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Abstract

In directly elected bicameral legislatures without a quota system, there is often a large disparity in the percentage of women's representation between the two chambers. Japan is no exception to this rule. The share of women members in the upper house (23.1%) is twice as high as that in the lower house (9.7%). Furthermore, the former has consistently outnumbered the latter for decades. The disparity between the two chambers may be the results of differences in electoral systems, but that cannot fully explain it. We explore the mechanisms behind this disparity through two survey experiments from the perspectives of both voters (demand side) and candidates (supply side). Our findings show that voters become more supportive of women candidates in upper house elections when they are informed that the upper house plays a subordinate role in decision-making. Moreover, women are found to be more willing to run for office when they are informed about the job security that accompanies an upper house position, whereas men are less willing to run when they are informed about the limited power of the upper house to appoint the prime minister. These results suggest that the institutional priming conditions people's attitudes toward women candidates and their willingness to run for office, resulting in a large disparity in the percentage of women representatives between the two chambers in the bicameral legislature.

Keywords: bicameralism, gender, elections, voting behavior, experiment, Japanese politics
JEL classification: J16, D72, D91

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1. Introduction

An increasing number of countries are adopting quota systems to increase the representation of women within their legislatures. However, countries with directly elected bicameral legislatures that have not adopted a quota system often have significant disparities in the ratio of women's representation between the two chambers. Japan is no exception. In the Diet, Japan's national parliament, the share of women legislators in the upper house (House of Councillors, hereafter HoC) is 23.1%, which is twice as high as the 9.7% female representation in the lower house (House of Representatives, hereafter HoR). This gap has existed even though voters directly elect members of both house under very similar electoral systems. Furthermore, this disparity has been notably consistent since World War II, when women's suffrage was introduced.

Why is there such a difference in women's representation between the two chambers? We explore the possible mechanisms behind this difference through survey experiments from two perspectives: the voter side (demand-side) and the candidate side (supply-side). Specifically, we focus on two key features that distinguish the Diet's two chambers: the size of the stakes and the stability of the positions. We argue that these institutional features influence the incentives of both voters and candidates, resulting in the gender disparity between the two chambers.

The results show that voters are more likely to support women candidates in upper house elections when they have been informed of the subordinate role of the HoC in decision-making. Moreover, (risk-averse) women are more willing to run for office when informed about job security in the HoC. At the same time, (power-seeking) men are less inclined to run for office when informed that the HoC has limited power to choose the chief executive—the Japanese prime minister (PM). These results suggest that people's attitudes toward women candidates and the willingness of women to run for office are conditional on the priming of institutional power, which results in significant disparity in the percentage of women representatives between the two chambers.

This study contributes to three strands of literature. First, we aim to contribute to the literature on bicameralism by introducing a gender dimension. Researchers have studied various aspects of bicameral legislatures worldwide, including their impact on policymaking (Tsebelis and Money 1997; Heller 2007) and the institutional differences between the two chambers (Shell

2001; Mueller, Vatter and Dick n.d.). By providing a gender perspective, this study broadens our understanding of the effects of the institutional differences between the two chambers. Second, this study also contributes to the literature on second-order elections and women's representation. Much of the research on this issue has focused on the relationship between the European Parliament (EP) and the national legislatures of EU member states (Xydias 2016; Kovar and Kovar 2012; Kauppi 1999). We extend the study of second-order elections by applying the analysis to a bicameral setting within a particular country. Third, we provide a more nuanced understanding of Japanese people's attitudes toward women candidates. Some studies suggest that Japanese voters do not necessarily have negative attitudes toward female candidates (Horiuchi, Smith and Yamamoto 2020; Kage, Rosenbluth and Tanaka 2019). In contrast, we focus on the gender gap between the two chambers of the Diet and identify under what conditions voters become more or less supportive of female candidates.

In what follows, we first illustrate the puzzle of the difference between female representation in the two chambers of Japan's bicameral system and then present two sets of hypotheses regarding citizens' perceptions as voters and potential candidates. We investigate our hypotheses using conjoint and vignette experiments in the following two sections. Finally, we summarize our findings and discuss their theoretical and practical implications.

2. The Puzzle of the Disparity in Female Representation

2.1. Different levels of female representation between the two chambers

Figure 1 shows the percentage of women members of the Japanese Diet over time. The HoC has a higher rate of female members than the HoR and the difference between the two chambers has been consistent over time (albeit with some fluctuation). Many scholars and pundits (e.g., Steel 2022, p.3) have pointed out that Japan lags far behind in the percentage of women legislators relative to the country's level of socioeconomic development, with only 9.7% of the HoR members being women as of 2021. However, a different picture emerges when women members of the HoC are included: in the 2010s, the average percentage of female members of the HoC was 23.0%, while the global percentage of female members was 25.5% on average as of 2021

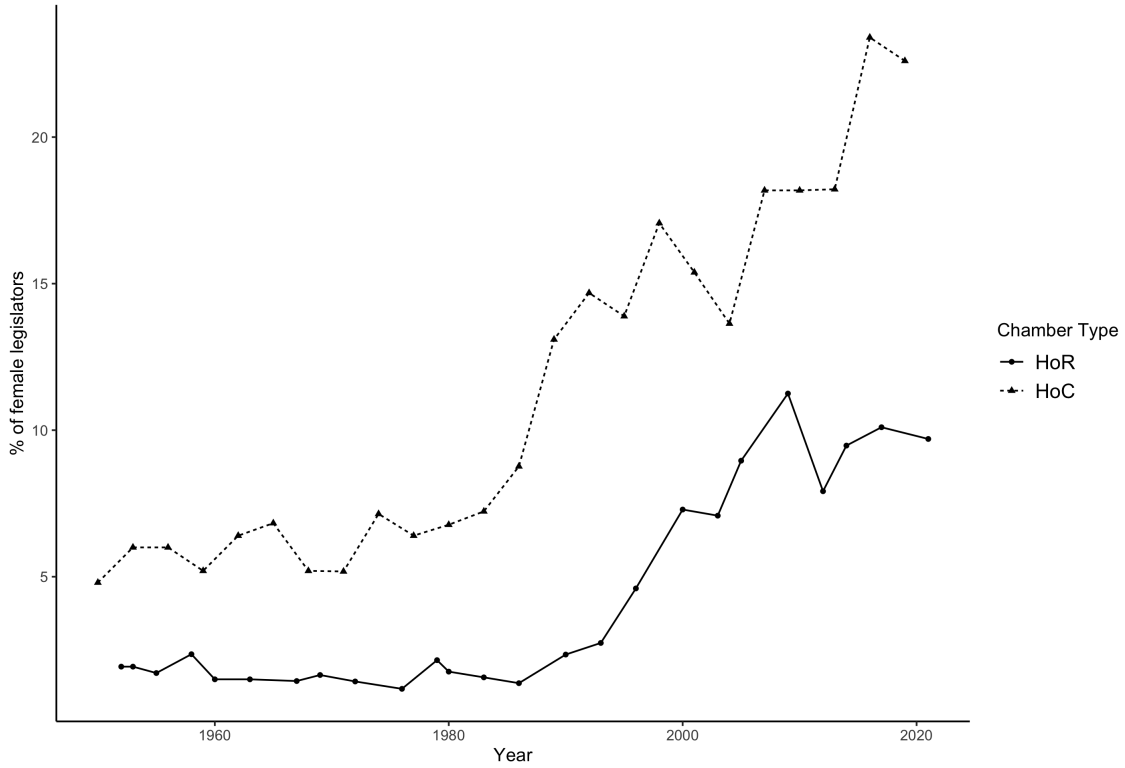

Figure 1: Gender disparity in Japanese bicameral legislature

Source: Inter-Parliamentary Union (n.d.)
Note: The Inter-Parliamentary Union's database does not include the results for the 2016 and 2019 HoC elections and the 2017 and 2021 HoR elections based on the data from the Ministry of Internal Affairs and Communications Office.

(United Nations 2021). The proportion of women in the HoC in contemporary Japan is not as far behind the grobal average as is their representation in the HoR.

The leading existing theories do not provide satisfactory explanations for this disparity. For example, national culture is discussed as an essential factor that accounts for female representation (Norris and Inglehart 2001), but members of both chambers are elected by voters of the same culture. Institutionally, members of both chambers are directly elected and no quotas are adopted for women (Krook 2010). Before the 1994 electoral reform, the two chambers had different electoral systems; however, after this reform, the two chambers adopted a mixed electoral system (Nemoto 2018). Thus, the consistent difference in women's representation between the HoR and HoC cannot be attributed to different electoral formulas, which are often used to explain this variation.

2.2. Theories and hypotheses

Around 40% of countries have a bicameral legislature that conducts legislative deliberations in two chambers (Tsebelis and Money 1997). However, the type of bicameralism varies across countries. Lijphart (1999) distinguished two dimensions of bicameralism, which account for these variation: whether the two chambers are (1) congruent or incongruent and (2) symmetrical or asymmetrical. The first dimension—congruence—concerns representation. It focuses on the composition of the members of each house and distinguishes the bicameral system according to their differences. However, the main focus is on *whom* the members represent; here, the differences in an electoral system for selecting members are intended to explain the differences between the bicameral system on this dimension. The focus is not on the differences in the gender of the elected representatives, per se. The second dimension—asymmetry— concerns the balance of power between the two houses of bicameralism. The constitutional powers granted to the two chambers often differ, and bicameral systems are classified according to the extent to which each house has the power to pass or block legislation.

Although the possibility that the second dimension affects the first is not much discussed in the bicameralism literature, we argue that the difference in the power bested on the two houses is likely to affect voter and candidate behavior and even the composition of the members of each house. We posit that a set of institutional factors in this dimension might contribute to the differences in female representation between the two houses in Japan.

We point to two particular types of institutional asymmetries. The first asymmetry is that virtually only the HoR members have the power to elect the PM in Japan. Although the legislative powers of both chambers are roughly equal (Takenaka 2010), this feature makes the HoC subordinate to the HoR in the eyes of both politicians and voters. Some authoritative cross-national studies reflect such evaluation. For example, in the comparative politics textbook published by the Oxford University, Japan is a case where the lower chamber has significantly greater powers than the upper counterpart (Kreppel 2020). Patterson and Mughan (2001) also assert that the Japanese upper house is subordinate to the lower house, similar to the cases of Britain, France, Ireland, and Spain. In the V-Dem database (Coppedge et al. 2022), which is prepared based on expert surveys, Japan's upper house is evaluated to be weaker than the lower

house to the similar extent as those in Czech and Poland (see Table A5).

The second institutional asymmetry concerns position security. The 1945 Constitution stipulates that a four-year term of office for HoR members, but at the same time states that the PM may dissolve the HoR at any time and hold general elections. In fact, in Japan's postwar history, most elections to the HoR have taken place following dissolution, with only two general elections (in 1976 and 2021) held after the expiration of a four-year term. In this regard, HoR members face the threat of losing their positions at virtually any time. In contrast, the term of office for HoC members is fixed at six years, and elections for these seats are never held in the middle of a six-year term. In other words, the six-year period of HoC members is constitutionally secured, and their positions are stable. Below we present hypotheses based on these institutional differences between the two chambers from the respective perspectives of voters and candidates.

Voters as demand-side

Voters are less enthusiastic about elections when the election results do not change the government framework and the stakes are small (Rief and Schmitt 1980), and they are even more supportive of electing women to less powerful offices (Kovar and Kovar 2012; Ono and Burden 2019). Researchers have shown that women candidates tend to be more favored in the EP elections because the EP is not as powerful as national parliaments (Lühiste and Kenny 2016; Beauvallet and Michon 2009; Kauppi 1999). Although these studies do not examine the causal relationship between the two, we apply this logic to bicameralism and expect Japanese voters to behave similarly, resulting in more women in the HoC. That is, we hypothesize that voters are more likely to support women candidates when they are informed that the office being contested in the election has less authority.

H1: *When respondents are informed that the HoC has less power than the HoR, they are more likely to support a female candidate over a male candidate in HoC elections.*

Candidate as supply-side

The institutional asymmetries that result in differences in power and the stakes between the two houses also affect the incentives of candidates. Not only the PM but also most ministers are customarily chosen from among members of the HoR. Such a practice would be expected

to create an incentive for ambitious candidates to prefer to run for office in the HoR. Men are generally more ambitious than women (Fox and Lawless 2011); likewise, they are expected to be more interested in running for HoR elections. This leads to the following hypothesis:

H2: *When respondents are informed that the HoC has less power than the HoR, gender differences in willingness to run for office are smaller in HoC elections than in HoR elections.*

Another element of institutional asymmetry that is likely to affect candidate incentives is position security. As mentioned earlier, the positions of HoC members are secured for six years, whereas HoR members could lose their positions if the parliament is dissolved. Scholars have generally considered that women tend to be more risk-averse than men (e.g., Byrnes, Miller and Schafer 1999; Cross, Copping and Campbell 2011), and Japanese data also support this finding (Iida 2016). Therefore, we expect that women would be more willing to run for HoC elections than for HoR elections, which leads to the following hypothesis that this tendency will be observed among respondents when primed with information about the stability of HoC member positions.

H3: *When informed that the positions of HoC members are more stable than HoR positions, the gender difference in willingness to run for office among respondents is smaller in HoC elections than in HoR elections.*

3. Demand-Side Study

3.1. Experimental design

We tested our voter-as-demand-side hypothesis with a conjoint experiment (Hainmueller, Hopkins and Yamamoto 2014). We embedded it in an online survey conducted from July 27 to 31, 2020. Eligible Japanese voters were recruited through the online panel of Rakuten Insight. In recruiting those respondents, quotas were set to match the distribution of respondents' gender, age, and prefecture of residence to the national census. We obtained a total of 2,267 valid responses, excluding inattentive respondents detected by the screening questions that preceded our experimental component.

In our conjoint experiment, respondents were shown randomly generated profiles of hypothetical election candidates and asked to rate their favorability toward each candidate as a legislator on an eight-point scale from "not favorable at all" to "very favorable." Candidate profiles included personal attributes such as gender, age, education, prior occupation, hometown, political experience, dynastic status, and party affiliation. These attributes largely followed Horiuchi, Smith and Yamamoto (2020), who conducted a conjoint experiment in Japan to assess the effects of those attributes on voters' support for candidates. We adjusted the marginal distributions of profiles to real-world distributions to improve external validity (de la Cuesta, Egami and Imai 2022). Respondents rated one candidate at a time in each task, which was repeated 10 times for the HoR election and 10 additional times for the HoC election, randomizing the order of the elections among respondents; thus, each respondent rated a total of 20 candidates. This yielded $2{,}267 \times 20 = 45{,}340$ observations.

The critical point of this experiment is that we randomly split respondents into two groups, and gave information about the difference in the authority to elect the PM between the HoR and the HoC to only one of the groups. Specifically, half of the randomly selected respondents were asked to read the following information:

> The Diet comprises the HoR and the HoC. The HoR has the power to nominate the PM as well as to vote on bills. On the other hand, although the HoC has the power to vote on bills, it has no de facto power to nominate the PM because the Constitution establishes the supremacy of the HoR. Thus far, the Japanese PM has been elected only from among the members of the HoR.

Although some respondents might already know this fact, we believe this information is important as a reminder to respondents that the HoC is less powerful than the HoR.

In addition, before beginning the experiment, we asked respondents how important they thought the HoR and HoC election results were.[1] We divided respondents a posteriori into those who rated the HoR election results as more important than the HoC election results (34.6% of all

[1] To conceal from respondents the true purpose of this study, we also included the local election results in the list of evaluations, but their ratings were not used in this study. The order of elections in the list was randomized.

attentive respondents) and those who did not (65.4%).[2] We examined how the effect of priming on the authority of each chamber varied by those groups.[3]

We focused on the average marginal component effect (AMCE) of a candidate being a woman on voters' candidate evaluations. The AMCE is "the marginal effect of [the attribute] averaged over the joint distribution of the remaining attributes" (Hainmueller, Hopkins and Yamamoto 2014, 10). It is estimated as the coefficient of the corresponding dummy variable in a linear regression where independent variables are a set of dummy variables representing each attribute. We estimated the linear model using the ordinary least squares with robust standard errors clustered by respondent. We also estimated the AMCE conditional on election types (HoR or HoC), the presence or absence of priming on HoR dominance, and respondents' perceptions of the importance of both chambers, by splitting the sample and estimating the AMCEs for the subgroups.[4]

3.2. Results

Figure 2 shows the results. This figure illustrates the nonconditional and conditional AMCEs of being a woman on voters' favorability toward the candidates.[5] Dots represent point estimates, and horizontal segments represent the 95% confidence intervals.

The first row shows that the nonconditional AMCE is close to zero and not statistically significant. The second and third rows show the AMCE conditional on election type. Although the HoC has a slightly larger AMCE than the HoR, neither its estimate nor their difference is

[2] The latter includes respondents who consider the HoC election results more important than the HoR election results. Because such respondents were rare (6.2%), they were combined with those who were indifferent to both elections.

[3] More detailed wording of the demand-side study is presented in Appendix A.1.

[4] Although it has been said that the AMCE is sensitive to the choice of base category and not suitable for subgroup comparisons (Leeper, Hobolt and Tilley 2020), this concern is irrelevant in this study because for the attribute of our interest (i.e., candidate gender), the number of categories is two and the AMCE should not be affected by the setting of base categories.

[5] The results of the other attributes are reported in Appendix A.2.

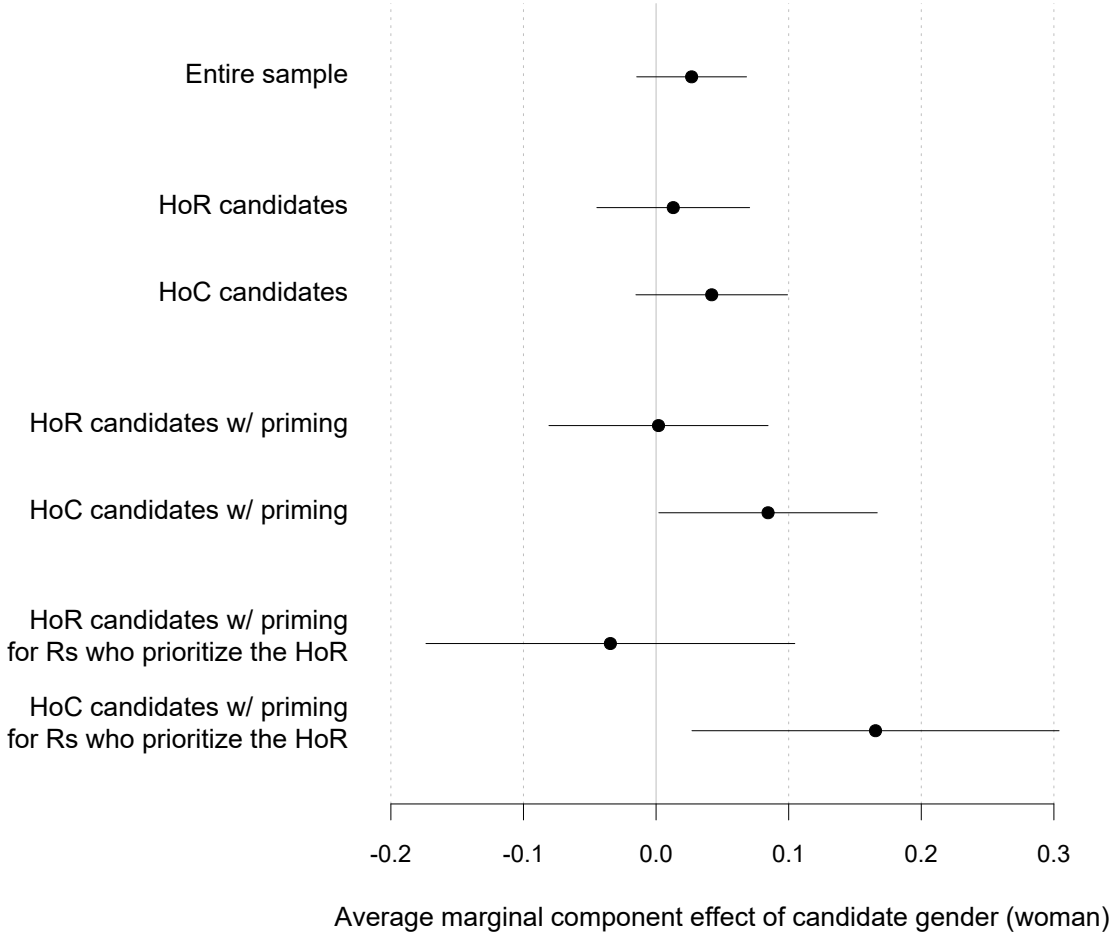

Figure 2: Results of the demand-side experiment: the average marginal component effect of being a woman on voters' favorability toward candidates.

Note: Dots represent point estimates, and horizontal segments represent the 95% confidence intervals.

statistically significant.

We observe interesting patterns in the fourth and fifth rows, which restrict the analysis of the second and third rows to respondents exposed to the priming. When reminded that the HoR is more powerful than the HoC, respondents are indifferent to the gender of the HoR election candidate, while they significantly support a woman candidate over a man candidate as HoC legislator. Moreover, these tendencies become clearer when the analysis is further restricted to respondents who perceive the HoR election results as more important than those of the HoC, as shown in the sixth and seventh rows.[6]

[6] In Appendix A.2, we show that the interaction between candidates' gender and the type of

Our experiment revealed that Japanese voters might welcome women legislators in the HoC, but only if they perceive the HoC to be less powerful and therefore less important than the HoR. These results suggest that Japanese voters have a bias toward considering that women politicians deserve less powerful positions, and that this is one of the reasons for the relative prevalence of women in the Japanese HoC.

4. Supply-Side Study

4.1. Experimental design

We next discuss the supply-side factors. We conducted another survey to test our hypothesis on the supply-side factors of the difference in the prevalence of women between the two chambers. We recruited eligible Japanese participants for the second online survey via the online panel of Rakuten Insight from April 7 to 12, 2021.[7] We established the same quota as the first survey, and the number of attentive respondents who passed an instructional manipulation check was 4,098.

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election was significant only when those who originally prioritized the HoR were primed.

[7] In recruiting respondents, we followed the procedure of a previous study conducted in Japan (Kage, Rosenbluth and Tanaka 2019); however, one might suspect that respondents recruited from online panels are far from potential election candidates in many aspects, including social status and political knowledge. One of the reasons for recruiting ordinary voters rather than politically knowledgable individuals is their availability, but it should also be noted that even if we were able to interview politically sophisticated individuals, they would not be suitable participants for testing our hypotheses with an experimental approach. This is because they should already have sufficient knowledge of the power and tenure of both chambers, which would reduce the effectiveness of informing respondents about institutional knowledge. On the other hand, prior research suggests that many ordinary Japanese voters do not have sufficient knowledge of the Diet. For example, fewer than 40% of respondents (in a nationally representative survey in 2009) could correctly answer a question about the length of the term of office of their elected HoC members(W-CASI Kenkyukai 2009 2009).

Our experimental design follows Kage, Rosenbluth and Tanaka's (2019) Survey 4, in which they conducted a vignette experiment mimicking a political party's open recruitment of a candidate for HoR elections and tested whether the party's provision of domestic support to its candidates encourages women to run for office. Instead of the presence or absence of household support, we manipulated the types of chambers and information in the vignettes that activated respondents' power-seeking and risk-averse tendencies.

We instructed respondents to "read the following information regarding the open call for [HoR/HoC] candidates by a fictitious political party and answer the question that follows." The type of chamber in brackets was randomly assigned. In addition, we independently manipulated whether to include information about the power of each chamber and the tenure of office so that the number of experimental conditions was 2 (type) $\times$ 2 (power) $\times$ 2 (tenure) $=$ 8.

The vignette for the control condition was as follows:

> Our party is looking for people like you who are aligned with our principles for the next [HoR/HoC] election.
>
> If you have a desire to become a politician, we will nominate you as a candidate. We will bear all of your electio expenses for the election.
>
> The probability of winning this election is very high, and if you win, you are guaranteed an annual income of about 40 million yen, including bonuses and some allowances.

For respondents assigned to the group to have information about the power of each chamber, we added the following sentence to the last paragraph of the above vignette:

> [For the HoR condition] The HoR has the power not only to deliberate on bills, but also to nominate the PM. Thus far, the Japanese PM has been chosen from among the members of the HoR.
>
> [For the HoC condition] The HoC has the power to deliberate bills and other acts of legislation, but it has no de facto power to nominate the PM because the Constitution establishes the supremacy of the HoR. Thus far, the Japanese PM has been chosen from among the members of the HoR.

For respondents assigned to the group to have information about tenure, the following sentence was appended:

> [For the HoR condition] The term of office is four years, but if the house is dissolved in the middle of the term, you will lose your job.
>
> [For the HoC condition] The term of office is six years, and you will not lose your job in the middle of the term.

Respondents assigned to the group that received both pieces of information read a vignette that included both additional sentences.

After the research participants read the vignette, we asked them if they would apply for this open call.[8] The options were on the same five-point scale as that of Kage, Rosenbluth and Tanaka (2019): "I will definitely apply," "I will probably apply," "Neither," "I will probably not apply," and "I will definitely not apply." We treated this outcome as a continuous variable, coding "I will definitely apply" as 4 and "I will definitely not apply" as 0.[9]

4.2. Results

The results are shown in Figure 3. The upper and lower panels correspond to the HoR and HoC conditions, respectively. In each panel, "Control" indicates the group that read only the base vignette, "Power" and "Tenure" indicate the groups that read an additional sentence about the power and tenure of members in each house, respectively, and "Power + Tenure" indicates the group that read both additional sentences. The filled and open dots show point estimates of the mean outcomes for male and female respondents, respectively. Segments represent 95% confidence intervals.

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[8] We additionally noted, "For those under [25/30] years old, imagine the situation after you become eligible to be elected," where 25 and 30 are the minimum age of eligibility for the HoR and HoC elections, respectively.

[9] The exact wording of the vignette and question for the demand-side study is shown in Appendix B.1.

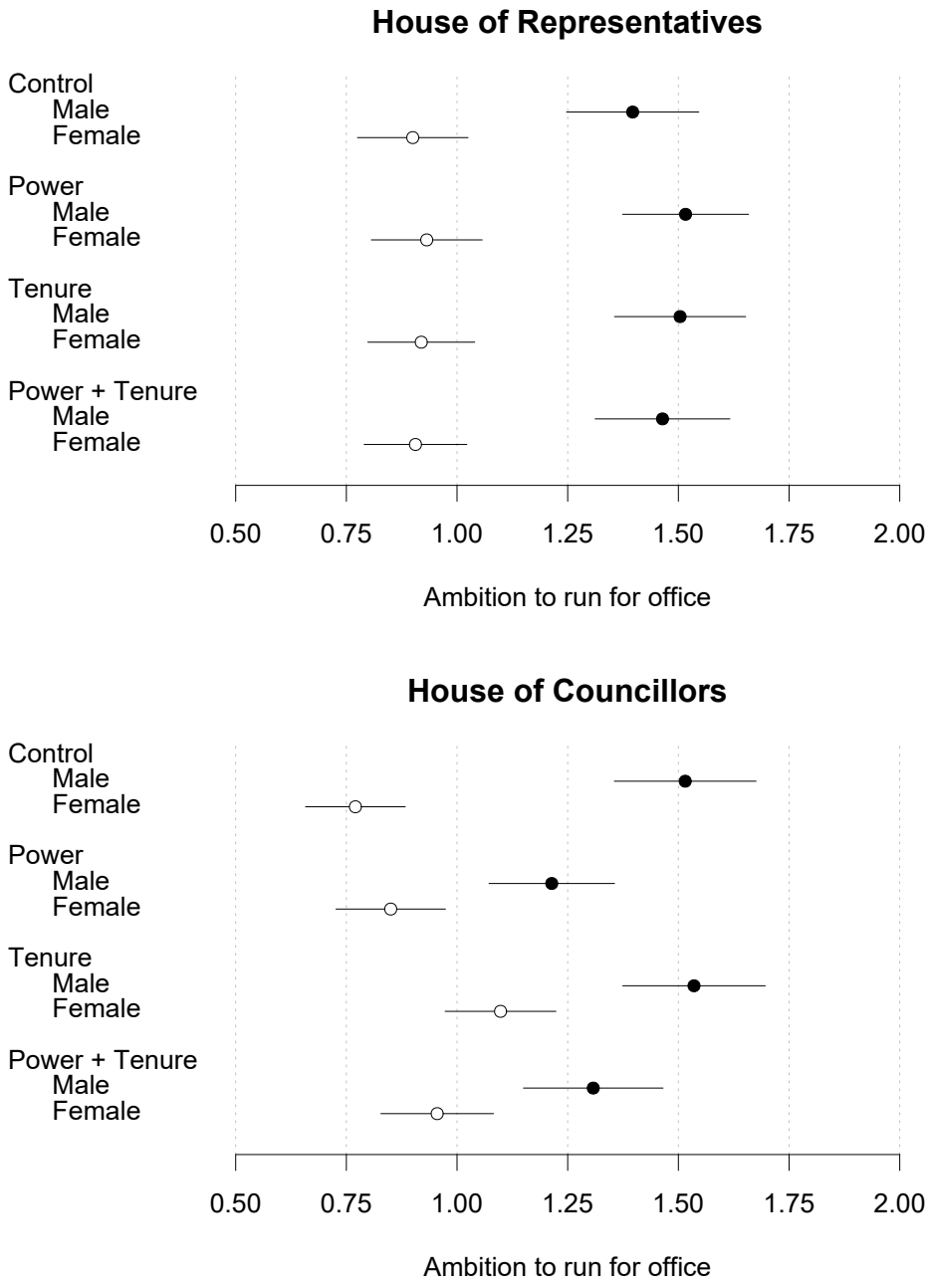

Figure 3: Results of the supply-side experiment

Note: Dots represent point estimates, and horizontal segments represent the 95% confidence intervals.

We found that the general public is definitely not interested in applying for party candidacy (note that the value 1 means "I will probably not apply"). Furthermore, we found that women were less enthusiastic about running for office than men, which is consistent with the findings of previous research.

More importantly, comparisons across experimental conditions showed several interesting results. First, when information about power was provided, male respondents were strongly discouraged from running for the HoC, while this effect did not apply to women. Second, by contrast, in a comparison between the control and tenure groups, female respondents were more willing to run for the HoC election if they knew that the tenure of the HoC members was long and fixed than if they were not informed of these facts. However, this was not the case for men. Interestingly, findings similar to these two points were not observed for the HoR election; indeed, the additional information did not affect the condition associated with the HoR.

We also confirmed the above results by regression analysis. For each group of male and female respondents, we separately estimated the parameters of a linear model in which the outcome variable was regressed on the dummy variable for the HoC condition. The dummy variables denote exposure to the information about power and tenure, respectively, and interaction terms for "HoC $\times$ power" and "HoC $\times$ tenure." The results showed that the coefficient of the "HoC $\times$ power" term was estimated to be significantly negative (-0.304) for male respondents. However, the estimated coefficient of the "HoC $\times$ tenure" term was significantly positive (0.221) in the case of female respondents.[10]

These results suggest that gender differences affecting the degree of ambition for power and the propensity to be risk-averse are among the supply-side causes of the inter-chamber disparity in the prevalence of women legislators. That is, ambitious men are relatively more likely to seek seats in the HoR, where they have greater power than in the HoC. At the same time, less ambitious and more risk-averse women would choose the HoC over the HoR when they are willing to run for office, as the HoC has a longer term of office and no possibility of dissolution,

[10] We explain this analysis in more detail in Appendix B.2. We also conducted a regression analysis focusing on gender differences in willingness to run for office, as we did for Hypotheses 2 and 3, and the results are presented in Appendix B.2.

which makes the legislative seat more stable.

5. Conclusion

In this paper, we examined the micro-foundations for the higher ratio of women members in the upper chamber than in the lower chamber of Japan's Diet. By conducting survey experiments, we probed citizens' attitudes as voters and as potential candidates. As voters, they tended to prefer female candidates when they were running for seats in a chamber perceived as having less power and being lesser stakes. As potential candidates, the results showed that the gender difference in willingness to run for office was smaller when respondents reaffirmed that the upper house has less power and greater job security.

This study is the first attempt to examine the gender gap in representation in a bicameral system, and there are many aspects of this topic that remain to be elucidated. For example, analysis is needed to understand how the perceptions and actual strategies of party leaders—the key gatekeepers in the recruitment and promotion of women politicians—operate with the kind of logic that we have identified in this study. Research is also needed to extend our argument to other levels of elected political office, e.g., governors, mayors, and local assembly members.

Furthermore, we believe that our findings can be tested in countries other than Japan. First, it is relevant to examine whether our argument holds in countries with a fairly weak upper house and directly elected representatives with no quota for women. For example, Australia and the Czech Republic have such conditions (see Appendix C for a list of OECD countries with bicameral systems, along with their electoral systems). Second, future studies can similarly examine the relationship between the EP and the national parliaments of EU member states. Third, a comparison of the disparity in female representation between presidential and vice presidential posts would also be a topic for future research.

Finally, several important practical implications can be drawn from the results of this study. Our research finds additional "intervention points" (Krook and Norris 2014) that enhance female representation, namely, an emphasis on tenure stability when encouraging women to run for

office.[11] For party leaders and activists involved in identifying female candidates, one strategy to make candidacy more attractive to women may be to emphasize—and better yet, actually strengthen—the stability of elected office at all levels.

[11] We should also be cautious, however, that motivating women to behave in a risk-averse manner might preserve gendered social structures when gender differences in risk preferences arise from social structures.

Appendix

A. Details of the Demand-Side Study

A.1. Wording

Perceived importance of elections

[The order of the elections in brackets was randomized, and the order of the items corresponding to the order in the question.]

When you consider Japanese politics and society, how important do you think the results of elections for [the HoR, the HoC, and the unified local elections] are? Please rate your answers on a scale of 1 to 11 from "not at all important" to "very important." (日本の政治や社会を考えたとき，[衆議院議員選挙，参議院議員選挙，統一地方選挙]の選挙結果は，それぞれどの程度重要だと思いますか。「全く重要でない」から「非常に重要である」までの11段階でお答えください。)

- ▷ The HoR (衆議院議員選挙)
- ▷ The HoC (参議院議員選挙)
- ▷ The unified local elections (統一地方選挙)

[Respondents answered the question using an eleven-point bipolar scale without numbered labels.]

Directed question

[A directed question is incorporated into a dummy battery. We excluded those who failed to pass the directed question from our analysis.]

To what extent do you agree or disagree with each of the following statements? (以下に示すそれぞれの文章に対して，あなたはどの程度，同意または反対しますか。)

- ▷ Choose the fifth option from the left. (左から5番目の答えを選択してください。)

- Strongly agree (強く同意)

- Agree (同意)
- Somewhat agree (どちらかと言えば同意)
- Somewhat disagree (どちらかと言えば反対)
- Disagree (反対)
- Strongly disagree (強く反対)

Instructional manipulation check

[This question is based on Instructional Manipulation Check #1 in Clifford and Jerit (2015, 800) but was adjusted to the Japanese context. For respondents who did not follow the instruction, we showed them the same question again with the emphasis on "please mark both the 'Advertising' and 'Business' boxes" with bold font. We excluded those who failed to pass the second check from the survey.]

We are also interested in what sections people like to read in the newspaper. What people read in the paper might affect their opinions on current events. We also want to see if people are reading the questions carefully. To show that you've read this much, please mark both the "Advertising" and "Business" boxes below. That's right, just select these two options only. (私たちは，あなたが新聞のどの欄を好んでお読みになるのかということに関心があります。あなたが新聞で何を読むのかによって，昨今の政治的な事柄に対する考えが異なる可能性があります。そして，私たちは，あなたが質問文を丁寧にお読みになっているかどうかということも確かめたいと考えています。あなたがこの文章をよくお読みになった証拠として，下の選択肢のうち「広告欄」と「経済面」の両方を答えとして選んでください。ただこの2つの選択肢を選んでいただくだけで結構です。)

- Politics (政治面)
- Society (社会面)
- Local (地域面)
- Advertising (広告欄)
- Sports (スポーツ記事)
- Business (経済面)
- Science and technology (科学・技術面)

- Opinion (投書欄)
- None of the above (上記のどれでもない)

Explanation of conjoint tasks

[The first paragraph was shown only for a random half of the respondents.]

The Diet comprises the HoR and the HoC. The HoR has the power to nominate the PM as well as to vote on bills. On the other hand, although the HoC has the power to vote on bills, it has no de facto power to nominate the PM because the Constitution establishes the supremacy of the HoR. Thus far, the Japanese PM has been elected only from among the members of the HoR. (国会には衆議院と参議院があり，衆議院は法律案の議決などのほか，内閣総理大臣の指名などを行う権限をもちます。一方，参議院は法律案の議決などの権限がありますが，憲法上の衆議院の優越規定により，内閣総理大臣を指名する権限は事実上なく，これまで内閣総理大臣は衆議院議員の中から選ばれてきました。)

On the next page and later, we will show the profile of ten candidates for **the [HoR/HoC] election**. Please carefully read each candidate's profile and answer the related question. (これから［衆議院／参議院］議員選挙への立候補者10人のプロフィールをお見せします。それぞれ候補者のプロフィールをよく見て，質問にお答えください。)

Conjoint tasks

Please imagine that the following person is running for **the [HoR/HoC] election** in your area. (あなたがお住まいの地域で，次の人物が［衆議院／参議院］議員選挙に立候補しているとします。)

[A conjoint table was displayed here. Table A1 shows attributes, their levels, and their marginal distributions.]

To what extent is this candidate favorable as a [HoR/HoC] member? Please evaluate this candidate using an eight-point scale from "not favorable at all" to "very favorable." (この候補者は，［衆議院／参議院］議員として，どのくらい望ましいと思いますか。「全く望ましくない」から「とても望ましい」までの8段階で，評価してください。)

[Respondents answer the question using an eight-point bipolar scale without numbered labels.]

Table A1: Attributes and their levels in the conjoint experiment

Attribute	Level	Prob.
Gender	- Male (男性)	0.813
	- Female (女性)	0.187
Age	- 42 years old (42歳)	0.382
	- 52 years old (52歳)	0.215
	- 59 years old (59歳)	0.185
	- 67 years old (67歳)	0.218
Education	- He or she graduate from a high school (高校卒)	0.135
	- He or she graduate from a vocational collage (専門学校卒)	0.045
	- He or she graduate from a private university (私立大学卒)	0.430
	- He or she graduate from a local national university (地方国立大学卒)	0.168
	- He or she graduate from the University of Tokyo (東京大学卒)	0.092
	- He or she graduate from a graduate school (大学院卒)	0.130
Occupation	- His or her former occupation is a business employee (前の職業は会社員)	0.243
	- His or her former occupation is a business executive (前の職業は会社役員)	0.090
	- His or her former occupation is a government employee (前の職業は公務員)	0.115
	- His or her former occupation is a celebrity (前の職業はタレント)	0.036
	- His or her former occupation is a secretary of a Diet member (前の職業は国会議員秘書)	0.173
	- His or her former occupation is a local politician (前の職業は地方政治家)	0.343
Hometown	- His or her hometown is X (X出身)	0.586
	- His or her hometown is not X (X外出身)	0.414
Political experience	- He or she has not served as a Diet member (国会議員経験なし)	0.554
	- He or she has served as a Diet member for six years (これまで国会議員を6年経験)	0.316
	- He or she has served as a Diet member for twelve years or more (これまで国会議員を12年以上経験)	0.130
Dynastic status	- His or her parents have no political experience (親の政治家経験はなし)	0.853
	- His or her parent was a local politician (親は元地方政治家)	0.036
	- His or her parent was a Diet member (親は元国会議員)	0.042
	- His or her parent was a cabinet minister (親は元大臣)	0.069
Party affiliation	- He or she is an independent (無所属)	0.052
	- He or she belongs to the LDP (自由民主党所属)	0.323
	- He or she belongs to the CDP (立憲民主党所属)	0.191
	- He or she belongs to Komeito (公明党所属)	0.054
	- He or she belongs to the JIP (日本維新の会所属)	0.096
	- He or she belongs to the JCP (日本共産党所属)	0.284

Note: Respondents' prefectures of residence recorded prior to the experiment was inserted into X. Parties' abbreviations are as follows: LDP = Liberal Democratic Party; CDP = Constitutional Democratic Party; JIP = Japan Innovation Party; JCP = Japanese Communist Party.

A.2. Detailed Results

We used R package `estimatr` (Blair et al. 2021) to estimate the AMCEs by linear regressions. Figure A4 shows the overall estimation results of the AMCEs of the attribute-levels.

To examine for whom the interaction between candidate gender and the type of election was statistically meaningful, we conducted the following regression analysis:

$$y_{ij} = \alpha + \beta_1 z_{ij} + \gamma x_{ij} + \delta z_{ij} x_{ij} + \cdots + \varepsilon_{ij}. \tag{A1}$$

y_{ij} is respondent i's rating for the j-th hypothetical candidate, z_{ij} is a dummy variable indicating that respondent i's j-th candidate was for the HoC election, and x_{ij} is a dummy variable indicating that respondent i's j-th candidate was a woman. α is an intercept, β, γ, and δ are coefficients, and ε_{ij} is an error term. The omitted parts include the set of dummy variables for attributes other than candidate gender.

We estimated the parameters of the above model by ordinary least squares and used the CR2 standard errors clustered by respondent. Table A2 shows the results, where we omitted the estimates of parameters other than the coefficient of the interaction term between the HoC dummy and the woman dummy. Each column shows the results of analyzing the respondents listed at the side of the table.

Table A2: The estimated coefficient of the interaction term between the HoC dummy and the woman dummy for the demand-side study.

	Est.	S.E.	p	N. obs.
Entire sample	0.038	0.055	0.491	24,540
Group w/o priming	−0.062	0.076	0.413	12,400
Group w/ priming	0.146	0.079	0.063	12,140
Those who did not prioritized the HoR	0.026	0.068	0.704	15,400
Those who prioritized the HoR	0.064	0.092	0.489	9,140
Those who did not prioritized the HoR w/o priming	0.006	0.091	0.945	8,020
Those who did not prioritized the HoR w/ priming	0.059	0.101	0.560	7,380
Those who prioritized the HoR w/o priming	−0.159	0.134	0.236	4,380
Those who prioritized the HoR w/ priming	0.286	0.126	0.025	4,760

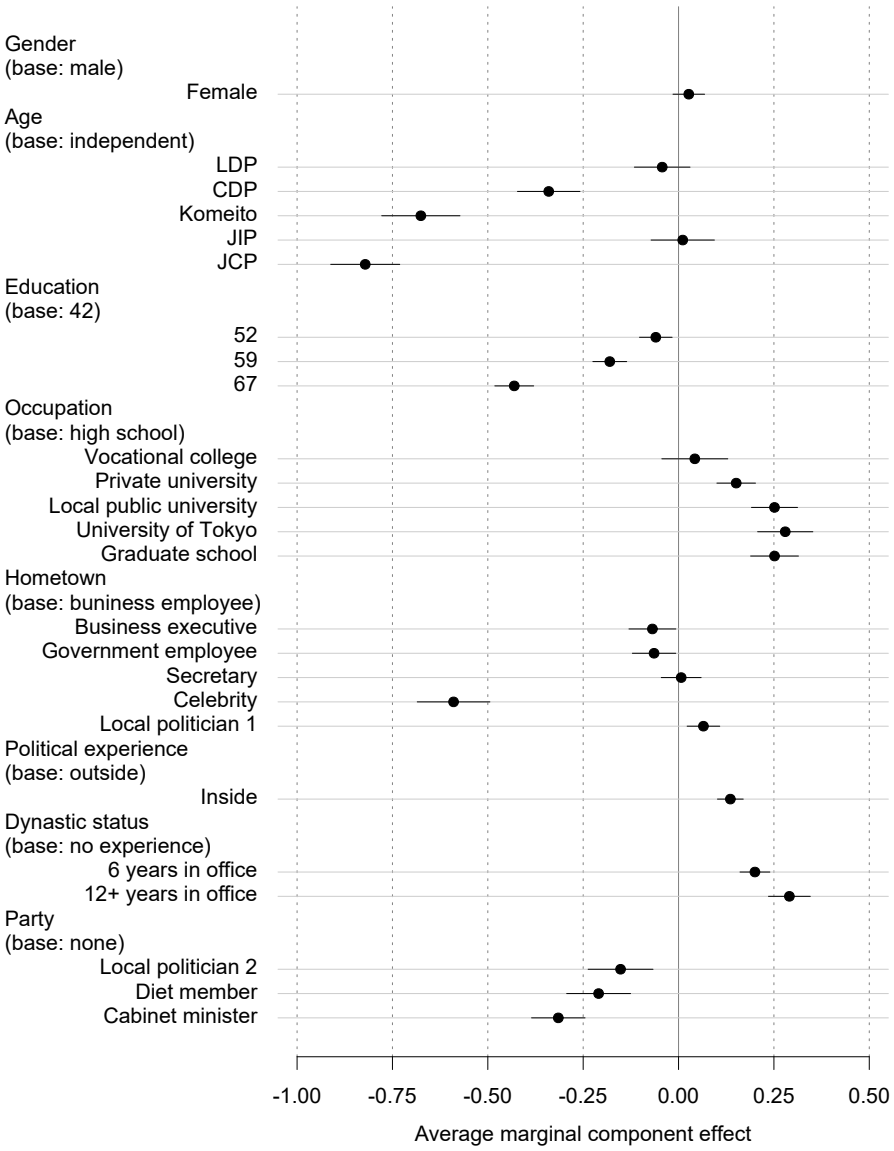

Figure A4: Average marginal component effects of all attributes on voters' favorability toward candidates.

Note: Dots represent point estimates, and segments represent 95% confidence intervals. Parties' abbreviations are as follows: LDP = Liberal Democratic Party; CDP = Constitutional Democratic Party; JIP = Japan Innovation Party; JCP = Japanese Communist Party.

B. Details of the Demand-Side Study

B.1. Wording

Instructional manipulation check

[This question is based on Instructional Manipulation Check #1 in Clifford and Jerit (2015, 800) but was adjusted to the Japanese context. We excluded those who failed to pass this question from our analysis.]

Please mark both the "Local" and "Opinion" boxes below. That's right, just select these two options only. (下の選択肢のうち「地域欄」と「投書欄」の両方を答えとして選んでください。ただこの2つの選択肢を選んでいただくだけで結構です。)

- Politics (政治面)
- Business (経済面)
- Science and technology (科学・技術面)
- Society (社会面)
- Local (地域面)
- Sports (スポーツ記事)
- Advertising (広告欄)
- Opinion (投書欄)
- None of the above (上記のどれでもない)

Experiment

[Only one of the words or sentences in square brackets was displayed depending on the condition for the type of chamber.]

Please read the following information about a fictitious party's open recruitment of a candidate for the member of the [HoR/HoC] and answer the subsequent question. (次の架空の政党による［衆議院／参議院］議員候補の公募情報を読み，質問にお答えください。)

[For the control group:]

Our party is looking for people like you who are aligned with our principles for the next [HoR/HoC] election. (わが党は，次回の［衆議院／参議院］議員選挙に向けて，わが党の理念に沿ったあなたのような人材を候補者として集めています。)

If you have a desire to become a politician, we will nominate you as a candidate. We will bear all of your electio expenses for the election. (あなたが政治家になりたいという意思をお持ちであれば，わが党はあなたを公認候補とします。選挙費用はわが党が全て負担します。)

The probability of winning this election is very high, and if you win, you are guaranteed an annual income of about 40 million yen, including bonuses and some allowances. (この選挙に勝つ確率は非常に高く，あなたが選挙で勝った場合，ボーナスや諸手当も含めて年収4,000万円程度が保証されています。)

[For the power information group:]

Our party is looking for people like you who are aligned with our principles for the next [HoR/HoC] election. (わが党は，次回の［衆議院／参議院］議員選挙に向けて，わが党の理念に沿ったあなたのような人材を候補者として集めています。)

If you have a desire to become a politician, we will nominate you as a candidate. We will bear all of your electio expenses for the election. (あなたが政治家になりたいという意思をお持ちであれば，わが党はあなたを公認候補とします。選挙費用はわが党が全て負担します。)

The probability of winning this election is very high, and if you win, you are guaranteed an annual income of about 40 million yen, including bonuses and some allowances. [The HoR has the power not only to deliberate on bills, but also to nominate the PM. Thus far, the Japanese PM has been chosen from among the members of the HoR./The HoC has the power to deliberate bills and other acts of legislation, but it has no de facto power to nominate the PM because the Constitution establishes the supremacy of the HoR. Thus far, the Japanese PM has been chosen from among the members of the HoR.] (この選挙に勝つ確率は非常に高く，あなたが選挙で勝った場合，ボーナスや諸手当も含めて年収4,000万円程度が保証されています。［衆議院は法案審議などのほか，内閣総理大臣の指名を行う権限を

もち，これまで内閣総理大臣は衆議院議員の中から選ばれてきました。／参議院は法案審議などの権限がありますが，憲法上の衆議院の優越規定により，内閣総理大臣を指名する権限は事実上なく，これまで内閣総理大臣は衆議院議員の中から選ばれてきました。］)

[For the tenure information group:]

Our party is looking for people like you who are aligned with our principles for the next [HoR/HoC] election. (わが党は，次回の［衆議院／参議院］議員選挙に向けて，わが党の理念に沿ったあなたのような人材を候補者として集めています。)

If you have a desire to become a politician, we will nominate you as a candidate. We will bear all of your electio expenses for the election. (あなたが政治家になりたいという意思をお持ちであれば，わが党はあなたを公認候補とします。選挙費用はわが党が全て負担します。)

The probability of winning this election is very high, and if you win, you are guaranteed an annual income of about 40 million yen, including bonuses and some allowances. [The term of office is four years, but if the house is dissolved in the middle of the term, you will lose your job./The term of office is six years, and you will not lose your job in the middle of the term.] (この選挙に勝つ確率は非常に高く，あなたが選挙で勝った場合，ボーナスや諸手当も含めて年収4,000万円程度が保証されています。［任期は4年ですが，途中で解散があればいつでも失職します。／任期は6年で，任期途中で失職することはありません。］)

[For the power information group:]

Our party is looking for people like you who are aligned with our principles for the next [HoR/HoC] election. (わが党は，次回の［衆議院／参議院］議員選挙に向けて，わが党の理念に沿ったあなたのような人材を候補者として集めています。)

If you have a desire to become a politician, we will nominate you as a candidate. We will bear all of your electio expenses for the election. (あなたが政治家になりたいという意思をお持ちであれば，わが党はあなたを公認候補とします。選挙費用はわが党が全て負担します。)

The probability of winning this election is very high, and if you win, you are guaranteed an annual income of about 40 million yen, including bonuses and some allowances. [The term of office is four years, but if the house is dissolved in the middle of the term, you will lose your job. The HoR has the power not only to deliberate on bills, but also to nominate the PM. Thus far, the Japanese PM has been chosen from among the members of the HoR./The term of office is six years, and you will not lose your job in the middle of the term. The HoC has the power to deliberate bills and other acts of legislation, but it has no de facto power to nominate the PM because the Constitution establishes the supremacy of the HoR. Thus far, the Japanese PM has been chosen from among the members of the HoR.] (この選挙に勝つ確率は非常に高く，あなたが選挙で勝った場合，ボーナスや諸手当も含めて年収4,000万円程度が保証されています。［任期は4年ですが，途中で解散があればいつでも失職します。衆議院は法案審議などのほか，内閣総理大臣の指名を行う権限をもち，これまで内閣総理大臣は衆議院議員の中から選ばれてきました。／任期は6年で，任期途中で失職することはありません。参議院は法案審議などの権限がありますが，憲法上の衆議院の優越規定により，内閣総理大臣を指名する権限は事実上なく，これまで内閣総理大臣は衆議院議員の中から選ばれてきました。］)

Are you willing to apply for this open recruitment? For those under [25/30] years old, imagine the situation after you become eligible to be elected. (あなたはこの公募に応募しますか。［25／30］歳未満の人は被選挙権を得てからのことを想像してください。)

- I will definitely apply (絶対にする)
- I will probably apply (するかもしれない)
- Neither (どちらでもない)
- I will probably not apply (しないだろう)
- I will definitely not apply (絶対にしない)

B.2. Detailed Results

First, we conducted an analysis examining how the treatment effects of the power and tenure information differ by the type of chamber. For male and female respondents separately, we estimated the following linear model:

$$y_i = \alpha + \beta z_i + \gamma_1 x_{1i} + \gamma_2 x_{2i} + \delta_1 z_i x_{1i} + \delta_2 z_i x_{2i} + \varepsilon_i, \tag{A2}$$

where y_i is an outcome variable for respondent i, z_i is a dummy variable indicating that respondent i was assigned to the HoC condition, and x_{1i} and x_{2i} are dummy variables indicating that respondent i was shown the power and the tenure information, respectively. α is an intercept, β, γ_1, γ_2, δ_1 and δ_2 are coefficients, and ε_i is an error term. We estimated these parameters by ordinary least squares and used the HC2 standard errors. We performed this analysis by R package `estimatr` (Blair et al. 2021).

Table A3 presents the results, showing that the coefficient of HoC $\times$ Power is significantly negative only for male respondents, while the coefficient of HoC $\times$ Tenure is significantly positive only for female respondents.

Second, we analyze the same data from a different perspective: how did the gender difference in willingness to run for office differ by type of chamber when the power and tenure information was provided? For the power information, we divided respondents according to whether x_{1i} takes 0 or 1 and estimated the following linear model:

$$y_i = \alpha + \beta z_i + \gamma w_i + \delta x_{2i} + \lambda z_i w_i + \varepsilon_i, \tag{A3}$$

where w_i is a dummy variable for female respondents. Similarly, for the tenure information, we separated respondents based on x_{2i} and estimated the following:

$$y_i = \alpha + \beta z_i + \gamma w_i + \delta x_{1i} + \lambda z_i w_i + \varepsilon_i. \tag{A4}$$

The estimation methods were the same as the analysis of Model A2.

Table A4 shows the results. In the analysis of the power information, the coefficient of Female

Table A3: Estimated coefficients of linear models for the supply-side study, focusing on the heterogeneous treatment effects.

	Male respondents			Female respondents		
	Est.	S.E.	p	Est.	S.E.	p
Intercept	1.439	0.065	0.000	0.912	0.054	0.000
HoC	0.058	0.096	0.546	−0.083	0.075	0.267
Power	0.040	0.075	0.599	0.009	0.062	0.888
Tenure	0.025	0.075	0.740	−0.004	0.062	0.952
HoC × Power	−0.304	0.109	0.005	−0.048	0.088	0.587
HoC × Tenure	0.031	0.109	0.775	0.221	0.088	0.012
N. obs.	1,969			2,129		

was significantly negative and the coefficient of HoC × Female was significantly positive among respondents who received the power information. This means that female respondents were significantly less willing to run in the HoR races, but such gender differences were smaller in the HoC races. This pattern did not hold when no power information was provided (i.e., the coefficient of HoC × Female was not significant). These results support Hypothesis 2.

Similarly, in the analysis of the tenure information, while the coefficient of Female is significantly negative irrespective of whether the tenure information was provided, the coefficient of HoC × Female was significantly positive, although at the 10% level, only when respondents read the tenure information. These results indicate that, when the tenure information was provided, the gender difference was less in the HoC race than in the HoR race, while this is not the case when the tenure information was not provided, which was consistent with Hypothesis 3.

Table A4: Estimated coefficients of linear models for the supply-side study, focusing on the gender difference in willingness to run for office.

(A) Analysis of the power information

	w/o power info.			w/ power info.		
	Est.	S.E.	p	Est.	S.E.	p
Intercept	1.388	0.059	0.000	1.477	0.057	0.000
HoC	0.074	0.079	0.348	−0.231	0.075	0.002
Female	−0.541	0.069	0.000	−0.573	0.068	0.000
Tenure	0.124	0.049	0.012	0.027	0.049	0.576
HoC × Female	−0.043	0.100	0.669	0.218	0.098	0.026
N. obs.	2,029			2,069		

(B) Analysis of the tenure information

	w/o tenure info.			w/ tenure info.		
	Est.	S.E.	p	Est.	S.E.	p
Intercept	1.465	0.058	0.000	1.535	0.059	0.000
HoC	−0.096	0.076	0.204	−0.060	0.079	0.446
Female	−0.544	0.069	0.000	−0.570	0.069	0.000
Power	−0.009	0.049	0.847	−0.102	0.050	0.039
HoC × Female	−0.011	0.098	0.913	0.172	0.100	0.086
N. obs.	1,997			2,101		

C. Chamber Power Asymmetry among Selected OECD Countries

Table A5: Chamber power asymmetry among selected OECD countries.

	Power	Lower House		Upper House	
Country	Asymmetry Index	Female %	Elec. System	Female%	Elec. System
USA	1.4	27.5	FPTP	25.0	FPTP
Chile	1.1	22.5*	List-PR	24.0	List-PR
Mexico	0.6	50.1*	Parallel	49.2	Parallel
Switzerland	0.5	42.0	List-PR	12.9	List-PR
Italy	0.2	35.7*	List-PR	35.3	Parallel
Australia	−0.1	31.1	Alternative	36.8	List-PR
Czech	−1.3	23.0	List-PR	16.0	List-PR
Japan	−1.5	9.9	Parallel	18.2	Parallel
Poland	−1.7	28.3*	List-PR	13.0	FPTP
Spain	−2.3	43.4*	List-PR	33.4	List-PR

Notes:

1. We excluded the bicameral countries where more than 80% of legislators are not elected directly by voters.
2. The chamber power index is from V-Dem's version 12, v2lgdomchm (Coppedge et al. 2022). Higher values indicate that the upper chamber is more powerful than the lower chamber.
3. For Spain's upper house, 22% of its members are not directly elected but represent regions. Spanish upper-house electoral system in the table refers to that of the proportion of directly elected members. Classification of the electoral system follows that of the ACE database.
4. An asterisk (*) indicates the presence of gender quota. The upper house percentages of female legislator data (except for Chile) come from: https://data.ipu.org/historical-women (for Chile, data is from: https://www.idea.int/data-tools/data/gender-quotas/country-view/79/35).

References

Beauvallet, Willy and Sebastien Michon. 2009. "General Patterns of Women's Representation in the European Parliament: Did Something Change after 2004." Center for European Political Sociology Working Paper, available at http://gspe.eu.

Blair, Graeme, Jasper Cooper, Alexander Coppock, Macartan Humphreys and Luke Sonnet. 2021. *estimatr: Fast Estimators for Design-Based Inference*. R package version 0.30.2, https://CRAN.R-project.org/package=estimatr.

Byrnes, James P., David C. Miller and William D. Schafer. 1999. "Gender Differences in Risk Taking: A Meta-Analysis." *Psychological Bulletin* 125(3): 367–383.

Clifford, Scott and Jennifer Jerit. 2015. "Do Attempts to Improve Respondent Attention Increase Social Desirability Bias?" *Public Opinion Quarterly* 79(3): 790–802.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Nazifa Alizada, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Sandra Grahn, Allen Hicken, Garry Hindle, Nina Ilchenko, Katrin Kinzelbach, Joshua Krusell, Anna Lührmann, Seraphine F. Maerz, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Oskar Rydén, Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundström, Ei-tan Tzelgov, Yi-ting Wang, Tore Wig, Steven Wilson and Daniel Ziblatt. 2022. "V-Dem [Country–Year/Country–Date] Dataset v12." https://doi.org/10.23696/vdemds22, accessed on August 29, 2022.

Cross, Catharine P., Lee T. Copping and Anne Campbell. 2011. "Sex Differences in Impulsivity: A Meta-Analysis." *Psychological Bulletin* 137(1): 97–130.

de la Cuesta, Brandon, Naoki Egami and Kosuke Imai. 2022. "Improving the External Validity of Conjoint Analysis: The Essential Role of Profile Distribution." *Political Analysis* 30(1): 19–45.

Fox, Richard L. and Jennifer L. Lawless. 2011. "Gendered Perceptions and Political Candidacies:

A Central Barrier to Women's Equality in Electoral Politics." *American Journal of Political Science* 55(1): 59–73.

Hainmueller, Jens, Daniel J. Hopkins and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." *Political Analysis* 22(1): 1–30.

Heller, William B. 2007. "Divided Politics: Bicameralism, Parties, and Policy in Democratic Legislatures." *Annual Review Political Science* 10: 245–269.

Horiuchi, Yusaku, Daniel M. Smith and Teppei Yamamoto. 2020. "Identifying Voter Preferences for Politicians' Personal Attributes: A Conjoint Experiment in Japan." *Political Science Research and Methods* 8(1): 75–91.

Iida, Takeshi. 2016. *Yukensha no Risuku Taido to Tohyo Kodo (Voter Risk Attitudes and Voting Behavior)*. Bokutakusha.

Inter-Parliamentary Union. n.d. "Historical Data on Women in National Parliaments." https://data.ipu.org/historical-women, accessed on January 29, 2022.

Kage, Rieko, Frances M. Rosenbluth and Seiki Tanaka. 2019. "What Explains Low Female Political Representation? Evidence from Survey Experiments in Japan." *Politics & Gender* 15(2): 285–309.

Kauppi, Niilo. 1999. "Power or Subjection? French Women Politicians in the European Parliament." *European Journal of Women's Studies* 6(3): 329–340.

Kovar, Jan and Kamil Kovar. 2012. "Women's Representation in European Parliamentary Elections: A Second-Order Approach?" *Politics in Central Europe* 8(1): 5–34.

Kreppel, Amie. 2020. "Legislatures." In *Comparative Politics*, ed. Daniele Caramani. Oxford University Press pp. 119–139.

Krook, Mona Lena. 2010. *Quotas for Women in Politics: Gender and Candidate Selection Reform Worldwide*. Oxford University Press.

Krook, Mona Lena and Pippa Norris. 2014. "Beyond Quotas: Strategies to Promote Gender Equality in Elected Office." *Political Studies* 62(1): 2–20.

Leeper, Thomas J., Sara B. Hobolt and James Tilley. 2020. "Measuring Subgroup Preferences in Conjoint Experiments." *Political Analysis* 28(2): 207–221.

Lijphart, Arend. 1999. *Patterns of Democracy: Government Forms and Performance in Thirty-six Countries*. Yale University Press.

Lühiste, Maarja and Meryl Kenny. 2016. "Pathways to Power: Women's Representation in the 2014 European Parliament Elections." *European Journal of Political Research* 55(3): 626–641.

Mueller, Sean, Adrian Vatter and Sereina Dick. n.d. "A New Index of Bicameralism: Taking Legitimacy Seriously." *Journal of Legislative Studies* .

Nemoto, Kuniaki. 2018. "Electoral Systems in Context: japan." *The Oxford Handbook of Electoral Systems* pp. 825–850.

Norris, Pippa and Ronald Inglehart. 2001. "Women and Democracy: Cultural Obstacles to Equal Representation." *Journal of Democracy* 12(3): 126–140.

Ono, Yoshikuni and Barry C. Burden. 2019. "The Contingent Effects of Candidate Sex on Voter Choice." *Political Behavior* 41(3): 583–607.

Patterson, Samuel C. and Anthony Mughan. 2001. "Fundamentals of Institutional Design: The Functions and Powers of Parliamentary Second Chambers." *Journal of Legislative Studies* 7(1): 39–60.

Shell, Donald. 2001. "The History of Bicameralism." *Journal of Legislative Studies* 7(1): 5–18.

Steel, Gill. 2022. *What Women Want: Gender and Voting in Britain, Japan and the United States*. University of Michigan Press.

Takenaka, Harutaka. 2010. *Sangiin to wa Nanika, 1947–2010 (What is the House of Councillors? 1947–2010)*. Chuo Koron Shinsha.

Tsebelis, George and Jeannette Money. 1997. *Bicameralism*. Cambridge University Press.

United Nations. 2021. "Proportion of Women Parliamentarians Worldwide Reaches 'All-Time High'." https://news.un.org/en/story/2021/03/1086582, accessed on January 29, 2022.

W-CASI Kenkyukai 2009. 2009. "Nihonjin no Shakaiteki Kitai to Sosenkyo ni Kansuru Yoron Chosa (Waseda-CASI&PAPI2009), 2009 (Opinion Poll on Japanese Social Expectations for the 2009 General Election)." https://ssjda.iss.u-tokyo.ac.jp/Direct/gaiyo.php?eid=0773, accessed on July 25, 2022.

Xydias, Christina. 2016. "Discrepancies in Women's Presence between European National Legislatures and the European Parliament: A Contextual Explanation." *Political Research Quarterly* 69(4): 800–812.