

Gender Stereotypes and the Policy Priorities of Women in Congress*

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Abstract

Scholars find that women who run for Congress are just as likely to win as men are, yet women face considerable challenges related to their sex on the campaign trail. Women are more likely to face challengers than men are, the challengers they face are typically more qualified, and gender stereotypes paint women as less able to handle important issues like defense and foreign affairs. We examine how women succeed in the face of these obstacle, arguing that women are successful, in part, because they craft large, diverse legislative agendas that include bills on a mix of topics. These topics include district interests, women's interests, and the masculine issues on which women are disadvantaged. We believe this balancing strategy allows women to develop reputations for competence on a wide range of issues, which in turn, helps them deter electoral challengers. We test our hypotheses by analyzing a comprehensive database of all bills introduced in the U.S. House between 1963 and 2009. We find that female MCs propose more bills, spread across more issues, than do men. Further, the topics of the bills women sponsor span a range of women's issues, masculine issues, and gender-neutral topics—giving support to the idea that women balance their legislative portfolios. Finally, we examine the electoral benefits to women of this strategy by analyzing rates of challenger emergence in Congressional races. We find that women must introduce twice as much legislation as men to see the probability of challenger emergence decrease to a level that is indistinguishable from that of men. The added effort and staff hours female MCs typically devote to crafting legislation, vis-à-vis male MCs, only serves to put them on equal footing with men. It does not give them an advantage.

Keywords: Women's Representation · Legislative Agendas · Descriptive Representation

Introduction

Many factors shape the policy agendas legislators pursue in office, including the interests of constituents, electoral coalitions and organized interests within their districts, and the partisanship, ideology and interests of the legislators themselves. For women in Congress, the desire to serve “at-large,” or as surrogate representatives for women nationwide has also been well documented (e.g., Carroll, 2002). Here, we consider an additional factor that influences policymaking—the need to overcome gender stereotypes with demonstrations of expertise.

In this paper, we bridge two existing branches of literature on women in politics to provide a fuller picture of the impact of gender on policymaking. The first finds that female legislators are more active than their male colleagues on issues related to women’s rights and women’s health (e.g., Dodson, 2006; Gerrity and Mendez, 2007; MacDonald and OBrien, 2011; Osborn and Mendez, 2010; Swers, 1998, 2001, 2002). The second shows that the public views women as less capable of handling stereotypically “masculine” issues, like defense, foreign affairs, crime, and macroeconomics—topics voters prioritize when evaluating candidates (e.g., Huddy and Terkildsen, 1993; Kahn, 1996; Druckman and Ostermeir, 2004). This was especially true during the earliest decades examined here (the 1960s, ’70s, and ’80s), when sexism in politics was particularly palpable.

Together, these two observations suggest women should be seriously disadvantaged at the polls, especially in years when defense, crime, and the economy are highly salient. And yet, when women run for public office, they are just as likely to be elected as men are (e.g., Burrell, 1994; Carroll, 1994; Fox, 2006). We seek to explain why, and contend that women are successful in part because they are more active legislators than their male counterparts—women craft large, diverse legislative portfolios that include district issues, women’s issues, *and* masculine issues. This allows female lawmakers to demonstrate competence in dealing with high salience topics like war and peace, while simultaneously serving as surrogates for women nationwide. On the campaign trail, female lawmakers can highlight their legislative accomplishments to quell concerns stemming from gender stereotypes.

As a first step in evaluating the theory we develop, we analyze a comprehensive database of

all bills introduced in the U.S. House between 1963 and 2009. Unlike prior studies that focus primarily on the extent to which female lawmakers prioritize women’s issues, we examine three key dependent variables: the number of bills introduced by MCs, the degree of concentration in lawmakers’ agendas, and the propensity of legislators to sponsor bills in 19 different topic areas that cover the full range of issues considered by Congress. These are all, respectively, modeled as a function of legislator characteristics (including sex), partisanship, institutional position, and district level factors. This makes the analysis the most thorough examination to date of sex differences in individual sponsorship behavior. We then assess the degree to which the size of an MCs legislative agenda impacts the emergence of challengers in primary elections. If our theory is correct, women will need to do more than their male counterparts to deter challengers from entering the race.

We find that female MCs propose more legislation than men do and that the legislation they introduce is distributed across more policy topics—meaning women are less likely to craft specialized policy agendas than men are. Instead, they distribute their attention across a range of topics that includes civil rights, health care, social welfare, and defense. Sponsoring more legislation, overall, allows women to attend closely to women’s issues without neglecting district interests or perennially important topics like defense and foreign affairs. But this means women are investing more time and resources in lawmaking than their male colleagues are—perhaps out of necessity. We find that women who are successful at deterring challengers from entering primary elections sponsor twice as much legislation, on average, as do men who deter challengers.

Our findings speak to the gendered context of Congressional campaigns, suggesting that female representatives must do more in office than their male colleagues to achieve similar electoral outcomes. The added effort and staff hours female MCs typically devote to crafting legislation, vis-à-vis male MCs, only serves to put them on equal footing with men. It does not give them an advantage. Our findings also shed light on the policy implications of increased female representation. A large body of evidence shows that female lawmakers devote more attention to women’s issues than similarly situated males do. Theorists argue that common experiences and a shared sense of identity among women leads female MCs to be especially active on these topics (Pitkin, 1967; Mansbridge, 1999). Our findings support this assertion in the context of the U.S. Congress.

But they also reveal one of the many additional ways that increased female representation matters. We find that women are adding their voices to debates on topics long considered the province of men. We further discuss the implications of this finding in the paper’s concluding section.

Gender Stereotypes and Electoral Threats

Female members of Congress serving during the 1960s, 70s, and 80s faced overt sexism from voters and their colleagues. For instance, in 1975, roughly half of Americans believed men were better suited for politics than were women (Roper N.D.), and women held just 19 seats in Congress.

Today, women seeking election and reelection to Congress continue to face obstacles related to their gender. Female incumbents are more likely to face challengers than are male incumbents (Palmer and Simon, 2006) and the challengers they face are more likely to have political experience (Milyo and Schosberg, 2000). Moreover, women are not as trusted to handle “masculine” issues, like defense, crime, and the economy, which are issues of great importance to voters (Hernson, Lay, and Stokes, 2003). The news media perpetuate this bias. Swers (2007) shows that journalists seeking comment on issues related to national defense often overlook women with leadership positions on relevant committees, and turn instead to less qualified men.

Despite these obstacles, women who choose to run for Congress are as likely to be elected as men are. There are several reasons why. First, female Congressional candidates tend to have more political experience than male candidates (Pearson and McGhee, 2013). This experience helps women overcome disadvantages at the ballot box. Once in office, women are more adept at securing money for their districts than are their male colleagues, bring home 9% more federal funding, on average (Anzia and Berry, 2011). Women who face the most adversity (those serving in conservative districts where levels of sex discrimination are higher) secure even higher levels of funding. Anzia and Berry (2011) argue that female incumbents are able to win reelection at rates similar to incumbent men because they are successful at securing benefits for their districts.

Anzia and Berry (2011) also find that women introduce more bills, on average, than men do. This finding, they say, shows that women do not neglect their lawmaking duties in the pursuit of

spoils for their districts. We argue that these findings also speak to an additional mechanism by which female MCs combat sex stereotypes and ward off challengers. Bill sponsorship helps MCs cultivate a reputation for expertise and attentiveness to the issues of importance to voters and organized interests. If women distribute the bills they sponsor across a wide range of issues—including “masculine” issues prioritized by voters—they will be better able to combat the idea that their sex renders them less competent in some areas of public policy.

Combating Stereotypes with Expertise

There is an important and self-reinforcing relationship between legislative agendas and campaign agendas. Members of Congress introduce bills as a way of demonstrating their commitment to and expertise on various issues. Doing so allows members to develop and maintain relationships with interest groups, attentive publics, and reelection constituencies. By introducing bills on the topics that are salient to these groups, MCs can “claim credit” for being active on these topics (Mayhew, 1974). Not surprisingly then, Sellers (1998) finds that senators run campaigns that are centered on their legislative agendas. Female legislators might be especially apt to use this strategy. Studies find female candidates prefer to run on their credentials and accomplishments (as opposed to their personal characteristics) (Fox, 1997). Bills introduced might be one such accomplishment. Reciprocally, legislators are active sponsors of bills on the issues they campaign on (Sulkin, 2009). Members of Congress also integrate the campaign issues raised by challengers into their legislative portfolios (Sulkin, 2009). They hope that by doing so they will inoculate themselves against similar challenges in the future.

This ability to claim credit and demonstrate expertise may be particularly important for female lawmakers who must combat the types of gender stereotypes described above (Windett, 2014). Due to such stereotypes, Hernson, Lay, and Stokes (2003) argue that male and female candidates are respectively able to “own” divergent sets of issues. Women are seen as credible on topics related to care and compassion, while men “own” those related to toughness, leadership, and aggression. When women’s issues are salient, as they were in 1992 (the year of Justice Thomas’ confirmation

hearing), female candidates can succeed at the polls by running on topics where they are advantaged (issues like poverty, sexual harassment, and health care) (Palmer and Simon, 2005). But when masculine issues dominate the national agenda, female candidates must “formulate strategies to weaken the stereotypes and establish perceptions of issue competency on these traditional male issues” (Palmer and Simon 2005, 45).

One such strategy may be to develop a legislative portfolio that demonstrates expertise in a masculine policy area. Doing so would allow women to establish their credibility on issues that their gender does not typically allow them to own. For instance, Michelle Swers (2007) shows that after the 9/11 attacks female senators used bill sponsorship to strengthen their reputations on national defense policy. On average, Democratic women sponsored more homeland security related legislation in the 108th Congress than did co-partisan men or Republicans of either sex. Republican women were more active sponsors of “soft” defense bills (those extending benefits to veterans and military personnel) in both the 107th and the 108th Congress. Swers (2007) concludes that “stereotypes about women’s policy expertise creates an additional hurdle for women senators who seek to gain credibility on defense issues. The women recognize this vulnerability and devote extra effort to building their reputations [on these issues]” (581).

Swers (2007) findings suggest that women in Congress seek to balance their legislative portfolios by attending to both stereotypically feminine and masculine policy topics. Osborn and Mendez (2010) similarly find that female Senators are more likely than men to address women’s issues, *and* defense and foreign affairs in their floor speeches. In the House, Atkinson (Forthcoming) uses aggregated data to show that women (as a delegation) have been more active sponsors of health, parental leave, and civil rights legislation throughout the post-war period than have men, and have periodically emphasized defense as well. These findings are echoed by those of Craig Volden and his colleagues (Volden, Wiseman, and Wittmer, 2016), who use chi-squared tests to show that women in the 113th Congress focused on the sponsorship of women’s issue bills (like health, education, and civil rights legislation) *and* defense legislation. Finally, women in the House take credit in their newsletters for accomplishments across a wider range of issues than do their male colleagues (Dolan and Kropf, 2004). While men stress their successes in traditionally masculine issue areas,

“women’s credit claiming is more equally balanced across the different policy areas” (Dolan and Kropf, 2004, 53). Whether these differences in credit claiming reflect differences in legislative behavior, or whether they simply reflect the strategic promotion of certain accomplishments, has not been examined.

Together, these studies demonstrate women do employ a balancing strategy in certain instances—particularly in the post-September 11th Senate (the data analyzed by (Swers, 2007; Osborn and Mendez, 2010; Volden, Wiseman, and Wittmer, 2016; Dolan and Kropf, 2004) all post-date the September 11 attacks). Whether this strategy was in use in the House before 9/11, the degree to which partisanship and district factors influence its use, and the degree to which it is successful at improving the electoral fortunes of incumbent women is unknown. What we do know is that the gender stereotypes that disadvantage women on issues like defense and crime were strongest in decades prior to September 11th. Further, voters have long preferred candidates with competence on masculine topics and candidates who possess masculine character traits (e.g., Huddy and Terkildsen, 1993; Kahn, 1996; Druckman and Ostermeir, 2004). This means that even before 9/11, female members of Congress had incentives to craft policy portfolios that included introductions on masculine issues. But because women must also attend to the needs of their districts, and have a desire to represent women’s interests, their policy portfolios should be larger and more diverse than are those of their male colleagues.

Hypotheses

We expect women in the House to balance their legislative agendas by incorporating some “masculine issues” into their legislative portfolios. This should allow female legislators to demonstrate expertise in these areas and deter potential challengers. Because the gender stereotypes this balancing strategy is designed to combat predate the 9/11 attacks, we expect to find it in use throughout the time period studied.

This strategy’s use should result in female legislative portfolios that are larger and more diverse than are those of men. This is because female MCs are known to be more active sponsors of legislation related to women’s issues, and must also serve the interests of their constituents. If this

heightened activity on issues like gender equality and women’s health is coupled with attention to issues like defense and foreign affairs, it means the agendas women pursue in office will be larger and broader in scope than are those of their male colleagues.

If this balancing strategy is a successful one, women who employ it should achieve electoral outcomes similar to those achieved by men. This means women who are significantly *more* active sponsors of legislation (as compared with men) should be as successful as men at deterring challengers.

Data and Methods

To test our theoretical expectations, we rely on data from several sources.¹ The bill sponsorship data come from the Congressional Bills Project (CBP) (Alder and Wilkerson 1963-2009). To this, we add data from and the Congressional Primary Elections Data (Boatright, Moscardelli, and Vickrey, 2017), the Census, and Polidata Presidential Election Results.² We use the CBP data to examine the agendas of members of Congress and the primary data to test the effects of agenda behavior on challenger entry. The dataset includes a record of every bill introduced during our period of study (1963 to 2009 or the 88th through the 110th Congress). For each bill, the dataset also includes a number of variables that are useful for our purposes, including the name, sex, and Congressional district of the sponsor, as well as the primary topic area of each bill. The topic codes correspond to the coding scheme developed by the Policy Agendas Project, which consists of 19 broad categories, such as health, education, defense, transportation, and agriculture.³

¹All data and code to replicate the analyses and figures is available on the Political Behavior dataverse. <https://doi.org/10.7910/DVN/IJEWYV>

²The polidata election results are available by request from Princeton University’s Data and Statistical Services.

³The 19 major topic areas are: macroeconomics, civil rights and liberties, health, agriculture, ‘labor, employment, and immigration,’ education, environment, energy, ‘space, science, and technology,’ ‘law, crime, and family issues,’ social welfare, community development and housing, defense,

Some of these categories align with topics considered “traditional women’s issues”—that is, topics related to care and compassion. Those categories are health, education, social welfare, and community development and housing.⁴ Additionally, the topic of “civil rights and liberties” contains legislation designed to combat inequality against women and minorities, as well as legislation related to reproductive rights. Finally, the topics of defense, foreign affairs, and macroeconomics encompass stereotypically “masculine” issue areas. Therefore, while the topic codes are broad, they allow us to examine the sponsorship of “feminine” and “masculine” issue bills. The coding scheme also identifies a number of gender-neutral categories, such as transportation, government operations, the environment, and public land and water management.⁵

The CBP data do not contain information about district characteristics, margins of victory, or electoral challengers.⁶ For that information, we relied on data from the Census Bureau, Polidata, and Congressional Primary Elections Data, respectively. The datasets were merged together based on the congressional district number.

After merging the datasets, we construct aggregate measures of the legislative agendas of each transportation, foreign trade, international affairs and foreign aid, government operations, and public lands and water management. In 2014, the coding scheme was updated to create a standalone ‘immigration’ category. Our analysis does not reflect this change.

⁴Community development and housing includes bills related to low and middle income housing programs, veteran housing assistance, elderly housing, and aid for the homeless.

⁵These are coding decisions made by the Congressional Bill Project team. We do not collapse the variables into masculine or feminine issue areas.

⁶Additionally, if a member does not sponsor any bills during a given session, he or she does not appear in the CBP data during that session. To resolve this, we compared complete member rosters for each session to the bill sponsorship data and added members who did not put forth bills. A total of 109 members did not introduce legislation in at least one session over the time period of our analysis. We include these members only in the analysis of the number of bills sponsored, where zero is a meaningful number. Including a zero in the analysis of agenda concentration or areas of sponsorship is not logically sound.

representative per session of Congress. Our dependent variables are indicators of sponsorship behavior for each legislator $_{ij}$, where i is the individual member and j indicates the session of Congress. To test our hypotheses, we construct four dependent variables with these data: a count of the number of bills introduced by each MC in each session, a measure of the degree of concentration in each member’s agenda during each session, and the propensity of each member to sponsor legislation in each of the 19 different topic areas. Finally, to assess the impact of agenda size and concentration, we measure the total number of challengers in each congressional race during the period of study.

The construction of the first dependent variable is self-explanatory, as it is simply a count of the number of bills sponsored. Table 1 displays the descriptive statistics for the variable, first overall and then separated by the sex of the legislator. Notice that, overall, the minimum number of bills sponsored by both men and women in a single session is zero and the maximum is 432. The overall mean is approximately 22.4. Men, on average, have a higher level of bill sponsorship than do women—with an average of about 23 and a standard deviation of 27. Women meanwhile, have a lower average with 18.4 per session, although the standard deviation is just 18.7.

Figure 1 plots the median, interquartile ranges, upper and lower values, and kernel density of bill sponsorship by gender over the time period studied. As this plot indicates, bill sponsorship has decreased over time. Congressional rules initially prohibited co-sponsorship, which resulted in the introduction of a large number of duplicate bills in each session. Those rules changed to allow for unlimited co-sponsorship in 1979 (the 96th Congress) and the number of bills introduced thereafter decreased. From 1979 on, we see individual bill sponsorship decline, the maximum values decline, and the overall distribution of the data becoming more compact. Interestingly, in 16 of the 23 sessions of Congress, women have higher median levels of bill sponsorship, as compared with men.

[Insert Table 1 here]

[Insert Figure 1 here]

The second dependent variable measures the concentration of each member’s legislative agenda. The goal is to assess the degree to which members specialize, by offering bills on a small number

of topics, or introduce legislation on a range of issues. Assessing the number of issue areas with sponsorship could provide a simple measure of agenda concentration; however, this type of measure would only indicate the breadth of a representative’s agenda, not the depth of it. To precisely test our theory, we need an indicator that can measure both the breadth and the depth of an agenda—as women may not be able to establish a reputation for issue competency by sponsoring a single bill in an area like national defense while focusing primarily on women’s issues. To better capture the diversity of each representative’s portfolio, we construct a Herfindahl-Hirschman Index (HHI) for each legislator, by Congress.⁷

Herfindahl-Hirschman Indices are utilized by economists to test market concentration and competition. When used for this purpose, low scores indicate a high degree of competition within a market, and high scores indicate the presence of a monopoly. The measure has also been used in political science “to consider the level of competition in elections (Stigler, 1972), the effective number of parties in multiparty systems (Laakso and Taagepera, 1979), and the diversity of interest organization populations (Gray and Lowery, 2000)” (Boydston, Bevan, and Thomas III, 2014, 181). Here, we use the measure to determine whether a single issue monopolizes the agenda of a given legislator, or whether the legislator’s attention is distributed equally across many topics.

The equation below shows how the HHI is calculated. The measure is created by squaring the percentage of the agenda comprised of each issue and then summing those squared values.⁸ The index ranges from zero, indicating diffusion of attention across all topics, to 10,000, indicating a concentration of attention on a single topic. In the next section, we use Time Series Ordinary Least Squares Regression with the HHI as the dependent variable to estimate agenda concentration.

⁷In each session, this value is constructed only for members who have at least one bill introduction. If a member does not have a legislative portfolio, we cannot assess the diversity of that portfolio.

⁸The index can alternatively be calculated using proportions rather than percentages, in which case, it ranges from zero to one.

$$HHI = \sum_{i=1}^N S_i^2 \quad (1)$$

Our third dependent variable moves beyond the count and concentration of agenda diversity. We want to know the types of issues representatives focus on so that we can assess whether women introduce bills on a mixture of feminine and masculine topics. To do so, we calculate the proportion of each member’s legislative agenda that is devoted to each of the 19 issue areas. We then use this dependent variable to test the effects of gender on issue prioritization.

Because legislators can offer bills pertaining to a number of different issue areas during the same session of Congress, we must control for the potential of simultaneous and un-modeled correlation in the behavior of the individual members. Therefore, we utilize a time series seemingly unrelated regression technique (SUR). This technique allows for both the estimation of multiple equations and for the error terms of each equation to be contemporaneously correlated with one another.⁹

Lastly, we aim to tie the legislators’ agendas to their electoral prospects. To do so, we utilize data on Congressional primary elections compiled by Boatright, Moscardelli, and Vickrey (2017) to calculate the total number of primary challengers vying for each Congressional seat in every election during the period of study. The idea behind the measure is to assess the degree to which the incumbent is seen as vulnerable within his/her district, as vulnerable representatives should attract the largest number of challengers. The raw count of candidates ranges from 0 to 31 (although the median is two). Because of the presence of a few extreme outliers, we construct a categorical dependent variable of the number of total challengers entering Democratic and Republican primaries. We include four categories: unopposed, one challenger, two challengers, and three or more challengers. Figure 2 shows the median, upper and lower bounds, and kernel density of candidate entry by gender and election cycle. It is noteworthy that in four of the elections we examine, the

⁹If these equations were unrelated, the coefficients and standard errors would be identical to running 19 distinct Time Series OLS models. We estimated these individual equations and concluded that the error structure is related, and thus a SUR modeling strategy is more appropriate.

median value for female members of Congress was 3 or more challengers.

[Insert Figure 2 here]

Constructing Independent Variables

In all models, our primary explanatory variable is the sex of the legislator. This variable is provided in the CBP data. In Table 2, we break down the frequency of observations by sex. The models also include variables measuring other factors known to influence the number and topics of bills sponsored by representatives: previous electoral margin,¹⁰ majority party status, institutional position, committee assignments, ideology, and tenure in office may all affect legislator behavior. Party leaders, committee chairs, and senior members of Congress typically have more resources at their disposal than do rank-and-file members. These resources include additional staff, greater control over the agenda, and greater access to specialized information. Subsequently, such members are more likely to sponsor legislation (Schiller, 1995), are more likely to see the bills they sponsor debated in committee (Kuklinski and West, 2005), and are more likely to participate in subcommittee markup (Hall 1996). Freshman legislators and members of the minority party, on the other hand, are less likely to sponsor legislation than are other members (Garand and Burke, 2006; Schiller, 1995). For these reasons, we control for majority party status, the number of sessions the member has served in Congress, status as a committee chair, and membership in the House leadership.¹¹ We also control for the ideology of the member, the race of the member, and whether or not the member began their career by replacing a deceased spouse.¹²

¹⁰In the appendix, we provide a model that includes an interaction between gender and electoral advantage. We do not see a significant effect across genders

¹¹We classify party leadership as Speaker, Majority and Minority Leader, and Majority and Minority Whip.

¹²One in five women who has served in the House and Senate initially succeeded their late husbands, although this practice was more common during the earlier decades of the study (prior to the mid 1970s) than in the later ones (Office of the Historian, 2017).

[Insert Table 2 here]

District factors also shape the priorities legislators pursue. For instance, legislators from urban areas are unlikely to focus on farm subsidies just as legislators from rural areas are unlikely to focus on urban renewal. Instead, members of Congress craft legislative portfolios that will appeal to their constituents. Thus, we include in the model information about the districts each member serves. We collected information from the Census Bureau that identifies urban districts, gives the percentage of the district that is African American, and lists the median income for the district in 2012 dollars.¹³ We also include the two-party Democratic vote share in the district for the previous presidential election. Because these indicators are all highly correlated with one another, we use principal components factor analysis to construct district-specific factor scores for these demographic and political characteristics. We include this factor score in each of our models.

Finally, we include a time trend in each of our models. This time trend assists in accounting for the over-time increase in women in Congress, increased over time polarization, as well as the decline in bill sponsorship (Volden, Wiseman, and Wittmer, 2016).

Results

Bill Sponsorship and Agenda Diversity

We begin our analysis with an examination of the differences in the overall sponsorship behavior across sex. Table 3 reports the coefficient estimates and standard errors of our first Time Series Negative Bi-Nomial Model predicting the total number of bills sponsored by each member. Overall, the results in Table 3 comport with our expectation that women sponsor more legislation than men. The substantive significance of coefficients from negative binomial models is difficult to interpret. For this reason, we plot the predicted number of bills sponsored with 95% confidence intervals for each session of Congress. As evident in Figure 3, we have strong support for our theoretical

¹³These data were collected in the census year value and converted to 2012 dollars using the Bureau of Labor Statistics' "Consumer Price Index Inflation calculator."

claims across all sessions of Congress. Women have a statistically significantly higher level of bill sponsorship than male MCs. Bill sponsorship has declined over time for both men and women, but women remain more active in bill sponsorship by session. In the early time periods in our data, we see women sponsoring nearly 8 more pieces of legislation as compared to men. During the last time period, this declines to 2 more pieces of legislation sponsored, but this difference is still statistically significant.

[Insert Table 3 here]

[Insert Figure 3 here]

Moving beyond the simple count of bills sponsored, we now turn our attention to the analysis of the Herfindahl-Hirschman Indices. As we have previously outlined, a lower value for the HHI indicates a more diverse and evenly spread out legislative agenda, while higher values indicate a concentration of attention on a smaller set of issues. Figure 4 shows the trends of the HHIs over time for men and women. The simple visual provides evidence that women generally have the most diverse agendas, although there is a good deal of variation over time. This evidence lends support to our argument that women craft agendas that are more diverse than are those of men. We next use the HHI as our dependent variable in a Time Series OLS model. The coefficients and standard errors are reported in Table 4. The results show that women have more diverse legislative agendas when compared to men. We plot the estimated HHI by gender and Congress in Figure 5. Again, we find that women have agendas that are more evenly distributed compared to men, with the relationship reaching statistical significance during the 91st Congress. This figure lends interesting insight into the overall nature of legislative agendas over time. As we show, the agendas of both men and women have become more concentrated over time, with higher HHI values in more contemporary Congresses. Nevertheless, the agendas of women remain statistically less concentrated over time (as compared with me).

[Insert Figure 4 here]

[Insert Table 4 here]

[Insert Figure 5 here]

Where do women focus their attention?

Our findings above show that women introduce more legislation across more topics than similarly situated men do. Here, we examine the specific issue areas that receive more or less attention from male and female MCs. Figure 6 reports the results of our seemingly unrelated regression estimations. Recall, we simultaneously estimate 19 models predicting the percentage of each MCs legislative agenda devoted to that issue area. The figure reports the predicted proportion of agenda priority for each issue area by the gender of the representative.¹⁴

[Insert Figure 6 here]

Our results offer strong support for our theoretical claims. We see consistent evidence of strategic behavior in the bill sponsorship patterns of women when compared with their male counterparts. Our estimates indicate that women balance their legislative agendas by sponsoring legislation in areas traditionally associated with “women’s interests,” as well as in areas traditionally stereotyped as “masculine.”

Women devote significantly more attention to the issues of “civil rights and liberties,” “education,” “health,” “law, crime, and family issues,” and “social welfare” than do their male colleagues. With the exception of “law, crime, and family,” each of these topics are considered “women’s issues.”¹⁵ We see men devote more attention to the areas of “energy,” “macroeconomics,” and “public lands and water management” as compared to women.¹⁶ Importantly, we find no differences in the propensity of men and women to sponsor bills related to “agriculture,” “banking,” “community development and housing,” “defense,” “environment,” “foreign trade,” “government

¹⁴In the appendix, we report the coefficients and standard error for each model.

¹⁵But note that crime and family issues includes some subtopics related to women, such as domestic violence, family law, and child abuse.

¹⁶One explanation for lessened attention to public lands is the nature of the districts women typically represent. It has been argued women come from district with less public lands.

operations,” “international affairs,” “labor,” “space, science and technology,” or “transportation.” In addition to sponsoring *more* legislation on a range of “feminine” topics, female MCs keep pace with their male colleagues on a broad range of additional issues, including the masculine topics of defense, and international affairs.

These findings demonstrate that women do not focus on the issues their gender allows them to “own” to the exclusion of other topics. Instead, women craft diverse legislative agendas that encompass stereotypically feminine *and* masculine topics, as well as gender-neutral ones. As a result of this balancing strategy, women introduce more legislation, on average, than do male legislators, and this legislation is typically spread across a larger number of topics.

One critique of these findings may be that the partisanship of men and women drives agenda behavior. Women are far more likely to affiliate with the Democratic party than the Republican party, which may influence the types of issues women focus on. (Although party affiliation should not directly influence the number and concentration of bills introduced.) In the appendix, we show the same analyses with the inclusion of a party-gender indicator variable. Our results remain robust.

Can Productivity Curb Candidate Entry?

In the previous two sections, we show that women have been more productive in bill sponsorship, that their agendas are less concentrated on a small number of issues, and that they balance their agendas by including bills on feminine, masculine, and gender-neutral topics. We next turn our attention to the electoral impact of women’s productivity. Here, we examine whether the size and scope of a women’s legislative portfolio has an influence on the emergence of primary challengers. In table 5, we report the coefficients of an ordered logit model predicting total challenger entry in two-party primaries for incumbent members of Congress. In this model, we include interaction terms for gender and bill sponsorship, agenda diversity, and the proportion of bills in the agenda focusing on “masculine issues” (as operationalized by Volden, Wiseman, and Wittmer (2016)). The results show that the interaction of gender and bill sponsorship has a statistically significant, negative effect on candidate entry. This indicates women with larger issue agendas face fewer

primary challengers. The other two agenda items fail to reach statistical significance.

[Insert Table 5 here]

In order to evaluate the substantive impact of bill sponsorship (by gender) on candidate deterrence, we generate two predictions. Each prediction is based on the results shown in Table 5. In these predictions, we examine hypothetical female and male members of Congress. In the first scenario, we examine the impact of total bills sponsored (by women and men, respectively) on seeing three or more challengers. In the second, we estimate the probability of running unopposed, again based on total number of bills sponsored. To assess the impact of gender stereotypes, we set different levels of sponsorship behavior for the hypothetical males and females. For men, we estimate the predicted probability at the mean level of bill sponsorship for the series—22 bills. Given that we expect gender stereotypes in the electorate to force women to do more than the average male, we estimate the effect for women at one standard deviation above the series mean, or 48 bills. In each of these predictions, we set the remaining co-variate values at the mean for continuous variables and the mode for dummy variables. We generate predicted probabilities for each election cycle from 1970-2008 with 95% confidence intervals.

Figure 7 shows the results of our predictions. Figure 7.a and 7.b show the probability for three or more challengers, while 7.c and 7.d show the probability of being unopposed. There are two main takeaway points from this exercise. The first is that, over time, bills sponsorship has become a less powerful tool for deterring challengers. Secondly, and more importantly, women have to be more than twice as productive as men to see the probability of challenger emergence decrease to a level that is indistinguishable from that of men. This finding holds throughout the time period studied. Women simply have to do more—much more, in fact—to face levels of electoral competition that are similar to those faced by the average male incumbent.

[Insert Figure 7 here]

Conclusion

This paper considers the strategic behavior of women in the U.S. House of Representatives as they seek to represent their constituents and the broad interests of women, while simultaneously combating gender stereotypes and threats from potential challengers. We demonstrate that women build more diverse legislative agendas than do similarly situated males by examining sponsorship behavior across the full range of issues legislated in Congress. Men develop more narrow legislative agendas that demonstrate expertise in a few areas, presumably those of particular interest to their constituents and to the representatives themselves. Women on the other hand, demonstrate expertise on a broader range of issues. The combination of attention to district interests, women's issues, and masculine topics results in the construction of legislative portfolios that are larger and broader in scope than are those of their male colleagues. These findings provide a more complete portrait of the influence women have had in Congress over the past half-century. They indicate that women are not single-issue representatives who focus their attention narrowly on "women's issues." Rather, the legislative portfolios crafted by women are the largest and most diverse in the chamber. These findings reiterate the idea that female lawmakers and candidates must do more than their male colleagues to be elected and reelected at similar rates (i.e. Anzia and Berry 2011, Lawless and Fox 2010), and support our argument that women balance their legislative portfolios strategically, as a way to fortify their credentials on masculine topics like defense and foreign policy. Further, we show that this balancing strategy results in electoral gains (by deterring challengers) that puts them on equal footing with male incumbents.

Despite this evidence in support of our theory, future researchers might explore alternative explanations for the findings we present. Perhaps the types of women who are successful at winning election to Congress (despite the gendered nature of Congressional politics) are more competent and have a wider range of interests than does the average male MC. If so, women might develop large, diverse legislative portfolios because they want to and are able to, not because they feel they must. More likely, their motives are mixed. Most members of Congress "run scared" and do all they can to protect themselves against challengers (King, 1997). Female politicians with broad

interests might, therefore, find that developing a reputation for expertise through bill sponsorship is a particularly appealing path to reelection. The interplay between the distinct backgrounds of female politicians, the stereotypes they must overcome, and the motives that drive their electoral behavior is fertile ground for continued research.

Finally, this study speaks to the wide range of policies influenced by female legislators. Women in Congress devote particularly high levels of attention to women's issues like childcare, education, health care, and so on. But they also offer just as many bills as men on a range of non-women's issues and masculine issues. The substantive influence of female legislators on such topics would seem a promising area for future research. Studies show women bring distinct perspectives to policy issues that are not considered "women's issues," like crime (Kathlene, 1995) and weapons testing (Clark and Clark, 1986). Researchers might, therefore, further investigate the qualitative nature of the legislation women introduce on masculine topics—looking to see if they offer distinct perspectives or policy solutions.

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Table 1: Summary Statistics for Agenda Dependent Variables

Dependent Variables	Min	Max	Mean	SD
Overall				
Total Bills Sponsored	0	432	22.4	26.91
HerfindahlHirschman Index	648.9	10000	2588.331	19806.957
Female Legislators				
Total Bills Sponsored	0	187	18.37	18.71
Herfindahl-Hirschman Index	857.14	10000	2504.18	1675.356
Male Legislators				
Total Bills Sponsored	0	432	22.7	27.42
Herfindahl-Hirschman Index	648.9	10000	2594.91	1816.77

Table 2: Number of Bills Sponsored, by Sex

Variable	Frequency	Percent
Female Legislators	736	7.27%
Male Legislators	9,391	92.73%

Table 3: Time Series Negative Binomial Predicting the Number of Bills Sponsored

Variable	Coefficient
Bills Sponsored _{t-1}	0.007* (0.00)
Female	0.187* (0.05)
Previous Electoral Margin	-0.001* (0.00)
Widow	0.022 (0.18)
Racial Minority	-0.067 (0.05)
Committee Chair	0.173* (0.03)
Party Leader	-0.352* (0.07)
District Effects Factor	-0.034* (0.02)
Majority Party Member	-0.047* (0.02)
DW-nominate	-0.026 (0.04)
Congress	-.045* (.00)
Constant	6.020* (0.23)
N	7564
Wald Chi ²	2817.61
* p<0.05	

Cell entries report coefficients from a Time Series Negative Binomial regression. Standard errors are in parentheses.

Table 4: Time Series OLS Model Estimating Agenda Concentration

Variable	Coefficient
HHI_{t-1}	0.389* (0.01)
Female	-276.811* (77.83)
Previous Electoral Margin	-0.478 (0.64)
Widow	-110.707 (270.95)
Racial Minority	22.130 (80.48)
Committee Chair	198.721* (71.39)
Party Leader	376.552* (164.91)
District Effects Factor	105.681* (35.86)
Majority Party Member	-58.934 (53.43)
DW-nominate	39.531 (58.51)
Congress	27.297* (3.90)
Constant	-1109.751* (444.99)
R^2	0.5162
N	7,442
* p<0.05	

Cell entries report Time Series OLS Coefficients with standard errors in parentheses.

Table 5: Ordered Logit Model Estimating Primary Candidate Entry

Variable	Coefficient
Female	0.488 (0.27)
Percent Masculine Issues _{t-1}	0.001 (0.00)
Female × Percent Masculine Issues _{t-1}	0.005 (0.00)
Bills Sponsored _{t-1}	0.000 (0.00)
Female × Bills Sponsored _{t-1}	-0.010* (0.00)
HHI _{t-1}	0.000* (0.00)
Female × HHI _{t-1}	-0.000 (0.00)
Republican	-0.669* (0.20)
Previous Electoral Margin	-0.042* (0.00)
Widow	0.657 (0.35)
Racial Minority	-0.021 (0.14)
Committee Chair	-0.208 (0.11)
Party Leader	0.294 (0.22)
District Effects Factor	0.780* (0.12)
Ideology	1.324* (0.38)
South	-0.284* (0.08)
Election	-.2127* (0.03)
Cut 1	-6.482* (0.51)
Cut 2	-3.776* (0.53)
Cut 3	-2.783* (0.54)
Pseudo R ²	0.172
N	9,273
* p<0.05,	

Cell entries report Ordered Logistic Regression Coefficients with clustered standard errors by election in parentheses. Election year dummy variables are not included in the presentation of the models.

Figure 1: Bill Sponsorship by Gender and Congress



Figure 2: Challenger Entry by Gender and Election

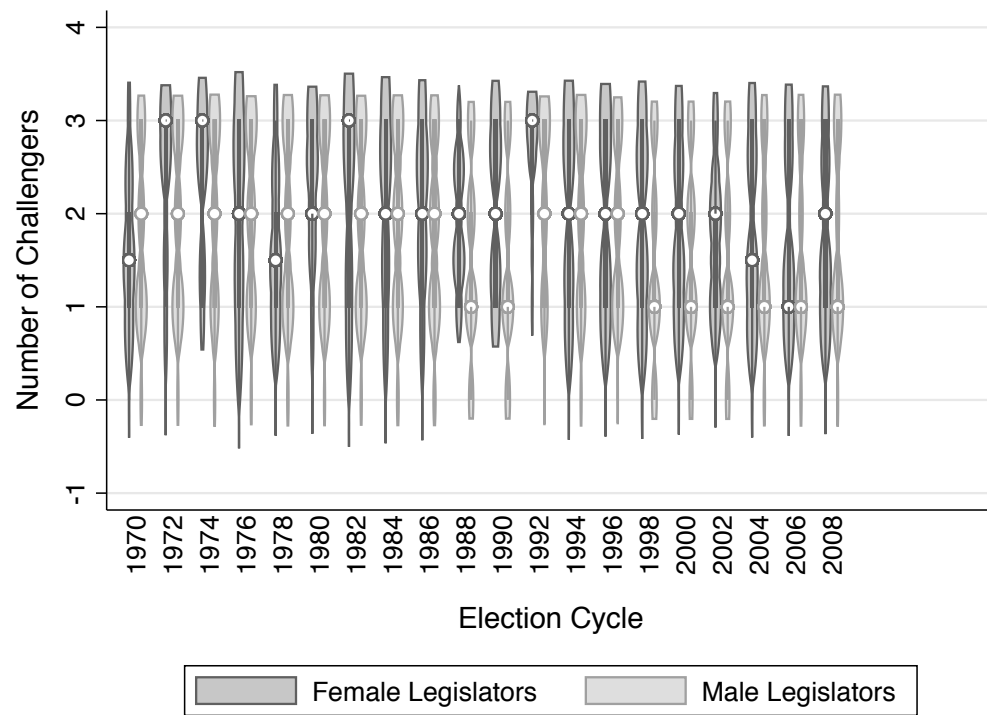


Figure 3: Predicted Count of Bills Sponsored by Gender and Congress

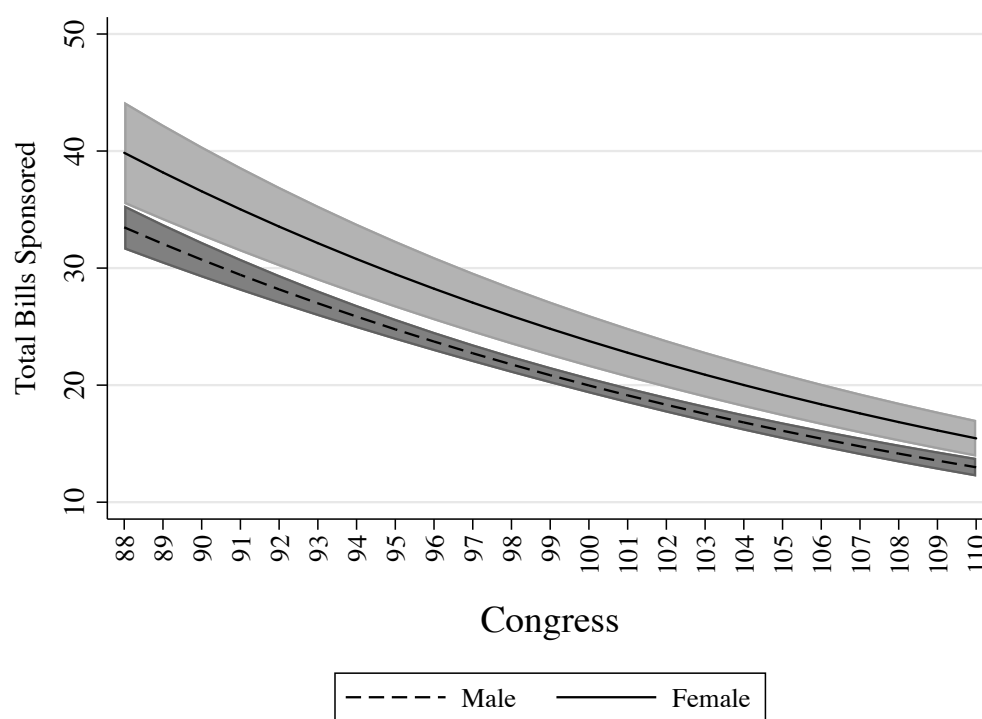


Figure 4: Median and Kernell Density of Herfindal-Hirschman Index by Gender and Congress



Figure 5: Predicted Herfindal-Hirschman Index by Gender and Congress

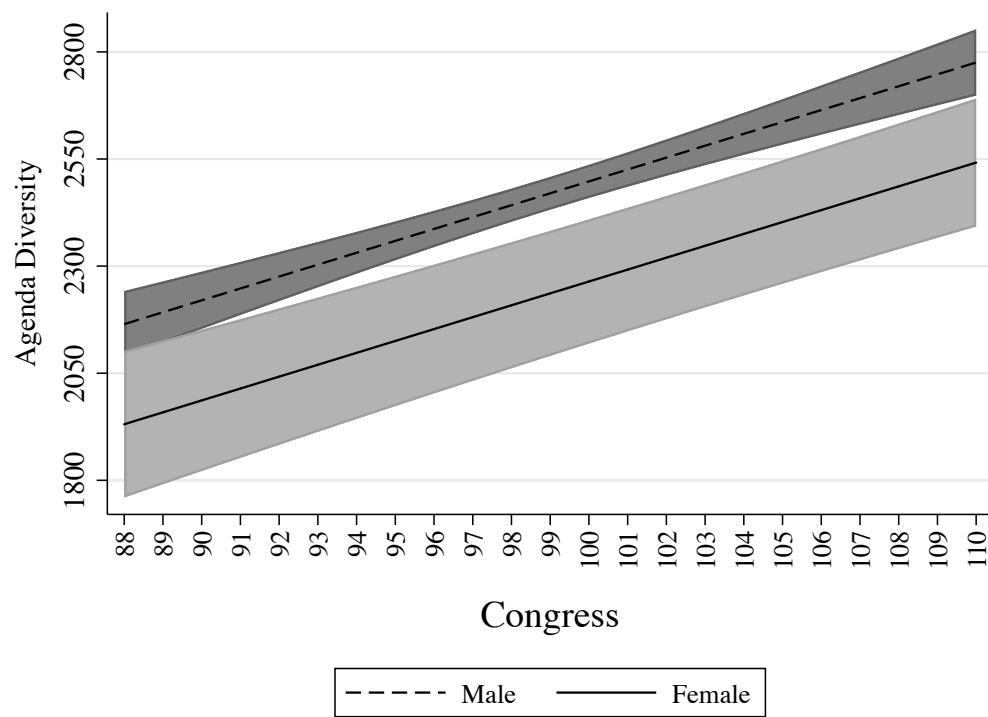


Figure 6: Predicted Agenda Concentration by Issue Area

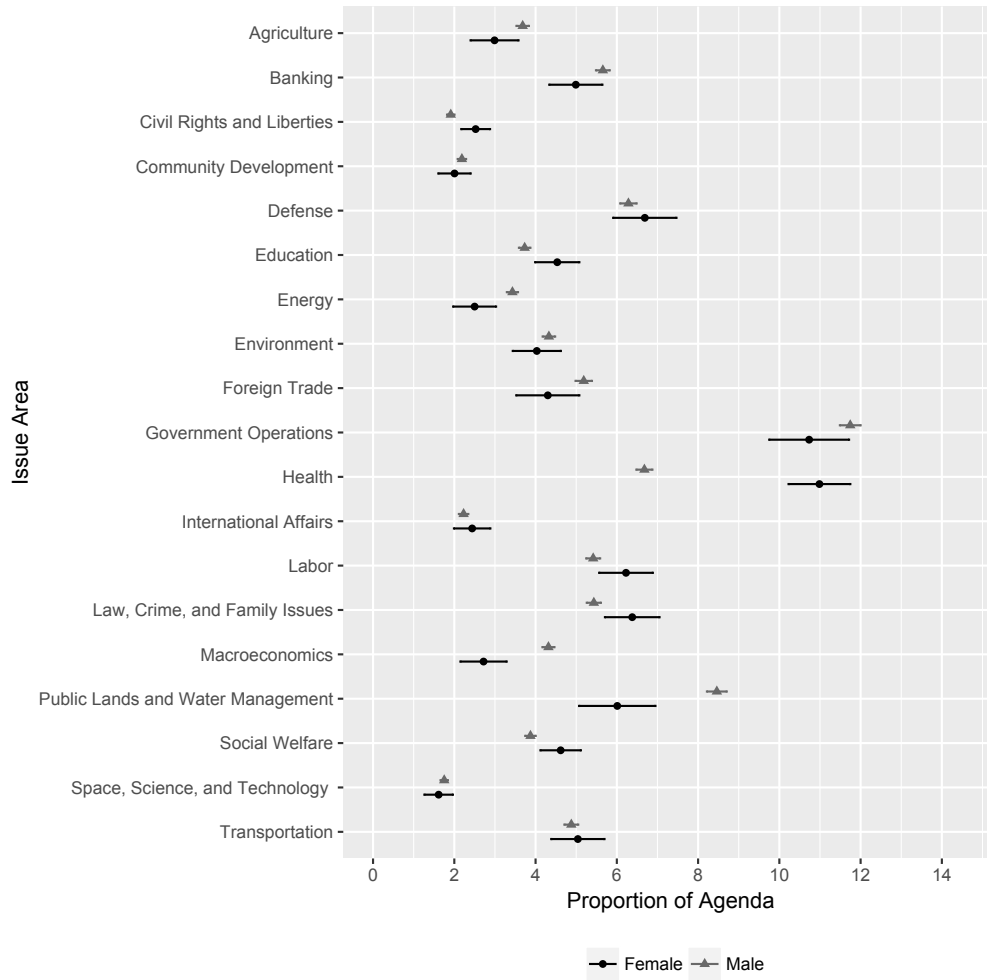


Figure 7: Predicted Probability of Challenger Emergence by Bill Sponsorship and Sex

