave their post than their male counterparts.

Though female leaders may be disadvantaged in the face of a poor performance, this does not necessarily suggest that women will uniformly experience shorter tenures in office as compared to men. Because of the many hurdles faced by women on the path to party leadership, those who thrive in the post may actually outlast male leaders. Eagly and Karau (2002) note, for example, that while discriminatory forces may decrease the probability that female leaders are favorably evaluated, the high barriers to entry overcome by these women may offset this effect. That is, the women who enter into the leadership post may on average be more competent than men and therefore enjoy a performance advantage.

In politics, it is clear that women face greater barriers to entry than similarly situated men. Women are less likely to be recruited to run for office (Lawless and Fox 2005, Sanbonmatsu 2006). When they do run, female candidates draw more—and better—challengers than male politicians (Milyo and Schosberg 2000) and are nominated to harder to win seats (Murray, Krook and Opello 2012, Ryan, Haslam and Kulich 2010). Women face additional challenges in gaining and maintaining high-profile leadership posts. Female leaders often encounter gendered "double binds"—"lose, lose" scenarios

in which women can be punished for being too masculine or too feminine, too inexperienced or not sufficiently representing change, etc. (Murray 2010).

Women have to overcome many obstacles in order to reach the upper echelon of their parties. As female party leaders are among a small subset of politicians who have excelled despite these challenges, those who perform well in the face of this adversity may actually, on average, outlast men. This suggests:

> **H6:** When faced with favorable electoral trajectory, female party leaders are less likely to leave their post than their male counterparts.

Given that women are more likely to be selected to head weak parties, a strong performance under these circumstances may extend their tenure in office.

Testing the Effect of Performance and Sex on Leaders' Tenure in Office

As before, I use a discrete time duration analysis to examine the effect of political performance and gender on leaders' survival in office. In this case, however, the event of interest is leaders' transitions out of power and the survival time is the number of years served by each leader. In this analysis, I consider all leaders selected after 1965 until mid-2013. There are 328 leaders in total, 45 of whom are female. The mean duration in office is 6.38 years for male leaders and 4.97 years for women. The longest serving leader is Alf Svensson, who led the Swedish Christian Democrats from 1973 to 2004. The minimum time in the position, by contrast, is under one year.

Measuring The Conditional Effect of Parties' Political Performance and Sex

When considering sex and leaders' survival rates, I argued that female leaders are more likely to leave office when faced with a poor electoral performance (H5) but may have longer tenures than their male counterparts when their parties perform well (H6). Building on the data from the previous analysis, I test these hypotheses using an *interaction effect between change in party seat share and leaders' sex*. Like the first model, this second

empirical analysis also controls for government participation and party status. It further accounts for the passage of time and incorporates variables controlling for party family and country. Finally, it is possible that female leaders entered politics later in life and as such are older (and more likely to leave the post) than men. To account for this potential omitted variable bias, I include a covariate measuring *leader age*.

Results from the Analysis of Leaders' Tenure in Office

At first glance, the results presented in Table 2 are consistent with existing research on party leaders' survival. Leaders have a significantly greater likelihood of leaving office when their party is losing seat share and are more likely to keep the post when their party has a favorable trajectory. Male and female leaders' predicted duration in office is also nearly identical in parties that are maintaining their seat share between elections. In fact, minor shifts in performance do not affect men and women differently.

Gender differences do emerge, however, when parties experience even moderate losses. As shown in Figure 4, when faced with a 10% loss of seat share female leaders are significantly more likely to leave office than their male counterparts. Holding all other variables constant and conditioning on survival up until time t, the Cox hazard is 0.147 for male leaders but 0.230 for female leaders. The hazard ratio thus decreases by a factor of 0.654 when a male is in power. Consistent with H5, men are significantly more likely to survive a poor performance than similarly situated women (90% CI: 0.413 to 0.993). This effect is even more pronounced as a party's electoral performance declines. At a 15% loss of seat share, the hazard for male leaders slightly increases to 0.167. For female leaders, it increases to 0.333.

Though female leaders have a greater likelihood of leaving office when their party has an unfavorable trajectory, these gender effects attenuate as performance improves. When parties maintain their seat share, female leaders are no more likely to leave the post than men. In direct opposition to H6, however, women are also no more likely to

Table 2: Discrete Time Duration Model of Party Leaders' Exit from Office

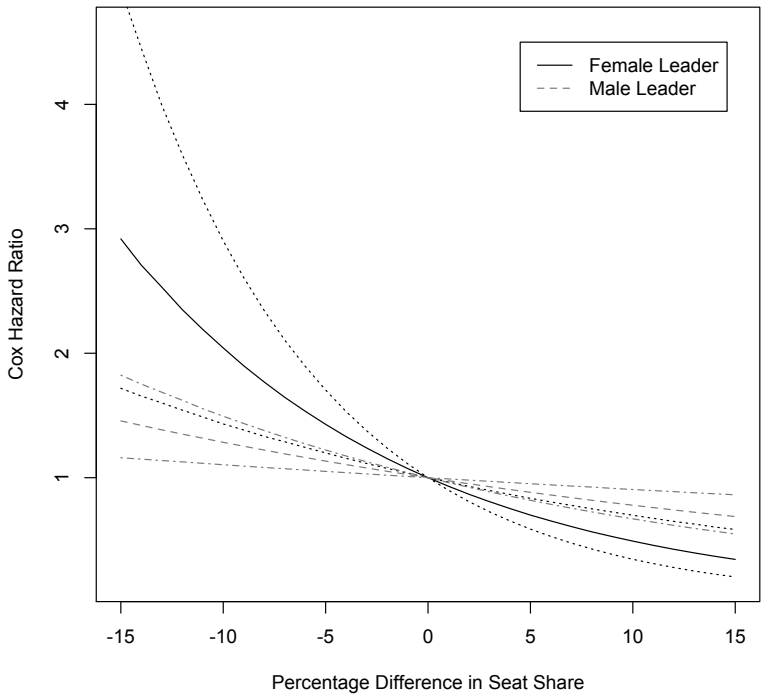
	Estimate	Std. Error	z value	Pr(>|z|)	CHR
(Intercept)	-3.678	0.599	-6.140	0.000	—
Δ Seat Share	-2.502	0.920	-2.720	0.007	0.082
Female Leader	-0.018	0.222	-0.080	0.936	0.982
Δ Seat Share × Fem. Lead	-4.631	2.294	-2.019	0.043	0.010
Government	-0.064	0.239	-0.269	0.788	0.938
Major Party	-0.120	0.208	-0.578	0.563	0.887
Gov × Major Party	-0.384	0.303	-1.266	0.206	0.681
Time	0.049	0.015	3.185	0.001	1.050
Leader Age	0.038	0.009	4.259	0.000	1.038
Social Democrats	0.391	0.344	1.137	0.256	1.479
Liberals	0.314	0.340	0.924	0.356	1.369
Christian Democrats	0.093	0.361	0.258	0.797	1.098
Conservatives	0.539	0.377	1.431	0.152	1.715
Agrarian	0.030	0.405	0.074	0.941	1.031
Other	0.613	0.369	1.660	0.097	1.845
Austria	-0.244	0.315	-0.775	0.439	0.784
Canada	-0.939	0.339	-2.771	0.006	0.391
Denmark	-0.637	0.303	-2.100	0.036	0.529
Finland	-0.260	0.271	-0.962	0.336	0.771
Germany	-0.612	0.342	-1.790	0.073	0.543
Ireland	-0.871	0.347	-2.509	0.012	0.419
New Zealand	-0.541	0.342	-1.581	0.114	0.582
Sweden	-0.952	0.307	-3.104	0.002	0.386
United Kingdom	-0.661	0.349	-1.890	0.059	0.517

Notes: The unit of analysis is the party leader. The outcome variable is the removal of the leader from office. Baseline categories include: minor parties in opposition, Communist parties, and Australian parties. Number of Observations=1,938 leader-years.

remain in the position as seat share rises. Even at a 15% gain in seats, the Cox hazard ratio comparing male (0.079) and female (0.039) leaders is not significantly different from one (2.034 90% CI:0.721 to 3.824).

Finally, the control variables behave largely as expected. Leaders of major (but not minor) parties are more likely to survive when in government than in opposition. The probability of a party leader holding on to the position also declines over time. Similarly, older leaders are significantly less likely to remain in the post than their younger counterparts. While ideology has no effect on duration in office, different states appear

Figure 4: Cox Hazard Ratio for Male and Female Leaders' Tenure in Office as a Function of Electoral Trajectory



Notes: The Cox hazard ratio was generated holding all other variables at their median or modal values. The ratio was calculated using 0 (no change in seat share) as the baseline. The dotted lines represent 90% confidence intervals.

to have different norms with respect to leadership survival. Australian leaders, for example, are significantly less likely to remain in the post than those in many other states.

Political Performance and Gendered Political Opportunity Structures

Though Figure 1 illustrates that an increasing number of parties are selecting female leaders, access to these positions is far from gender neutral. To the contrary, the empirical analyses demonstrate that male and female leaders and would-be leaders face different opportunity structures when trying to attain and retain power. Parties' political performances influence both the likelihood of a party first selecting a female leader

and women's tenure in the post.

For parties that remain exclusively male-led, these findings suggest that a female leader may be most likely to come to power when the organization is out of government and losing seat share. Indeed, these were the circumstances under which Margaret Thatcher, Angela Merkel, Denmark's Helle Thorning-Schmidt, and Finland's Jutta Urpilainen came to power. Minority status and women's presence in the parliamentary delegation can further increase the likelihood of women's entrance into office. Major parties that are in government and expect to retain power after the next election, in contrast, are likely to remain male-controlled until their political performance falters.

For parties that are currently female-led, it is clear that gender shapes leaders' position in office. Yet, women are not uniformly less likely to survive in the post. When parties perform well, women and men actually have similar tenures. If their party falters, however, women are especially likely to leave the party leadership. Based on these results it is not surprising, for example, that Julia Gillard was removed from her position as leader of the Australian Labour Party in 2013. Despite the fact that Labour was in power, the party had an unfavorable trajectory. It lost seat share between 2007 and 2010 and Gillard was forced to form a coalition government. There were also strong indications that Labour would lose additional ground in the 2013 federal election. The party's poor performance, coupled with the fact that Australian parties are especially likely to dispatch with their leaders, laid the groundwork for Gillard's defeat.

Together these results provide cause for optimism and pessimism alike. On the one hand, there are many more female leaders than previously recognized. Each country has had at least one female-headed party and the majority of parties in the study have been female-led. When parties maintain their seat share, moreover, there are also no differences between men's and women's tenure in office. Finally, while parties always aim to perform well, for advocates of women's descriptive representation there is a silver lining to a poor showing. A lackluster performance can create opportunities for new

types of leaders to emerge. That is, women can benefit from an otherwise bad situation.

Despite this positive reading of the results, it is impossible to overlook the fact that women are doubly disadvantaged with respect to the party leadership. First, they are more likely to initially come to power when the post is least desirable. Attractive positions remain male-dominated, suggesting that gender biases persist in party politics. Second, female leaders have a greater likelihood of leaving the post when their parties lose seat share. Women also gain no gendered advantage from improving their parties' standings, even though they likely overcame higher barriers to entry and are more likely to first come to power when their parties are performing poorly. This suggests that parties have higher expectations for female than male leaders. It further illustrates that gender biases persist at each stage of women's political careers. Even the most qualified and successful women, those who are viable candidates to lead political parties, are held to different standards than men.

Conclusions

Party leaders are among the most important political actors in advanced industrial democracies. They shape the policy agenda, oversee the decision to enter government, influence the parties' political performance, and affect candidate selection. The leaders of major parties can even hope to become prime minister. Despite the importance of this position, up until this point comparatively little has been known about women's access to, and tenure in, the party leadership. While anecdotal and case study evidence suggested that women face unique challenges in gaining and retaining office, these gendered opportunity structures were as of yet largely unidentified.

To address this gap in the literature, I theorized that political performance differentially affects men's and women's experiences with party leadership. Using a unique data set of 55 parties in 10 countries over almost 50 years, the results suggest that women are more likely to initially come to power in minor opposition parties and those that

are losing seat share. Extending this research, I also show that female leaders are more likely to leave office when faced with an unfavorable trajectory, yet are no more likely to retain the post when their parties gain seats. Political performance thus represents a double-edged sword for female politicians. Though a poor performance increases the likelihood of a female leader first ascending to power, women are also more likely than men to leave the post when their party experiences large losses.

These findings highlight the need for gender and politics scholars to focus greater attention on political parties. There is a large body of research considering the macro-level determinants of women's descriptive representation in both the legislative and executive branches. Yet, it is parties that are chiefly responsible for selecting candidates, ministers, and even heads of government. Indeed, in advanced parliamentary democracies, we cannot fully understand women's presence in politics without accounting for party-level behavior. Future research should thus continue to identify the circumstances in which promoting women's representation aligns or conflicts with parties' vote- and office-seeking aims. As was the case with the party leadership, this could provide new insights not only into women's presence in politics—including their access to executive positions—but could also shed light on variation in women's substantive representation.

At the same time, it is also increasingly important to gender the research on political parties. There is a growing body of literature, for example, on political leaders' tenure in office. When ignoring sex differences in political opportunity structures, these studies are likely to miss an important factor shaping leaders' survival in the post. More generally, this research demonstrates that parties are themselves fundamentally gendered institutions. Both inter- and intra-party behavior is likely to differentially affect male and female politicians. The gender makeup of these organizations, in turn, is likely to influence the ways in which they function. Incorporating gender will thus shed new light on the "black box" of intra-party politics.

Finally, though this paper significantly extends our knowledge of female party lead-

ers, the study of this topic is far from concluded. A logical extension of this project, for example, is to consider how female party leaders affect party performance. This work should examine whether female leaders can in fact alter voters' perceptions of the party and turn the tide in its favor. It should also establish whether women are as successful as their male counterparts, and how the performance of the first female leader affects women's subsequent access to power.

Beyond the performance framework, more research is also needed to understand the consequences of women's access to the party leadership for women's representation more broadly. Future work should examine the relationship between female party leaders and the promotion of women's descriptive representation. Indeed, more research is needed to determine whether female leaders are more likely to select female candidates and promote women to ministerial posts. Additional work could further explore the link between female party leaders and women's substantive and symbolic representation. There is a large body of literature that suggests, for example, that women's presence in legislatures is not only linked to the adoption of female-friendly policies (Schwindt-Bayer and Mishler 2005, Kittilson 2008), but also empowers women within society and upsets traditional expectations about appropriate gender roles (Campbell and Wolbrecht 2006, Wolbrecht and Campbell 2007). While existing research focuses primarily on female legislators, party leaders have greater control over the policy agenda and are more visible to the public than their backbench colleagues. This suggests that female party leaders have the potential to serve as "critical actors" whose influence may be especially important to women's policy representation and political empowerment. Regardless of the results of these further studies, these unanswered questions ensure that we will be studying gender and party leadership for many years to come.

References

Andrews, Josephine T and Robert W Jackman. 2008. "If Winning Isn't Everything, Why Do They Keep Score? Consequences of Electoral Performance for Party Leaders." *British Journal of Political Science* 38(4):657–675.

Bashevkin, Sylvia. 2010. "When do outsiders break in? Institutional circumstances of party leadership victories by women in Canada." *Commonwealth & Comparative Politics* 48(1):72–90.

Bashevkin, Sylvia B. 1993. *Toeing the lines: Women and party politics in English Canada*. Toronto: Oxford University Press.

Bashevkin, Sylvia B. 2009. *Women, power, politics: The hidden story of Canada's unfinished democracy*. Toronto: Oxford University Press.

Beaman, Lori, Esther Duflo, Rohini Pande and Petia Topalova. 2012. "Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India." *Science* 335(6068):582–586.

Beaman, Lori, Raghabendra Chattopadhyay, Esther Duflo, Rohini Pande and Petia Topalova. 2009. "Powerful Women: Does Exposure Reduce Bias?" *The Quarterly Journal of Economics* 124(4):1497–1540.

Beckwith, Karen. 2013. "Contesting for Party Leadership: Women, Gender and Opportunity." Paper for presentation at the 2013 European Conference on Gender and Politics, Barcelona, March 21-23.

Bittner, Amanda. 2011. *Platform Or Personality?: The Role of Party Leaders in Elections*. New York: Oxford University Press.

Bowler, Shaun, David M. Farrell and Richard S. Katz. 1999. Party Cohesion, Party Discipline and Parliaments. In *Party Discipline and Parliamentary Government*, ed. Shaun

Bowler, David M. Farrell and Richard S. Katz. Columbus: Ohio State University Press pp. 3–22.

Bynander, Fredrik and Paul 't Hart. 2007. "The Politics of Party Leadership Survival and Succession: Australia in Comparative Perspective." *Australian Journal of Political Science* 42(1):47–72.

Bynander, Fredrik and Paul 't Hart. 2008. "The Art of Handing Over: (Mis)Managing Party Leadership Successions." *Government and Opposition* 43(3):385–404.

Campbell, David E. and Christina Wolbrecht. 2006. "See Jane Run: Women Politicians as Role Models for Adolescents." *Journal of Politics* 68(2):233–247.

Caul, Miki. 2001. "Political Parties and the Adoption of Candidate Gender Quotas: A Cross-National Analysis." *Journal of Politics* 63(4):1214–1229.

Cheng, Christine and Margit Tavits. 2011. "Informal Influences in Selecting Female Political Candidates." *Political Research Quarterly* 64(2):460–471.

Cross, William and André Blais. 2012*a*. "Who Selects the Party Leader?" *Party Politics* 18(2):127–150.

Cross, William P and André Blais. 2012*b*. *Politics at the Centre: The Selection and Removal of Party Leaders in the Anglo Parliamentary Democracies*. New York: Oxford University Press.

Davis, Rebecca Howard. 1997. *Women and Power in Parliamentary Democracies: Cabinet Appointments in Western Europe, 1968-1992*. Lincoln: University of Nebraska Press.

de Zárate, Roberto Ortiz. 2011. "Zárate's Political Collections 1996-2005." *Accessed from http://www.terra.es/personal2/monolith/home.htm on 1 May 2011* .

Dolan, Kathleen. 1998. "Voting for Women in the "Year of the Woman"." *American Journal of Political Science* pp. 272–293.

Döring, Holger and Philip Manow. 2010. "Parliament and government composition database (ParlGov): An infrastructure for empirical information on parties, elections and governments in modern democracies." *Accessed from http://www.parlgov.org/ on 1 May 2011* .

Eagly, Alice H., Mona G. Makhijani and Bruce G. Klonsky. 1992. "Gender and the evaluation of leaders: A meta-analysis." *Psychological Bulletin* 111(1):3.

Eagly, Alice H. and Steven J. Karau. 2002. "Role Congruity Theory of Prejudice Toward Female Leaders." *Psychological review* 109(3):573.

Ennser-Jedenastik, Laurenz and Wolfgang C Müller. 2011. "Intra-party democracy, political performance, and the survival of party leaders: Austria, 1945–2011." Paper for presentation at the ECPR Joint Sessions, University of St. Gallen, Switzerland, April 2011.

Escobar-Lemmon, Maria C. and Michelle M Taylor-Robinson. 2013. "Sex, survival and scandal: A comparison of how men and women exit presidential cabinets." Paper for presentation at the 2013 European Conference on Gender and Politics, Barcelona, March 21-23.

Escobar-Lemmon, Maria and Michelle M Taylor-Robinson. 2005. "Women Ministers in Latin American Government: When, Where, and Why?" *American Journal of Political Science* 49(4):829–844.

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):685–699.

Gagliarducci, Stefano and M Daniele Paserman. 2012. "Gender Interactions within Hierarchies: Evidence from the Political Arena." *The Review of Economic Studies* 79(3):1021–1052.

Harmel, Robert and Kenneth Janda. 1994. "An Integrated Theory of Party Goals and Party Change." *Journal of Theoretical Politics* 6(3):259.

Harmel, Robert, Uk Heo, Alexander Tan and Kenneth Janda. 1995. "Performance, Leadership, Factions and Party Change: An Empirical Analysis." *West European Politics* 18(1):1–33.

Harris, Kenneth. 1988. *Thatcher*. Boston: Little, Brown.

Jalalzai, Farida. 2008. "Women Rule: Shattering the Executive Glass Ceiling." *Politics & Gender* 4(2):205–231.

Jalalzai, Farida. 2013. *Shattered, Cracked, or Firmly Intact? Women and the Executive Glass Ceiling Worldwide*. Oxford University Press.

Jalalzai, Farida and Mona Lena Krook. 2010. "Beyond Hillary and Benazir: Women's Political Leadership Worldwide." *International Political Science Review* 31(1):5–21.

Jensen, Jane S. 2008. *Women Political Leaders: Breaking the Highest Glass Ceiling*. New York: Palgrave Macmillan.

Katz, Richard S. and Peter Mair. 1992. *Party Organizations in Western Democracies: A Data Handbook on Party Organizations in Western Democracies, 1960-90*. London: Sage Publications Ltd.

Katz, Richard S. and Peter Mair. 1995. "Changing Models of Party Organization and Party Democracy: The Emergence of the Cartel Party." *Party Politics* 1(1):5–28.

Kittilson, Miki Caul. 2006. *Challenging Parties, Changing Parliaments: Women and Elected Office in Contemporary Western Europe.* Columbus: Ohio State University Press.

Kittilson, Miki Caul. 2008. "Representing Women: The Adoption of Family Leave in Comparative Perspective." *Journal of Politics* 70(2):323–334.

Kittilson, Miki Caul. 2011. "Women, Parties and Platforms in Post-Industrial Democracies." *Party Politics* 17(1):66—92.

Klingemann, H.D., Andrea Volkens, Ian Budge, Judith Bara and Michael D. McDonald. 2006. *Mapping Policy Preferences II: Estimates for Parties Governments & Electors in the OECD, EU and Central and Eastern Europe 1990-2003.* Oxford: Oxford University Press.

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):840–855.

Kunovich, Sheri and Pamela Paxton. 2005. "Pathways to Power: The Role of Political Parties in Women's National Political Representation 1." *American Journal of Sociology* 111(2):505–552.

Laver, Michael J. and W. Ben Hunt. 1992. *Policy and Party Competition.* New York: Routledge.

Laver, Michael and Norman Schofield. 1990. *Multiparty Government: The Politics of Coalition in Europe.* Oxford: Oxford University Press.

Lawless, Jennifer L. and Richard L. Fox. 2005. *It Takes a Candidate: Why Women Don't Run for Office.* New York: Cambridge University Press.

McAllister, Ian. 2007. The Personalization of Politics. In *The Oxford Handbook of Political Behavior*, ed. Russell J. Dalton and HansâĂŘDieter Klingemann. Oxford: Oxford University Press.

McKay, Joanna. 2004. "Women in German Politics: Still Jobs for the Boys?" *German Politics* 13(1):56–80.

Milyo, Jeffrey and Samantha Schosberg. 2000. "Gender Bias and Selection Bias in House elections." *Public Choice* 105(1-2):41–59.

Müller, Wolfgang. 2000. "Political parties in parliamentary democracies: Making delegation and accountability work." *European Journal of Political Research* 31(3):309–333.

Murray, Rainbow. 2010. *Cracking the Highest Glass Ceiling: A Global Comparison of Women's Campaigns for Executive Office*. Santa Barbara: Praeger Publishers.

Murray, Rainbow, Mona Lena Krook and Katherine A.R. Opello. 2012. "Why Are Gender Quotas Adopted? Party Pragmatism and Parity in France." *Political Research Quarterly* 65(3):529–543.

Norris, Pippa. 2003. "Preaching to the Converted? Pluralism, Participation and Party Websites." *Party Politics* 9(1):21–45.

O'Neill, Brenda and David K Stewart. 2009. "Gender and Political Party Leadership in Canada." *Party Politics* 15(6):737–757.

Poguntke, Thomas and Paul D Webb. 2005. *The Presidentialization of Politics: A Comparative Study of Modern Democracies*. Oxford ; New York: Oxford University Press.

Randall, Vicky. 1987. *Women & Politics. An International Perspective*. Chicago: University of Chicago Press.

Reynolds, Andrew. 1999. "Women in the Legislatures and Executives of the World: Knocking at the Highest Glass Ceiling." *World Politics* 51:547–572.

Ridgeway, Cecilia L. 2001. "Gender, Status, and Leadership." *Journal of Social Issues* 57(4):637–655.

Ryan, Michelle K and S. Alexander Haslam. 2005. "The Glass Cliff: Evidence that Women are Over-Represented in Precarious Leadership Positions." *British Journal of Management* 16(2):81–90.

Ryan, Michelle K and S. Alexander Haslam. 2007. "The Glass Cliff: Exploring the Dynamics Surrounding the Appointment of Women to Precarious Leadership Positions." *Academy of Management Review* 32(2):549–572.

Ryan, Michelle K, S. Alexander Haslam and Clara Kulich. 2010. "Politics and the Glass Cliff: Evidence that Women are Preferentially Selected to Contest Hard-to-Win Seats." *Psychology of Women Quarterly* 34(1):56–64.

Sanbonmatsu, Kira. 2006. *Where Women Run: Gender & Party in the American States*. University of Michigan Press.

Schwindt-Bayer, Leslie A and William Mishler. 2005. "An Integrated Model of Women's Representation." *Journal of Politics* 67(2):407–428.

Stewart, Marianne C. and Harold D. Clarke. 1992. "The (Un)Importance of Party Leaders: Leader Images and Party Choice in the 1987 British Elections." *Journal of Politics* 54:447–470.

Strøm, Kaare. 1990. "A Behavioral Theory of Competitive Political Parties." *American Journal of Political Science* 34(2):565–598.

Trimble, Linda and Jane Arscott. 2003. *Still Counting: Women in Politics Across Canada*. Toronto: University of Toronto Press.

Webb, Paul, David M. Farrell and Ian Holliday. 2002. *Political Parties in Advanced Industrial Democracies*. Oxford: Oxford University Press.

Wiliarty, Sarah Elise. 2008. "Chancellor Angela Merkel–A Sign of Hope or the Exception that Proves the Rule?" *Politics & Gender* 4(3):485–96.

Wilson, Frank L. 1994. The Sources of Party Change: The Social Democratic Parties of Britain, France, Germany and Spain. In *How Political Parties Work: Perspectives from Within*, ed. Kay Lawson. Westport: Praeger pp. 263–283.

Wolbrecht, Christina and David E. Campbell. 2007. "Leading by Example: Female Members of Parliament as Political Role Models." *American Journal of Political Science* 51(4):921–939.

Supplementary Information

Empirical Analysis

Formally, the discrete time duration model is defined as:

$$y_i(t) \sim Bernoulli(h(t, \mathbf{x}_i(t))$$

$$h(t, \mathbf{x}_i(t)) = p(y_i(t) = 1 | y_i(t') = 0 \; \forall \; 0 < t' < t)$$

$$clog(h(t, \mathbf{x}_i(t))) = \log\left(\frac{1}{1 - h(t, \mathbf{x}_i(t))}\right) = g(t) + \boldsymbol{\beta}\mathbf{x}_i(t)$$

Where $y_i(t)$ is an indicator describing whether unit i experiences the event at time t, $\mathbf{x}_i(t)$ are (possibly time varying) covariates for unit i, $g(t)$ is the baseline function describing the effect of time, and $h(t, \mathbf{x}_i(t))$ is the hazard probability describing the probability that unit i experiences the event at time t conditioned on not having experienced the event before time t. In the discrete models presented here, units (parties or leaders) are observed annually.

Both models use the complementary log-log link function. This is preferable to the logit link function for two reasons. First, in any given year the probability of a party first selecting a female leader conditioned on being male-led up until that point is low. The complementary log-log model is more appropriate when dealing with rare events. Second, the discrete time survival analysis with a complementary log log link function is analogous to the Cox proportional hazards model for continuous time data.

In the Cox proportional hazard model for continuous time data, the hazard is the derivative of the logged survival function. In contrast, the hazard in the discrete time model is the probability of observing an event in a given period conditioned on survival up until that time. It is thus referred to as a hazard probability. The usual interpretation of a regression coefficient for the Cox proportional hazards model is that the exponential of the regression coefficient corresponds to a multiplicative effect in the hazard. Though

not identical to the continuous model, the interpretation for the discrete time model follows similar logic. For this reason, throughout the results section the exponential of the regression coefficient from a discrete time event history analysis is referenced as affecting the Cox hazard. The effect is multiplicative with respect to the complementary log of the hazard probability ($h(t)$), which is given by

$$clog(h(t)) = \log\left(\frac{1}{1-h(t)}\right).$$

An increase in *clog(h(t))* corresponds to an increase in $h(t)$. A regression coefficient of 0.5, for example, corresponds to an increase of *clog(h(t))* by a factor of 1.65 when all other covariates are held constant. The results tables thus present the regression coefficient, its standard error, z value, and p-value, as well as the multiplicative effect on *clog(h(t))* of a unit change in the covariate.

Finally, both duration models presented in this paper were estimated using six different formulations of the baseline hazard. Using the AIC as a goodness of fit measure suggested that in both cases including a linear term for time provides adequate fit without sacrificing the parsimony of the model. The results for the covariates capturing the performance, moreover, are robust to alternative time specifications. Both models also account for right-censored observations—parties that dissolved during the period of study and parties that have not yet selected a female leader. The discrete time duration analysis of leaders' tenure in office further accounts for the right censoring caused by leader's death and the inclusion of party leaders that have not yet left office as of July 2013.

Table 1: Number of Male and Female Leaders and Date of First Female Leader

	Male	Female	First Female Year
Australia–Australian Labor Party (ALP)	9	1	2010
Australia–Liberal Party (LPA)	13	0	—
Australia–National Party (NPA)	7	0	—
Austria–Green Party	4	3	1986
Austria–Freedom Party (FPO)	5	2	2000
Austria–Liberal Forum (LIF)	3	1	1993
Austria–Austrian People's Party (OVP)	9	0	—
Austria–Social Democratic Party (SPO)	6	0	—
Canada–Bloc Québécois (BQ)	4	0	—
Canada–Liberal Party (LP)	7	0	—
Canada–New Democratic Party (NDP)	4	2	1989
Canada–Progressive Conservative Party/Conservative Party (PCP/CPC)	5	1	1993
Canada–Reform Party /Canadian Alliance (RPC/CA)	2	0	—
Denmark–Centre Democrats (CD)	2	1	1989
Denmark–Progress Party (FP/FrP)	6	3	1985
Denmark–Conservative People's Party (KF)	6	2	1998
Denmark–Christian People's Party/Christian Democrats (KrF/K)	7	2	2002
Denmark–Social-Liberal Party (RV)	2	2	1990
Denmark–Socialist People's Party (SF)	4	1	2012
Denmark–Social Democrats (Sd)	4	1	2005
Denmark–Venstre (V)	4	0	—
Finland–Centre Party (KESK)	5	2	2002
Finland–National Coalition Party (KOK)	6	0	—
Finland–Liberal People's Party (LKP)	5	0	1990
Finland–Swedish People's Party (RKP/SFP)	9	0	—
Finland–Social Democratic Party (SSDP)	5	1	2008
Finland–Finish People's Democratic Union (SKDL)	4	0	—
Finland–Finnish Christian Union (SKL/KD)	6	1	2004
Finland–Finnish Rural Party/True Finns (SMP/PS)	3	1	1991
Finland–Left Alliance (VAS)	3	1	1998
Finland–Green League (VIHR)	5	5	1988
Germany–Christian Democratic Union (CDU)	5	1	2000
Germany–Free Democratic Party (FDP)	8	0	—
Germany–Social Democratic Party (SPD)	11	0	—
Ireland–Fianna Fail (FF)	6	0	—
Ireland–Fine Gael (FG)	6	0	—
Ireland–Green Party	2	0	—
Ireland–Labour Party (Lab)	6	0	—
Ireland–Progressive Democrats (PD)	2	2	1993
New Zealand–ACT Party	5	0	—
New Zealand–National Party (NP)	7	1	1997
New Zealand–Labour Party (LP)	6	1	1993
Sweden–Centre Party (C)	3	3	1985
Sweden–Liberals (FP)	7	1	1995
Sweden–Christian Democrats (KD)	2	0	—
Sweden–Moderate Party (M)	6	0	—
Sweden–New Democracy (NyD)	4	1	1994
Sweden–Social Democrats (SAP)	5	1	2007
Sweden–Sweden Democrats (SD)	2	0	—
Sweden–Communist Party/Left Party (SKP/VKP/Vp)	6	0	—
United Kingdom–Conservative Party (Con)	6	1	1975
United Kingdom–Labour Party (Lab)	6	0	—
United Kingdom–Liberal Democrats (LD)	4	0	—
United Kingdom–Liberal Party (Lib)	2	0	—
United Kingdom–Social Democratic Party (SDP)	2	0	—