

Gender Representation and Lobbying in the European Union

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Abstract

Gender equality in political representation is a cornerstone of contemporary democracies. Although much scholarly attention has been devoted to understanding gender inequality in government, less is known about gender representation within interest groups. We posit that gender representation in interest groups is influenced by the gender diversity of government officials. To test this hypothesis, we utilize a unique dataset that includes the gender composition of the entire population of government officials and interest group representatives in the European Union (EU). We examine it along with data from more than 4,000 consultation meetings between lobbyists and EU officials. Using an instrumental variable design, we find that interest groups are more likely to engage female lobbyists when interacting with more gender-diverse policy-making bodies. Conceptually, this paper advances discussions on the link between political representation and gender mainstreaming. Empirically, it offers one of the first comprehensive analyses on the links between lobbyists access to government and gender.

Introduction

Despite a notable body of work that assesses the interaction between policy-maker characteristics and interest group access (Mahoney 2004; Baumgartner, Berry, Hojnacki, Leech and Kimball 2009; Getz 1997; Hillman, Zardkoohi and Bierman 1999), the gender dimension remains largely out of focus, despite some notable exceptions (Celis, Childs, Kantola and Krook 2008; De Bruycker 2024; Junk, Romeijn and Rasmussen 2021; Dunlop 2024; Hane-graaff, Berkhout and van der Ploeg 2022; Elomäki and Kantola 2020; Lombardo and Verloo 2009). As such, we know little about why/ how gender impacts interest groups' political strategies (Hillman, Zardkoohi and Bierman 1999; Oliver and Holzinger 2008). Moreover, research leaves unaddressed theoretical discussions on interest group representation, gender mainstreaming, and political inequality (Mansbridge 1999; Weldon 2002; Waylen 2017; Krook and Mackay 2011).

In this paper, we ask whether gender impacts interest groups' access to policy-makers. We argue that interest groups employ lobbyists with certain individual characteristics, including gender, to improve their chances to access policymakers in key positions. To test our hypothesis, we focus on the European Union (EU). This political system consists of a complex institutional setting, with a very diverse interest group population. In addition, there is a rich literature that explores the conditions under which interest groups are able to gain access to EU institutions. This makes the EU an ideal case to test our argument.

We rely on a unique dataset that we construct containing information on: (i) the staff of all EU Commission Directorate Generals (DGs), akin to government departments; (ii) the lobbyists these policy-makers interact with (drawing from the EU's Joint Transparency Register (JTR)). This dataset is complemented with information on the meetings that take place between these policy-makers and lobbyists. We use information from the censuses of various countries and employ machine learning techniques to extract policy-makers' and lobbyists' genders. The resulting dataset contains the gender composition of government officials and lobbyists in the EU, along with information on roughly 4000 meetings between

them.

First, we match the interest groups registered in the JTR with the relevant DGs based on their policy areas of interest. Lobby groups must specify their policy areas of interest in the JTR. We test whether the DG's gender composition affects the interest group representatives' gender. We find a statistically significant and positive effect using a Bartik shift-share instrument, where we interact the gender composition of a DG in 2010 with the increase in the number of female staff in other DGs over time.

Second, we focus on the meetings between lobbyists and policymakers, testing whether access to these meetings depends on the lobbyist's gender. We find that employing a female lobbyist makes it likelier the interest group gains access to meetings. Interestingly, this holds true regardless of the gender composition of the policymakers involved, suggesting an interesting mismatch between the demand and supply of gender representation.

The findings provide evidence indicating that gender is used strategically by interest groups to improve their access to decision-makers. These findings speak to the body of work in political science and management studies that examine the interaction between lobbyists' individual characteristics, representation, and gender mainstreaming policies.

Gender Mainstreaming as a Lobbying Strategy

Access to policy-makers is crucial for interest groups (Vogel 1996; Reimann 2006; Levy and Egan 2003; Mahoney 2004; Coen, Lehmann and Katsaitis 2021), and hence the latter tailor their lobbying strategies to maximize access. Because access is dependent on trusted relationships between key individuals, interest groups adapt their strategies by adjusting staff while considering policymakers' characteristics (Walker and Rea 2014). Interest groups take into consideration qualities, such as education, experience, and position (Christiansen 1997; Baumgartner and Leech 2001; Egeberg, Gornitzka, Trondal and Johannessen 2013), and this is true also in the EU's context. Moreover, companies tend to prefer individuals with

work experience in the private sector who can easily relate to decision-makers on technical issues in similar policy areas (Coen and Vannoni 2020, 2016; Coen, Katsaitis and Vannoni 2021)

Whereas a substantial body of work examines interest group strategies vis-a-vis access to policy-makers, including research focusing on the individual level characteristics, there is less work untangling the impact of gender at the individual level. The main hypothesis put forward here is that the policy-maker's gender will affect the lobbyist's gender. Put simply, interest groups are likely to employ more female lobbyists if they deal with a more gender diverse set of policy-makers. Recent work has found evidence of this in the US: Strickland and Stauffer (2021) find that interest groups hire female lobbyists when working in more diverse legislatures.

Formally:

Hypothesis 1 (H1): *Interest groups are more likely to use female lobbyists when dealing with female policy-makers*

We argue that interest groups use gender as a heuristic to choose which individuals get more access (Strickland and Stauffer 2021). There are three main reasons why female lobbyists are likelier to be given access by female policy-makers. First, gender diversity in politics may produce an environment more conducive to the emergence of women lobbyists and women's issue groups (Wiener 2021; Celis et al. 2008). This may lead to a positive representative spiral where there is overlap in the types of issues women frequently lobby for and legislate on. As such, interest groups may see women policy-makers as natural allies to women lobbyists and vice-versa due to issue homophily (Ertug, Brennecke, Kovács and Zou 2022).

Second, policy-makers are likelier to give access to lobbyists with whom they share previous professional linkages (e.g. a lobbyist who interned at a policy-maker's office) or issue based connections (e.g. being part of a common advocacy coalition) (Strickland and Stauffer 2021; Krook and Mackay 2011). Female policy-makers are more likely to share these links

with female lobbyists. Hence, we might see that female policy-makers are more likely to work with female lobbyists, regardless of the policy area/issue or the government department (Minto and Mergaert 2018; Kantola and Rolandsen Agustín 2019).

Third, gender homophily may reduce information and search transaction costs that DG staff use to identify credible lobbyists to provide reliable information and expertise (Chalmers 2013). Individuals tend to form groups with other individuals with whom they share common characteristics, gender being a key variable to be considered. This may act as a driver that enhances interactions between individuals who share this characteristic.

Data and Measurement

We focus on the EU for theoretical and practical reasons. Theoretically, the EU represents a complex multi-level political system with high variation in structure and functions across its political institutions. In turn, this has an effect on the interest group population and its lobbying strategies. In the Appendix, we provide detailed descriptive statistics and a discussion on gender representation in the EU. In line with work on policy gendering, we find that more technical issues are dealt by male policy-makers and lobbyists, whereas 'caregiving issues' see more female policy-makers and lobbyists.

To test our hypotheses, we need information on the gender distribution of staff in the different DGs in the European Commission and on the meetings between those staff members and lobbyists. Significantly, we require information on the specific characteristics of individual policymakers and lobbyists including their gender and position. Furthermore, we require information on interest group type, budget, and overall staff.

The EC is the executive of the EU, drafting and proposing legislation. It works as a cabinet government, with 27 ministers (called Commissioners). Almost 33000 civil servants work for the EC and are divided into Directorates General (DGs), akin to departments or ministries. There are two broad categories of civil servants: Directors (AD) and Assistants

(AST). Directors develop policies, liaise with stakeholders, take part in international negotiations, whereas Assistants have more of an executive role. Director General and Deputy Director General are the highest-ranking Directors and are roughly 100 in total.

For the policymakers, we collect data on the gender composition of each Commission DG from 2010 to 2018 from its official website. We collect information on meetings that took place between EC staff and interest groups from November 2014 to February 2021. A total of 30881 meetings were recorded (around 4000 took place in 2018 for which we have information on the lobbyists from the JTR). We collect information on: the decision-maker involved; their policy portfolio; the subject of the meeting; the organization that participates in the meeting. ¹

We then match all this information with the data from the EU Joint Transparency Register (JTR) across different years. The JTR is the EU’s mandatory lobbying register: any organization that aims to lobby or meet any EU official must be registered on the JTR. The JTR contains detailed information on each interest group: the organization’s budget; the number of full-time employed lobbyists; the details of the government’s affairs representative; the legal representative; the lobbyists with accreditation to enter the European Parliament (EP); the headquarters’ address; the type of organization; the policy fields they are interested in.

In order to allocate a gender (male or female) to the lobbyists (i.e. the EU affairs representative and the lobbyists with accreditation to enter the EP from the JTR) and policy-makers, we employ the `genderize` R package. ¹ This software predicts the gender of a person on the basis of their first name (and assigns a probability to that prediction), drawing on a database of first names from different censuses around the world. More information on this is provided in the Appendix.

From this procedure, we derive three measures of the gender of the interest group repre-

¹We acknowledge that it is possible that not all the meetings are recorded, but we assume that whether a meeting is recorded or not is not related to the individual characteristics of the lobbyist or some co-variables related to that. Also, we note that meeting registration has become increasingly the norm since 2015, following notable scrutiny of EU officials from internal and external observers.

sentative. The first measure is the gender of the EU representative, who is the main lobbyist employed by the organization and typically responsible for EU affairs as a whole. The second measure is the gender of the EP-accredited lobbyists, referring to those individuals accredited to enter the premises of the European Parliament. Since most organizations list more than one accredited individual, we calculate an average for this group. The third measure is an overall average derived from these two. For our analysis, we use data on individuals from the JTR for the year 2018.

Analysis

We run two analyses. The first analysis takes the 'interest group-policy area-DG' as unit. We start from the interest groups registered in the JTR and we link them to the relevant DGs through their fields of interest (as registered in the JTR). It should be noted that most of the interest groups list more than one field of interest and that a DG can work on different policy areas. Moreover, a policy area can be the competence of two or more DGs. The following is the baseline model:

$$GenderInterest_{ipd} = \alpha GenderLeg_d + \beta X' + \delta_i + \phi_i + \gamma_p + \varepsilon_{ipd} \quad (1)$$

where $GenderInterest_{ipd}$ is the gender of the representative of interest group i in policy area p and DG d . $GenderLeg_d$ is the average gender of the staff working for the DG d . We use fixed effects for: type of interest group (δ_i), its country of origin (ϕ_i), and the policy area (γ_p). We also include a vector of control variables related to the interest group (X'), specifically: the budget of the organization and the number of lobbyists.

The inclusion of fixed effects is very important, as we can exclude some sources of endogeneity and omitted variable bias (but not all). By including the policy area fixed effects, we control for the fact that female lobbyists and policy-makers might be attracted to work (i.e. they self-select) in the same areas, for instance. Yet, other sources of endogeneity and

omitted variable bias might be present.

Therefore, we take a Bartik shift-share approach. We instrument the gender composition of a DG by interacting the shares of assistant and director female staff in that DG in 2010 with (the increase in) the number of female policy-makers in those categories in the other DGs from 2010 to 2018. The contemporaneous gender composition of lobbyists within an interest group in a specific policy area does not affect the gender composition of the DG working in that area a decade earlier, nor does it affect changes in the gender composition of other DGs. Yet, it is linked to changes in the gender composition of the DG of interest. In other words, we isolate the supply of female policymakers from the demand.

This is in line with many current applications of shift-share instruments. For instance, Basso and Peri (2015) instrument the population of immigrants in a region with the population of immigrants by nationality at t_0 across economic regions and the increase in these populations by the aggregate growth factor of immigrants from that nationality in the US between t_0 and t . Acemoglu and Linn (2004) instrument the market size for a drug with the age profiles of users for each drug category and then compute the implied market size from aggregate demographics and income changes given these time invariant age profiles.

More formally, these are the two main terms (see Equation 2). $\frac{Female_{jp0}}{Tot_{j0}}$ is the share of female staff in DG j in position p (we have data on administrators (AD) and assistants (AST)) at the beginning of the sample (at time 0, namely 2010). These are the so-called shares. $\Delta Female_{j-1pt}$ is the average increase in female staff in all the other DGs $j - 1$ in position p from time 0 to time t . These are the so-called shifters.

$$GenderLegInstrument_{jt} = \sum_{p=1}^P \sum_{j=1}^J \frac{Female_{jp0}}{Tot_{jp0}} (\Delta Female_{j-1pt}) \quad (2)$$

We then instrument $GenderLeg_{idp}$ in 1 with $GenderLegInstrument_{jt}$ in 2.

We perform some balance tests in the Appendix. We regress the shifts and the shares of the instrument on the contemporaneous value of the gender of the EU representative. We find a statistically significant relationship, but this relationship vanishes when using policy

area fixed effect. This is in line with our research design. We can then claim that our instrument is exogenous to the outcome within policy areas.

The second analysis relies on the data on the meetings between lobbyists and EC policy-makers. We test whether the gender of the lobbyist is related to access to those meetings. More formally:

$$Meeting_{idp} = \alpha GenderIG_i + \gamma GenderLeg_d + \beta X' + \eta_i + \lambda_i + \delta_d + \phi_p + \varepsilon_{idp} \quad (3)$$

where *Meeting* is whether interest group *i* attends a meeting with policy-makers from DG *d* in the policy area *p*. The main explanatory variable is *GenderIG_i*, which is the gender of the representative of the interest group *i*. *GenderLeg_d* is the average gender of the staff working for the DG *d*. We use fixed effects for: the DG (δ_d), the policy area (ϕ_p), the type of interest group (η_i) and its country of origin (λ_i). Finally, we include a vector of control variables related to the interest group (X'): the budget of the organization and the number of lobbyists.

Results

Results for the analysis using the Bartik shift-share instrument are shown in Table 1. We find a statistically significant and positive relationship between the DG's gender (instrumented with the Bartik shift-share) and the lobbyists' gender. We can reject the null hypothesis that the instrument is a weak instrument and we find a very strong first stage.

We find empirical support for our Hypothesis 1. This finding suggests that the relationship between the gender of policy-makers and that of lobbyists goes beyond the demand and supply factors seen above. For instance, this finding suggests that female lobbyists are more likely to get access to female policy-makers not (only) because they deal with the same issues, such as education and healthcare. In the Appendix, we provide the results also for

Table 1: IV Reg: Gender DG (Instrumented with Shift-Share) and Gender EU Representative

	(1)	(2)	(3)
Gender DG	0.163*** (0.039)	0.151* (0.038)	0.395** (0.079)
IG Type	No	Yes	Yes
IG Country	No	Yes	Yes
Policy Area	No	No	Yes
IG Covs	No	Yes	Yes
N	74486	66778	66778

the other interest groups' representatives. Table A3 and A4 respectively show the results when we use the gender of the EP representatives and the averages of the gender of the EU representative (used in the main specification) and that of the EP representatives. The effects indicate that a DG with only women is about twice as likely to be lobbied by a female lobbyist compared to a DG with only men. ²

The second part of the analysis investigates whether these strategies work in securing access to the decision-making process. Table 2 shows that gender is positively related to the likelihood of getting access to a meeting with an EC decision-maker. Results hold also when controlling for the gender of the DG with which the interest group interacts, with stable estimates across specifications. In other words, those interest groups that employ female lobbyists are more likely to get access to the EU decision-making process. Having a female EU representative increases the likelihood of a meeting by about 35 per cent compared to when the representative is male.

This is a rather interesting finding, suggesting that interest groups hire more female lobbyists when dealing with more gender-diverse policy-makers. In addition, female lobbyists are more likely to get access to the EU decision-making process regardless of the gender of the policy-makers in charge. This finding elicits interesting considerations on the link between the demand and supply of representation. While interest groups supply more gender diversity when faced with gender diversity, policy-makers demand it regardless of the context. This is an important finding that calls for further research on policy-makers' expectations in terms

of representation and their effects on the decision-making process.

Table 2: EC Meetings: Meeting and Gender EU Rep

	Meeting					
	(1)	(2)	(3)	(4)	(5)	(6)
Gender EU Rep	0.303*** (0.030)	0.302*** (0.030)	0.343*** (0.030)	0.270*** (0.035)	0.260*** (0.035)	0.258*** (0.035)
Gender DG		X	X	X		X
IG Covs			X	X	X	X
IG Country				X	X	X
IG Type				X	X	X
DG					X	
Policy Area						X
<i>N</i>	78,260	78,260	70,375	70,375	70,375	70,375

Conclusion

This paper is the first to take a gender perspective and assess on an individual micro-level lobbyists’ access to policymakers in the European Union. We argue that interest groups are likely to use the lobbyists’ gender to improve their likelihood of gaining access to policy-makers.

By cross-referencing data from the JTR with a dataset on meetings held by specific policy-makers with interest group representatives in the European Commission we create a unique dataset to test our argument. In so doing, we provide a nuanced perspective that assesses the specific lobbyist and policy-maker interacting in a specific meeting. Moreover, we determine in detail lobbyists’ individual characteristic and their organizations as well as for the policy-makers and their institutions. Using innovative machine learning techniques, we extract the gender of the lobbyists and policy-makers.

To test our hypothesis we take an instrumental variable approach. We find that female lobbyists are likelier to gain access to meetings when the policy-maker is female. The results lend support to the expectation that interest groups adapt their strategies to improve their lobbying success (access to policy-makers), with gender being a notable characteristic taken

into consideration.

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