# Reverse Revolving Doors: The Influence of Interest Groups on Legislative Voting\*

Miguel Alquézar-Yus $^{\dagger}$  Josep Amer-Mestre $^{\dagger}$ 

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#### Abstract

This paper investigates to which extent legislators with a background in an interest group (i.e., reverse revolvers) influence other legislators' voting behavior. To answer this question, we collect novel data containing the universe of votes cast at the European Parliament between 2004 and 2019 and characterize legislators by their former working experience. Using the alphabetic allocation of seats, we find that seating beside reverse revolvers when the motion is relevant to their former interest groups increases co-voting by 2.4%, attendance by 1.3%, and decreases abstention by 9%. We find no influence on non-relevant ballots. These effects are driven by budget-related motions and interest groups with limited lobbying spending. Our results show that the revolving doors influence the political process when working in reverse.

**Keywords:** Voting behavior, Interest groups, Social interaction, Revolving doors, European Parliament, Decision-making

JEL Classification: D72, D73, F53, N44, P16

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<sup>&</sup>lt;sup>†</sup>European University Institute, miguel.alquezar@eui.eu and josep.amer@eui.eu.

#### 1 Introduction

Modern democracies have long strived to regulate the activities of interest groups. In recent years, these efforts have been broadened owing to the growing intensity and public notoriety of interest groups. As of 2018, more than 12.000 organizations were openly interested in influencing European policy-making, spending €2.38 billion on lobbying-related activities (EU Transparency Register, 2018).¹ Lobbying directed at European institutions has mainly focused on influencing legislative powers. In particular, 89% of the Members of the European Parliament (hereafter, MEPs) report receiving voting instructions from interest groups. Similarly, legislators receive at least 21 weekly meeting requests from interest groups, with 59% of MEPs admitting attending at least one of those meetings (Hix et al., 2016).

Interest groups are also known for using a subtler practice, often overlooked by regulators: the reverse revolving doors. This practice refers to the flow of individuals from interest groups into active politics (hereafter, reverse revolvers). According to Hix et al. (2016), 22% of surveyed MEPs admitted having been encouraged by an interest group representative to stand in European elections.<sup>2</sup> Understanding whether the presence of reverse revolvers in public institutions affects decision-making is paramount for their healthy development. However, little is known in that respect.

In this paper, we investigate whether the European Parliament members' voting behavior is affected by their close contact with reverse revolvers. We document that 28% of all elected legislators between 2004 and 2019 had worked for an interest group before entering parliament. These engagements range from short work spells for regional NGOs to high-level consulting jobs in lobbying firms. Reverse revolvers are expected to hold policy preferences aligned to those of their former employers. As a result, whenever reverse revolvers influence their colleagues, they would do so in favor of their former employers' interests, even without an active connection.

Given the salience of reverse revolving doors, we set out to estimate the causal effect of legislators with a background in interest groups on the legislative process. The main challenge for our empirical strategy is to obtain a relevant metric of connection between legislators which is also exogenous to the characteristics predicting their voting behavior. We address this issue by using the seating adjacency of legislators in the European Parliament, in which non-leader members of the main political groups sit in alphabetic order. Two main reasons drive our choice of using this measure in the context of the European

<sup>&</sup>lt;sup>1</sup>The European Union lobbying industry is the second largest in the world, only after the US. According to OpenSecrets.org, in 2018, the US federal lobbying sector accounted for 11.600 organizations spending \$3.42 billion.

<sup>&</sup>lt;sup>2</sup>Reverse revolving doors are not unique to European institutions. According to OpenSecrets.org, in the US, as of 2017, 148 former lobbyists had been appointed to various executive federal agencies of the Trump administration.

Parliament: First, lawmakers who sit next to each other during plenary sessions are more likely to interact, influencing each others' views (Masket, 2008; Saia, 2018; Harmon, Fisman and Kamenica, 2019; Lowe and Jo, 2021). Second, the connections created by the alphabetic seating rule are as good as random after conditioning on specific observable characteristics (Harmon, Fisman and Kamenica, 2019). This setting allows us to obtain causal estimates of reverse revolvers' influence on their colleagues' voting behavior. It is relevant to note that our estimates should be interpreted as the additional influence exerted by reverse revolvers on top of the average seating adjacency effects.

A second obstacle that might hinder our causal estimates is the joint selection into lobbying and politics. For example, suppose that more charismatic individuals are more likely to undertake both career activities. In that case, we would not be able to distinguish the importance of charisma from having interest group working experience. To tackle that concern, we leverage variation in voted subjects by identifying which motions are relevant for the interest groups. Under our assumption that former interest group employees will lean towards opinions aligned with their former employers, our research hypothesis is that reverse revolvers will predominantly influence their seating neighbors' voting behavior when voting on relevant motions to their former employers.

We construct a novel dataset containing information on votes cast by MEPs and their work history. First, we collect all electronic ballots cast at the European Parliament between June 2004 and May 2019, characterizing each motion with the subjects they addressed. Second, we use the legislators' résumé to describe their work experience and education, and spot those who worked for an interest group before taking office. Third, we classify interest groups based on their topics of interest and match them with the subjects of each motion voted in Parliament to determine which votes are relevant for each reverse revolver. Finally, we merge all the previous data with the precise seating arrangement of every legislator in every plenary session, allowing us to study how seating adjacency to a reverse revolving door legislator influences voting behavior depending on the motion's relevance to their past employers.

We find that legislators seated next to reverse revolvers are 2.4% more likely to coincide in their ballots when the voting motions are related to the interest group's economic activity, compared to those seated adjacent to the average legislator. The magnitude of the effect corresponds to 21% of the influence exerted by those legislators in charge of drafting the motions being voted – also known as rapporteur – and 43% of the magnitude of seating next to colleagues from the same national party. In contrast, we find no statistically significant effect of seating next to a former interest group employee when the vote is unrelated to the interest group's economic activity. These results show that reverse revolvers influence their peers when voting in motions relevant to their former interest group.

We shed light on how the legislators' ballots are influenced. First, we show that the

influence exerted by reverse revolvers on their peers is twice as large when voting on relevant motions containing important public expenditure decisions. Second, we find that reverse revolvers mobilize their peers towards active voting positions, leading to a 9% reduction in their abstention rate and a 1.3% increase in attendance rate. However, that influence is short-lived as legislators quickly avoid co-voting with their adjacent reverse revolvers.

We provide evidence that reverse revolving doors are only used by interest groups with limited lobbying resources, while not by larger organizations. This result suggests that reverse revolving doors and traditional interest group practices are more likely to be perceived as substitutes rather than complement methods to influence policy. Our results suggest that for more financially constrained interest groups reverse revolving door could be perceived as a more cost-effective practice for achieving a certain level of influence in policy making.

Finally, we investigate which reverse revolvers' characteristics help explain the results. We find suggestive evidence that personal characteristics of the focal and the adjacent legislators are not key determinants in explaining reverse revolvers' influence, compared to that of the average legislator. These results suggest the influence reverse revolvers exert on their peers comes from unobserved characteristics common to all reverse revolvers, such as their preference towards the policy topic under discussion or their inherently higher motivation.

To the best of our knowledge, this is the first study showing the influence reverse revolving doors have on the legislative process. Our contribution is twofold. First, we build a unique dataset containing the universe of electronic ballots cast in the European Parliament between 2004 and 2019 and complement it with detailed information on the legislators' backgrounds. Second, we exploit the alphabetic seating rule followed at the European Parliament to construct an exogenous measure of network formation. We show that reverse revolvers influence their colleagues when voting on motions relevant to their former employer. These findings have important implications for policy-making as they shed light on a relatively overlooked feature of modern democracies: the presence of former interest group employees in democratically elected institutions. Our results support the hypothesis that revolving doors affect the political process, even when working in reverse.

This paper relates to three different strands of the literature. First, we contribute to the literature on lobbying in politics, which harks back to Logan and Fellow (1929). Some recent studies have provided compelling evidence in favor of the argument that lobbyists' main asset is their connection with policymakers: (de Figueiredo and Silverman, 2006; Blanes i Vidal, Draca and Fons-Rosen, 2012; Bertrand, Bombardini and Trebbi, 2014; Bertrand et al., 2020; d'Este, Draca and Fons-Rosen, 2020). While most of the literature focuses on how interest groups benefit from their political connections (de Figueiredo and

Richter, 2014; DellaVigna et al., 2016; Bombardini and Trebbi, 2020), our paper is the first one to causally study how interest groups can influence the legislative process by focusing on a commonly overlooked practice: the placement of industry insiders in democratically elected institutions.<sup>3</sup>

Second, this paper contributes to the literature on legislators' voting behavior determinants, which goes back to Rice (1927) and Routt (1938). However, existing evidence on how legislators affect each other's voting behavior is still limited. Recent research has focused on understanding the role of legislators' social ties (Cohen and Malloy, 2014; Battaglini, Sciabolazza and Patacchini, 2023) and in-parliament proximity (Masket, 2008; Saia, 2018; Harmon, Fisman and Kamenica, 2019; Lowe and Jo, 2021) on their co-voting behavior. We build on and contribute to this literature by showing that those legislators who used to work for an interest group influence their seating peers' voting behavior, particularly in motions relevant to their former employer.

Thirdly, we contribute to the literature on political selection (Besley, 2005; Mattozzi and Merlo, 2008). This literature has expanded in addressing the question of how legislators' careers, before entering parliament, influence different outcomes such as the working committee to which they are assigned (Adler and Lapinski, 1997; McElroy, 2006; Yordanova, 2009; Martin and Mickler, 2019), their leadership roles (Daniel and Thierse, 2018), and voting behavior (Van Geffen, 2016; Francis and Bramlett, 2017). We expand on this literature by showing how legislators' personal and professional characteristics shape the influence their exert on their adjacent colleagues once in parliament.

The remainder of the paper is organized as follows: Section 2 explains the institutional setting. Section 3 presents our data. Section 4 exposes the empirical strategy followed. Section 5 presents the main results, and Section 6 concludes.

### 2 Institutional Setting

### 2.1 Legislative Voting in the European Parliament

The European Parliament is the lower legislative branch of the European Union. Members of the European Parliament (MEPs) are chosen through elections held in each EU member state. Once elected, they join cross-national European Political Groups (EPGs) based on their national party's ideology. EPGs comprise legislators from different nationalities with close political affiliations. These groups perform actions similar to conventional political parties in national parliaments. Before every vote, each group discusses its position internally; however, crucially for our analysis, every MEP has the right to choose which ballot to cast in every single vote.

<sup>&</sup>lt;sup>3</sup>Further reviews on the lobbying literature can be found in de Figueiredo and Richter (2014), DellaVigna et al. (2016) and Bombardini and Trebbi (2020).

The European Parliament meets once or twice a month, during the so-called plenary sessions, in one of its two venues, Brussels and Strasbourg. These plenary sessions represent the final step of the legislative process, in which legislation is debated and voted on. MEPs cast their ballot in three ways: by show of hands, secret ballot, or electronic vote. In our analysis, we focus on electronic votes as they are the default practice at the European Parliament (i.e., 40% of all votes) and are the only voting method identifying each legislator's ballot. To cast a vote, legislators must first obtain recognition in the system by inserting their unique ID card into their voting device and subsequently pressing the button with their preferred choice. Casting a ballot for a colleague is strictly forbidden and penalized by the Parliament's norms.

#### 2.2 Alphabetical Seating in the Chamber

The rules of the Conference of Presidents regulate the seating arrangement in the European Parliament's chambers. MEPs belonging to the different European political groups are clustered in the chamber, and groups are allocated from left to right according to their political orientation. Figure 1 shows the seat distribution, highlighting the block seating allocation by the European political groups. Within these groups, leaders sit in the front rows while the remaining seats are generally allocated alphabetically by surname. The five largest groups, S&D, Verts/ALE, ALDE, PPE, and ECR, adhere to this seating rule. In total, 55.7% of all MEPs sat alphabetically during our study period, amounting to 1,703 legislators. The compliance rate with the alphabetic seating rule might vary across groups and time.<sup>4</sup> The explanation for non-perfect adherence to the seating rule within the "alphabetical groups" is that the rule allows members to occupy another seat for "technical or organizational proposes".

Figure 2 illustrates the predictive power of the alphabetical rank on the seating rank. It plots the within-EPG alphabetic rank and the within-EPG seating order for two groups, one that adheres to the seating rule (Panel A) and one that does not (Panel B). In addition, individuals with prior working experience in interest groups are identified. The sample used in our analysis is determined by the change in the seating pattern depicted in Panel A. The dots on the left-hand side of Panel A represent those MEPs in the front rows of their group who do not adhere to the alphabetic seating rule. We identify those as EPG leaders. The dots on the right-hand side represent those MEPs that do sit alphabetically within the seats designated for their EPG, the non-leader MEPs. Lastly, Panel B contains MEPs belonging to an EPG that does not adhere to the alphabetic seating rule. Our analysis is restricted to non-leader MEPs belonging to alphabetically seating EPGs. Moreover, the

 $<sup>^4</sup>$ The compliance rate is the correlation between the within-EPG alphabetical and seating rank. The average correlation across all voting dates is 0.92 in our sample of non-leaders from alphabetically organized EPGs.

distribution of legislators with prior experience in an interest group is not spatially nor alphabetically clustered.

#### 3 Data

#### 3.1 Plenary Sessions

We collect the complete record of electronic votes at the European Parliament between June 2004 and May 2019, corresponding to the 6th, 7th, and 8th legislative terms, from each plenary session summary report. This dataset contains all electronically cast ballots for each MEP and information on the motions' characteristics, such as the subjects covered and the committees involved.<sup>5</sup> We combine this voting information with the MEP's corresponding plenary seating arrangement, published before each plenary session on the European Parliament's website.<sup>6</sup>

#### 3.2 MEPs' Background

We obtain the legislators' biographical information of all those who took office at any point in time during our studied period from two different sources publicly provided by the European Parliament, namely the MEPs' profiles and their résumés. From the first source, we collect the legislators' characteristics, such as age, sex, nationality, and national party, and their roles in Parliament (e.g., working committees, EPG positions, and procedure rapporteurships). Second, we compile the biographical records of all the MEPs using their submitted résumés upon the start of their mandates.<sup>7</sup> The information in the résumés, initially collected by the European Parliament, was retrieved from the watchdog *Parltrack*. Using the information in these résumés, we classify legislators based on their educational and professional backgrounds.

We identify those MEPs who studied at a "Top 500" university, measured using the 2003 Academic Ranking of World Universities, as a proxy of education excellence as in Fisman et al. (2015). We further characterize MEPs using their professional experience. We use three main measures to classify our legislators: their labor profile, skill level, and topics of expertise. The first measure is obtained by classifying the legislators' working spells with the same categories used by the European Parliament: political, professional, or academic.

<sup>&</sup>lt;sup>5</sup>We restrict our analysis to those motions with an assigned rapporteur. Table A1 in the Appendix displays how motions with and without rapporteur compare, showing the relative importance of the former ones. Similarly, Table A2 shows the characteristics of our sample of interest, non-leaders in alphabetically seated groups, their group leaders, and other legislators in non-alphabetically seated groups.

<sup>&</sup>lt;sup>6</sup>In the rare event that no seating plan was available for a particular plenary session, we take the preceding seating plan corresponding to the same venue as reference.

<sup>&</sup>lt;sup>7</sup>Despite being voluntary, a vast majority of the MEPs (81%) submit their résumé. We hand-collect the biographical information of the remaining MEPs.

We assign each parliamentarian to a category by selecting the one with the most repeated type of work spell after weighing them linearly by the duration of each spell. We use a supervised Random Forest algorithm to fill working spells that the European Parliament did not classify under any of these three categories.<sup>8</sup>

Regarding the legislator's skill level, we use a keyword-matching algorithm to capture those spells that reflect high levels of responsibility, such as CEO, secretary general, and director. We then define each parliamentarian as having or not having managerial skills, following the same methodology used to assign a labor profile. Lastly, we assign each legislator the topics in which they gained expertise before entering parliament to rule out any potential confounding effects through better knowledge of the voted subjects. We do this in two stages. First, using the educational and professional background of all legislators, we classify each legislator using the 14 different categories proposed in Yordanova (2009) and Daniel and Thierse (2018). Next, using all 48 predefined subjects attached to each motion voted in parliament, we select those that best map into each of the 14 expertise categories. Table A3 in the Appendix displays the mapping.

#### 3.3 Interest Groups

The other fundamental source of information is provided by the EU Transparency Register. This voluntary register lists those organizations interested in influencing the EU decision-making process. Despite being voluntary, both the European Parliament and the European Commission require individuals to be listed in the register to access its facilities and to participate in a diverse range of activities that they promote, i.e., public consultations and expert groups or to contact high-level decision-makers.<sup>10</sup>

As of 2018, the register encompasses around 12.000 entities, with a total lobbying budget of €2.38 billion and almost 30.000 employees. We assemble a dataset including all the 17.000 entities registered on the European Transparency Registry at any point in time between 2016 and 2019, including information on each organization's lobbying budget, policy interests, and sectors of activity. We use this dataset to extract the list of all organizations that have expressed interest in EU policy-making and match them with the employers' names found in the MEPs' résumés. We employ a keyword-matching algorithm using a wide variety of patterns, such as stemmed words, the interest groups' websites, and different versions and translations of their registered names. The overall matching rate is 85%, computed using a hand-coded sample. A total of 28% of the MEPs in our sample

<sup>&</sup>lt;sup>8</sup>We use as training dataset the résumés submitted during the terms 8th and 9th, as the European Parliament classified them under these three categories. The algorithm has a 5% error rate.

<sup>&</sup>lt;sup>9</sup>We thank the authors of both studies for kindly providing their data, covering the 6th and 8th parliamentary terms. Following their directions, we coded the same information for the 7th term.

<sup>&</sup>lt;sup>10</sup>For further information, please refer to the Annual Report on the operations of the Transparency Register (2019) and Rule 11 in the Rules of Procedures of the European Parliament.

worked for an interest group at some point before taking up office.

Lastly, and crucial for our analysis, we are interested in identifying those relevant motions for the economic activity of the interest groups identified in our sample. To do so, we rely on the 48-policy subject categories the European Parliament assigns to each motion, linking them to each interest group. The result of the hand-coded linkage between policy subjects and interest groups is the indicator variable *Relevant*, which allows us to distinguish which votes are relevant to each interest group. To construct this variable, we use information scattered over different sources, such as the revealed issues of interest reported in the EU Transparency Register, the topics covered during the meetings with high-level officials from the European Commission, and their activity description from their website, among others.

Table 1 provides the summary statistics on the differences between those legislators who worked for an interest group before entering the European Parliament and those who did not. For instance, reverse revolvers are, on average, older, more experienced, and share a professional (and not political) profile compared to other non-revolving legislators. Similarly, Table 2 provides evidence on the distribution of interest groups' characteristics. For instance, the average interest group with reverse revolvers in Parliament is European, nationally based, non-business-oriented, and has a limited lobbying scope, both in terms of accreditations to access the European Parliament and total lobbying budget.<sup>11</sup>

### 4 Empirical Strategy

We are first interested in examining the extent to which MEPs' voting behavior is influenced by being placed adjacent to a colleague with working experience in an interest group using the following model:

$$Agree_{iv} = \alpha + \beta_1 Peers IG_{iv} + \eta_{iv} \tag{1}$$

where  $Agree_{iv}$  is a variable capturing the fraction of legislators sitting to the left and right of the focal legislator i casting the same ballot in vote v.  $Peers\ IG_{iv}$  is the fraction of adjacent legislators to the focal legislator i during vote v who used to work for an interest group before joining parliament.

To interpret  $\beta_1$  as the causal effect of sitting beside a colleague with an interest group background, we need legislators not to be able to choose where to sit; otherwise, some of their unobserved characteristics might correlate both with their voting behavior and their previous professional experience, biasing our estimation of  $\beta_1$ . We address this concern

<sup>&</sup>lt;sup>11</sup>Table A4 in the Appendix shows the share of interest groups assigned to each subject and their share over the total number of votes cast.

by restricting our attention to those members who sit in alphabetical order. Despite the high compliance rate with the alphabetic seating rule, as shown in Section 2, we estimate both the intention-to-treat (ITT) and the average treatment effect of the compliers (LATE) instrumenting the group of individuals that sit adjacently to the focal MEP using the individuals whose surname is adjacent in the group's alphabetic rank. Hence,  $Name\ Peers\ IG_{iv}$  is the fraction of legislators who previously worked at an interest group whose surnames are adjacent to the focal MEP i in her EPG's alphabetic list in vote v.

A concern when using surname contiguity as an instrument for seat adjacency is that the former might be confounding other unobserved heterogeneous characteristics that cause legislators to vote similarly, such as having similar backgrounds. Using a dyadic approach, Harmon, Fisman and Kamenica (2019) assesses this concern by showing that, after conditioning for party affiliation and surname similarity controls, surname adjacency between two MEPs does not predict their shared characteristics, such as shared nationality, similar education, freshman status, or gender. Following their results, we control for surname similarity by using the fraction of adjacent legislators sharing the same surname as the focal MEP and the absolute alphabetic rank across EPGs and terms. These two controls help us mitigate unobservable characteristics shared by the focal and peer legislators.

In addition to the name similarity controls, we further include a comprehensive set of controls to capture any other type of characteristic of the focal legislator and her group of peers that might affect their voting agreement, together with fixed effects by EPG-Term, plenary sessions since the term started, procedure type and vote subject. Section B in the Appendix includes the list of all the controls introduced in our specifications, and their descriptive statistics are reported in Table B1.

Next, we analyze whether the effect captured by  $\beta_1$  depends on whether the subject of the voted motion is related to the adjacent legislators' former interest groups. To that end, we introduce a new variable that identifies whether any of the subjects of the voted proposal are related to the interest group in which the adjacent colleagues used to work, Relevant. Importantly, we code this variable only for the interest groups identified in our sample. Thus, this variable only takes value 1 if the motion voted on is relevant for the economic activity of any of the adjacent reverse revolvers; it takes value 0 when no adjacent legislator has experience in an interest group or when the voting subject is unrelated to their interest group's sector of activity. Thus, we estimate the following fully saturated model:

$$Agree_{iv} = \alpha + \gamma_1 Peers \ IG_{iv} + \gamma_2 Peers \ IG_{iv} \times Relevant_{iv} + \epsilon_{iv}$$
 (2)

as in Equation 1, we instrument Equation 2 using Name Peers  $IG_{iv}$  and Name Peers  $IG_{iv}$  × Relevant, in a twin first stage regression setting. We cluster all standard errors at the

legislator level.

#### 5 Results

We present our first set of results in Table 3. Columns 1 to 5 display the ITT estimates from Equation 1, instrumenting Peers IG with Name Peers IG and progressively including different fixed effects and individual and peer controls. Our first coefficient of interest, present in Column 1, is estimated using a specification that does not include any fixed effect or control variables. It displays a statistically significant increase of 3.5 percentage points in the probability of MEPs casting the same ballot as their adjacent alphabetic peers when they all have professional experience in an interest group. By including EPG-by-Term and plenary session fixed effects and name similarity controls, we then account for the possibility that the estimated effect might come from a specific EPG at a given legislative term, from some temporal trend, or name similarity conditions. The effect on the agreement probability is still statistically significant while attenuated to an increase of 2.07 percentage points. In Column 3, we further control by vote characteristics, namely by the procedure type and the vote subject, and estimate a similar effect of 2.06 percentage points.

In Column 4, we introduce focal legislators' characteristics, reducing the average probability of casting the same ballot as those surname-adjacent MEPs with an interest group background to 1.27 percentage points. Introducing peer-related controls in Column 5 produces a considerable drop in the probability of co-voting to 0.66 percentage points, and the coefficient becomes statistically insignificant.

Column 6 introduces our main regressor of interest, Name Peers  $IG \times Relevant$ . It captures the additional effect of voting on a motion deemed relevant to the former employer of alphabetically adjacent MEPs on their probability of co-voting. It can be interpreted as the additional effect of being adjacent in the alphabetic list to a legislator who used to work for an interest group when the subject of the motion is related to that group's economic activity. When the subject is not relevant to the peers' former employers, the agreement rate is smaller and not precisely estimated. However, when the voting subject is relevant to the peers' former interest group, the probability of vote coincidence increases by 0.7 percentage points.

The mean agreement rate is 70%, implying that the estimated effect of surname adjacency to legislators with interest group background when the vote is relevant to their interest groups represents an increase in the probability of casting the same ballot of 1.9 percent on the mean. The magnitude of this effect is 16% and 44% of the influence of being name adjacent to the rapporteur and shadow rapporteur of the motion, respectively. Similarly, the estimated effect explains 34% of the variation in co-voting with a name colleague

from the same national party.<sup>12</sup> Given that the primary task of a (shadow)rapporteur is to convince other legislators to vote like them on the motion they represent, we argue that former interest group members have a sizable influence on their adjacent colleagues.

Finally, Column 7 estimates the LATE using both regressors of interest. Compared to Column 6, both  $Peers\ IG$  and  $Peers\ IG \times Relevant$  are similar in magnitude to their surname counterparts due to the strong first stages. We find an increase in the average probability of casting the same ballot as the adjacent MEPs when voting on subjects deemed of relevance to their interest groups by 1.7 percentage points, or 2.4%, compared to those legislators with no adjacent former interest group member. This effect corresponds to 21% or 57% of the influence exerted by an adjacent rapporteur or shadow rapporteurs, respectively. Similarly, it explains 43% of the variation in co-voting behavior with a seating colleague from the same national party. It is worth noticing that seating adjacency already increases the probability of vote coincidence by 0.6 percentage points, as shown in Harmon, Fisman and Kamenica (2019). Hence our results are interpreted as the additional influence on top of the average seating adjacency effects.

We are now interested in understanding the potential mechanisms at play when former interest group employees turned politicians to persuade their colleagues to vote like them. To that end, we shed light on the channels through which these legislators affect voting behavior, such as voting mobilization, the emphasis on high stake votes, and the importance of the connection persistence over time.

#### 5.1 Voting Mobilization

We turn now to analyze how the legislators' ballots are influenced. Under the implicit assumption that legislators who previously worked for an interest group have a clear stance on motions with a subject related to their previous employers, their objective is to mobilize their network to vote in favor or against specific motions along their previous employer's economic activity. Using the specification in Equation (2), we estimate whether seating adjacent to a legislator with prior experience in an interest group affects the probability of abstaining from relevant votes.

We use an indicator variable taking value 1 if the focal legislator i casts an abstention ballot in vote v and 0 otherwise. Columns 1-3 in Table 4 display the results from that

<sup>&</sup>lt;sup>12</sup>Table A5 displays Table 3 together with the coefficients for both focal and peer rapporteur and shadow rapporteurs, and for whether both focal and peer MEPs are from the same national party.

<sup>&</sup>lt;sup>13</sup>Table A6 in the Appendix reports the first stage results corresponding to Column 7.

<sup>&</sup>lt;sup>14</sup>We show in Table A7 how reverse revolvers do affect not only their closest peers but also those at higher distances, with a decaying influence as distance increases. In the same line, Table A8 shows that using row-aggregated information produces consistent results with our main specification. In Table A9, we provide evidence that our benchmark results are not sensitive to different clustering choices, and in Table A10, that they are comparable when assigning each interest group with up to 3 relevant subjects. Finally, Table A11 shows that influence is absent in cross-party neighbors.

estimation. Seating adjacent to reverse revolvers does not affect voting abstention on average. In contrast, it does when the motion is relevant for the interest group in which the neighboring legislator used to work. In our preferred specification, although small in absolute magnitude, the effect predicts that legislators seating adjacent to reverse revolvers when the vote is of interest for their interest groups are on average 0.3 percentage points or 9% less likely to abstain.

These results point towards reverse revolvers influencing their peers out of abstention when the motion voted on is relevant for their former employer. This influence is possible because the limited party line enforcement at the European Parliament reduces the individual cost of casting a vote instead of actively abstaining.

In the same direction, we could expect reverse revolvers to mobilize their network to participate in the voting process to increase the support for a specific motion. Columns 4-6 in Table 4 display the analogous analysis using MEPs' absenteeism instead. We estimate Equation (2) with the dependent variable being an indicator variable taking value 1 when the focal legislator i was absent during vote v, and 0 otherwise. In our preferred specification, sitting next to reverse revolvers decreases the focal legislator's probability of not attending the vote by 1.15 percentage points. Since MEPs in our sample are, on average absent for 13% of the votes, the effect implies an 8.7% decrease in the mean absenteeism or, conversely, a 1.3% increase in the mean attendance.

Overall, all these results show that reverse revolvers mobilize their peers towards an active voting position, away from abstention and absenteeism.

#### 5.2 High-Stakes Votes

We want to understand whether the influence of reverse revolvers is stronger in high-stakes situations. To that end, we rely on different vote characteristics to identify these types of situations.

First, to infer a motion's intrinsic importance, we turn our attention to whether it concerns the budget of the Union or not. We consider this a good proxy for high-stakes situations as these are the motions that determine how the annual EU budget is spent. In particular, 16% of ballots in our sample refer to votes about the budget, being characterized by their lower abstention (i.e., 12 % in budget-related votes vs. 13.3% in non-budget-related votes) and their stronger party lines (i.e., 80% and 77.7%, respectively). Table 5 presents the results depending on whether the motion being voted on concerns the budget of the Union or not.

We can observe how legislators are influenced when sitting close to former interest group members, specially when doing so in relevant budget-related motions. For instance, having all seating neighbors with an interest group background when the subject is relevant for any of their prior employers increases the probability of casting the same ballot by 1.4 percentage points in the case of non-budgetary votes and by 3.9 percentage points on budget votes. Both estimated effects are statistically significant at the 10% level, and when compared to their corresponding average agreement rates, the probability of voting like the seating peers increases by 2% for non-budget votes and by 5.4% for budget-related motions. Moreover, we reject that the two joint coefficients are statistically equal, highlighting the importance of budget votes for reserve revolvers.

Second, to infer the motion's relative voting importance, we look at those motions that passed by a narrow margin. We consider these to be a good ex-post measure capturing the legislators' voting pivotality in a given motion. In our sample, 2, 9.5, and 18% of the votes refer to motions passed by less than a 1, 5, and 10% margin of victory, respectively. Figure 3 presents the heterogeneous effects by proximity to the winning margin. It is constructed by interacting our benchmark specification, as in Equation 2, with each one of the margins of victory previously outlined.

We can observe that seating next to reverse revolvers does not significantly affect the probability of co-voting in highly contested motions. While interest groups might put more resources into winning contested motions, legislators are also subject to higher scrutiny from their own party in those votes, making it more costly to deviate from other party peers. As a result, the reverse revolving door practice might not play a relevant role during highly contested votes, influencing only uncontested voting motions. Our results provide suggestive evidence that reverse revolvers, rather than fighting for individual voting motions, put more effort into creating supermajorities.

Overall, all these results suggest that legislators with an interest group background invest significant effort in persuading their colleagues in close proximity during budget-related votes, but are not found to do so in highly contested votes.

#### 5.3 Connection Persistence

In the previous section, we showed that sitting adjacent to a reverse revolver increases the likelihood of casting the same ballot, especially in those high-stake motions relevant for the interest groups. In this section, we study how long-lasting that influence is.

On the one hand, sitting next to the same colleagues for long periods could facilitate the exchange of ideas and the negotiation process, thus potentially increasing the agreement rate between those members. In our case, this would allow reverse revolvers to draw adjacent legislators closer to their views. On the other hand, the opposite effect could also play a role; legislators might learn about each other's preferences and, as a result, avoid co-voting with them. In our case, this would imply that the influence of reverse revolvers would decrease over time as their peers learned about each other's inclinations.

Table 6 presents the results of estimating Equation 2 looking at the cumulative time legislators have spent with their seating colleagues in a given legislature. As shown in the

results of our baseline analysis, reverse revolvers only influence their peers' voting behavior in those motions classified as relevant to their previous employer. We find a similar result when looking at the persistence their influence. In particular, Table 6 shows that the influence exerted by reverse revolvers on their peers diminishes as the legislators spend more voting sessions together. More precisely, it will take an average of 67 voting sessions sitting together for this influence to completely die out (i.e., 3.6 years in parliament). This result suggests that legislators slowly learn from their peers' inclinations, limiting the initial influence exerted by reverse revolvers. It is worth mentioning that all the regressions include time fixed effects, ruling out confounding effects with the parliamentarian learning process.<sup>15</sup>

#### 5.4 Interest Groups' Characteristics

We now shed light on whether the influence of those legislators with prior ties to interest groups varies depending on various interest groups' characteristics. First, we look at whether the influence former interest group members exert on their peers depends on the interest groups' business type. To that end, we define an interest group as private good if its legal status is business-related (e.g., companies and corporations which are not state-owned) and public good if its legal status is non-business-related, such as NGOs, trade unions, and the like. Figure 4 reports the results of our preferred specification, showing that the business-nature of the interest groups represented in our sample do not explain the observed influence.

Second, we inspect whether the extent to which an interest group's activity is likely to be regulated by the European legislation helps explain the influence of reverse revolvers. To do so, we define an interest group as regulated if its main interest lies in policies relating to agriculture, the environment, ICT, and the banking and energy sectors. While those reverse revolvers with ties to regulated interest groups might have higher incentives to influence others, their activities, as in the case of highly contested votes, are also subject to higher scrutiny from their parties and the chamber, making it more costly to convince other party peers. Figure 4 supports this hypothesis, showing that only those reverse revolvers coming from less regulated interest groups influence their peers when the topic voted is deemed relevant to their former employers, while those from regulated interest groups cannot exert any different influence.

Third, we explore whether the location of the interest group's headquarters affects its relative influence. On the one hand, we might think that those interest groups located in Brussels, where most EU bodies are based, would have a higher interest in EU policy-making and hence might mobilize their former employees-turned-politicians to exert a

 $<sup>^{15}</sup>$ Table A12 presents the fully interacted version using the number of voting days together, as opposed to the number of voting sessions, showing quantitatively similar results.

greater influence on their current colleagues. On the other hand, interest groups based in the European capital already have many other means to influence legislative voting and therefore might not utilize all their network. In contrast, interest groups located in their respective member states might not have an extensive network, relying on placing their former employees in parliament to influence EU policy-making. Figure 4 points in favor of the latter hypothesis, suggesting that the reverse revolving doors is used by nationally-based interest group to persuade European legislators.

Fourthly, we look at whether interest groups' lobbying resources help explain the influence of their reverse revolvers. We define an interest group as having limited lobbying spending if it has a below-median lobbying budget (i.e., 1 million euros per year). On the one hand, we could think those interest groups with large lobbying budgets would have sufficient power to mobilize their networks towards their desired outcomes, possibly utilizing more direct forms of lobbying, not needing to resort to reverse revolving. On the other hand, interest groups with extensive lobbying resources might use a combination of all forms of influence, including the mobilization of their former employees. Similarly, those interest groups with more limited lobbying resources might be more prone to use the reverse revolving doors, instead of traditional and more competitive methods. Figure 4 supports this last hypothesis, suggesting that for more financially constrained interest groups reverse revolving door is perceived as a more cost-effective practice for achieving a certain level of influence in policy making.

Fifthly, we finish our exploration of the interest groups' characteristics by investigating whether the relative position held in the interest group matters in explaining the influence in parliament. We use the information on the legislators' résumés to identify those with managerial positions in interest groups and those without them. Figure 4 presents the results for the influence exerted by both types of legislators, highlighting no significant differences in the utilization of reverse revolving doors to influence policymaking.

We then focus on whether the time that has passed since leaving an interest group and the time spent in an interest group affects the influence that legislators have on their peers. Figure 5 displays the average effect of having all seating neighbors with working experience in an interest group and voting on a motion related to the group's economic activity. More concretely, Subfigure 5a shows how the influence of the reverse revolvers depends on how long ago they stopped working for their respective interest groups. These results evidence a small positive effect in those legislators who finished their interest group employment relationships in the previous four years before entering parliament. For instance, having all seating neighbors with experience in an interest group when the vote subject is relevant increases the probability of casting the same ballot by 2.9 and 7.5 percentage points, when the neighbors finished working for an interest group in the last 2 and 4 years before entering parliament, respectively. No significant influence is exerted at higher time horizons.

Subfigure 5b shows that the influence legislators with prior interest group exposure have on their peers does not systematically depend on their interest group's tenure.

Overall, these results shed light on which interest groups are crucial in understanding the effective influence of reverse revolvers. In this section, we have shown that reverse revolvers are particularly influential when they have ties with interest groups with limited lobbying resources, non-regulated, and national-based, while other factors such as the position held and the group's business nature do not seem to matter.

#### 5.5 MEPs' Characteristics

Finally, we want to understand the role of personal characteristics in shaping the influence of reverse revolvers.

We explore the role of adjacent reverse revolvers' characteristics in explaining the influence observed. For that matter, we focus on the following traits: gender, tenure in parliament, topic-level field of studies, role in the motion's drafting process, and managerial status. Figure 6 presents the interacted results for those peers' attributes. We can observe how gender plays a central role in explaining how reverse revolvers influence their peers. More precisely, female reverse revolvers have a large and significantly positive influence on their peers, while male reverse revolvers have none. We do not find any significant differences among the other peers' attributes. Similarly, Figure 7 displays the interacted results for the personal attributes of focal legislators. As with the peers' attribute, we find no significant differences along focal legislators' attributes.

Overall, we show that personal characteristics, both of the focal and adjacent legislators, are not the key determinants in explaining reverse revolvers' effective influence. These results suggest that the influence reverse revolvers have on their peers comes from unobserved characteristics common to all reverse revolvers, such as their preference towards the policy topic under discussion, or their inherently higher motivation, as well as, from individual interest groups with specific attributes, such as those with limited lobbying resources, non-regulated, and national-based.

#### 6 Conclusion

This paper provides novel evidence of interest groups' influence on the legislative process through reverse revolving doors. To do so, we follow a twofold approach. First, we collect a unique dataset containing the universe of electronic votes that took place at the European Parliament between 2004 and 2019 and complement it with detailed information on the legislators' characteristics. In particular, we use the legislators' résumés to pinpoint those with prior experience in an interest group and identify the motions in which their former employers are more interested. We document that 28% of the legislators had work

experience on interest groups before entering European politics. Second, we exploit the alphabetic seating rule followed at the European Parliament to construct an exogenous measure of network formation. This setting allows us to estimate the causal effect of sitting next to a former interest group member when voting on motions crucial to their former employer's business activity.

We show that reverse revolvers influence their adjacent colleagues when voting on a motion relevant to their former employer, implying a 2.4% increase in the co-voting probability. Meanwhile, no influence is exerted in non-relevant motions. When voting on relevant motions containing important public expenditure decisions, these results are twice as large. We further show that reverse revolvers influence their seating peers by decreasing their abstention ballots by 9% and increasing their voting attendance by 1.3%. However, legislators quickly learn from their peers' inclinations and avoid co-voting with their adjacent reverse revolvers.

To the best of our knowledge, this is the first study providing evidence of the influence of reverse revolving doors on the legislative process. These findings have important implications for policy-making as they shed light on a relatively overlooked lobbying practice used by interest groups, consisting of having insiders sitting in democratically elected institutions. Our results support the hypothesis that revolving doors affect the political process even when working in reverse.

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## Tables and Figures

Table 1: MEPs' Characteristics - Reverse Revolvers vs. Other Legislators

	Revers	Reverse Revolvers		legislators			
	Mean	SD	Mean	SD	p-value		
Panel A: Legislators' char	acteristics						
Women	0.37	0.48	0.35	0.48	(0.45)		
Age	54.07	10.63	52.72	10.60	(0.02)		
Top ranked education	0.44	0.50	0.26	0.44	(0.00)		
Panel B: Roles in Parliam	ent						
First-term elected	0.57	0.50	0.59	0.49	(0.58)		
Tenure at the EP	3.14	4.96	3.08	4.94	(0.83)		
Absence	0.13	0.11	0.14	0.13	(0.02)		
Rapporteur	0.00	0.00	0.00	0.00	(0.30)		
Shadow rapporteur	0.00	0.01	0.00	0.01	(0.00)		
Committee membership	4.91	1.22	4.82	1.22	(0.19)		
Panel C: Legislators' prior	Panel C: Legislators' prior experience						
Work spells	15.24	12.44	10.62	8.20	(0.00)		
Work experience (years)	26.85	10.66	23.46	10.85	(0.00)		
Managerial profile	0.28	0.45	0.26	0.44	(0.60)		
Political profile	0.61	0.49	0.73	0.44	(0.00)		
Professional profile	0.34	0.47	0.23	0.42	(0.00)		
Academic profile	0.05	0.21	0.04	0.19	(0.50)		
Total	4	173	1:	230	1703		

Notes: This table shows the distribution of legislators' characteristics as follows: Baseline (Col. 1); Reverse revolvers (Col. 2-3); Other legislators (Col. 4-5). The p-value of the difference between reverse revolvers and any other legislator is reported in Column 6.

Table 2: Interest Groups' Characteristics

	Mean	SD	Min	Max	N
Panel A: Business Type					
NGOs	0.23	0.42	0	1	513
Academic institutions	0.19	0.39	0	1	513
Companies & Groups	0.18	0.39	0	1	513
Trade Unions	0.10	0.30	0	1	513
Other institutions	0.09	0.29	0	1	513
Trade and Business associations	0.06	0.24	0	1	513
Think Tanks	0.06	0.23	0	1	513
Transnational associations	0.04	0.19	0	1	513
Consultancies	0.03	0.17	0	1	513
Regional structures	0.03	0.17	0	1	513
Panel B: Headquarter's Location					
Belgium	0.23	0.42	0	1	513
Germany	0.12	0.32	0	1	513
United Kingdom	0.11	0.32	0	1	513
Italy	0.07	0.26	0	1	513
France	0.07	0.25	0	1	513
Poland	0.04	0.21	0	1	513
Finland	0.04	0.20	0	1	513
Netherlands	0.04	0.20	0	1	513
Spain	0.04	0.20	0	1	513
Denmark	0.03	0.17	0	1	513
Rest of Europe	0.15	0.36	0	1	513
Rest of the World	0.05	0.22	0	1	513
Panel C: Other Characteristics					
Num. Employees	14.81	209.82	0	4750	513
Num. EP Accreditations	1.78	3.86	0	53	513
Lobbying Budget	512,445	1,131,297	0	10,000,000	513

Notes: The table displays the mean, standard deviation, minimum, and maximum values for a set of interest group's characteristics. The interest groups used correspond to those identified in the résumés of non-leader MEPs affiliated with an alphabetic seating group.

Table 3: Reverse Revolving Doors Connection and Vote Coincidence

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	2SLS
	Agree						
Name Peers IG	0.0350***	0.0207***	0.0206***	0.0127**	0.0066	0.0059	
	(0.0076)	(0.0067)	(0.0067)	(0.0053)	(0.0049)	(0.0050)	
Name Peers (IG $\times$ Relevant)						0.0073*	
						(0.0039)	
Peers IG							0.0080
D (10 D )							(0.0066)
Peers (IG $\times$ Relevant)							0.0091*
							(0.0049)
$EPG \times Term FEs$	No	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	No	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	No	No	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	No	No	Yes	Yes	Yes	Yes	Yes
Name controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	No	No	No	Yes	Yes	Yes	Yes
Peers controls	No	No	No	No	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336
Mean Agree	0.707	0.707	0.707	0.707	0.707	0.707	0.707
Joint p-value						0.0239	0.0257
F-stat 1							1056
F-stat 2							1308

Notes: Results of estimating Equation (2). Joint p-value tests the joint significance of being adjacency to reverse revolvers and when the topic is relevant for any of their interest groups. A comprehensive set of controls of the focal and peer legislators is used. See Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 4: Reverse Revolving Doors Connections and Voting Abstention and Absenteeism

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	ÒĹS	2SLS	OLS	ÒĹS	$2 \widetilde{\mathrm{SLS}}$
	Abstain	Abstain	Abstain	Absent	Absent	Absent
Name Peers IG	-0.0010	-0.0009		-0.0087*	-0.0087*	
Traine Feels Fe	(0.0016)	(0.0016)		(0.0047)	(0.0047)	
Name Peers (IG × Relevant)	(0.0010)	-0.0017**		(0.001.)	-0.0000	
Traine I cons (I a w Italia rana)		(0.0008)			(0.0038)	
Peers IG		(0.0000)	-0.0012		(0.0000)	-0.0115*
			(0.0021)			(0.0062)
Peers ( $IG \times Relevant$ )			-0.0021**			-0.0000
			(0.0010)			(0.0047)
EPG × Term FEs	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,881,658	5,881,658	5,881,658	6,770,336	6,770,336	6,770,336
Mean dep. variable	0.0229	0.0229	0.0229	0.131	0.131	0.131
Joint p-value		0.131	0.139		0.141	0.134
F-stat 1			1020			1056
F-stat 2			1236			1308

Notes: Results of estimating Equation (2) using as the dependent variable whether the legislator cast an abstention ballot (Columns 1-3) or was absent during the vote (Columns 4-6). Joint p-value tests the joint significance of being adjacency to reverse revolvers and when the topic is relevant for any of their interest groups. A comprehensive set of controls of the focal and peer legislators is used. See Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 5: Reverse Revolving Doors Connections and Vote Coincidence by Vote Type

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	2SLS
	Agree	Agree	Agree	Agree
Name Peers IG	0.0066 (0.0049)	0.0059 $(0.0050)$	0.0059 $(0.0050)$	
Name Peers (IG * Relevant)	(0.0010)	0.0074* $(0.0039)$	0.0048 $(0.0039)$	
Name Peers (IG * Budget)		,	0.0023 (0.0057)	
Name Peers (IG * Budget * Relevant)			0.0183* (0.0101)	
Peers IG			(0.0101)	0.0081 (0.0066)
Peers (IG * Relevant)				0.0060 $(0.0049)$
Peers (IG * Budget)				0.0027 $(0.0068)$
Peers (IG * Budget * Relevant)				0.0219* $(0.0120)$
EPG × Term FEs	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	No	No
Name controls	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes
Budget-vote control	No	No	Yes	Yes
Observations	6,769,638	6,769,638	6,769,638	6,769,638
Mean Agree	0.707	0.707	0.707	0.707
Joint p-value		0.0238	0.00392	0.00330
Non-budget: p-value			0.0695	0.0693
Budget vs. Non-budget: p-value			0.0580	0.0566
F-stat (KP)				523

Notes: This table shows the results of estimating Equation (2) adding as a regressor of interest whether the motion voted upon is related to the Union's budget. Joint p-value tests the joint significance of being adjacency to reverse revolvers and when the topic is relevant for any of their interest groups. Budget vs. Non-Budget tests the differential effect between being adjacency to reverse revolvers and when the topic is relevant for any of their interest groups, depending on whether the motion voted upon is related or not to the Union's budget. A comprehensive set of controls of the focal and peer legislators is used. See Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 6: Average Effect of Reverse Revolving doors Connections on Vote Coincidence Persistence by Plenary Sessions

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	2SLS
	Agree	Agree	Agree	Agree
Name Peers IG	0.0059	0.0043	0.0034	
Tulle Foots 19	(0.0050)	(0.0069)	(0.0068)	
Name Peers (IG * Relevant)	0.0073*	0.0073*	0.0164**	
,	(0.0039)	(0.0039)	(0.0064)	
Sessions name adjacent	-0.0000	-0.0000	-0.0000	
	(0.0001)	(0.0001)	(0.0001)	
Name Peers IG * Sessions name adjacent		0.0001	0.0001	
		(0.0002)	(0.0002)	
Name Peers (IG * Relevant) * Sessions name adjacent			-0.0003	
			(0.0002)	
Peers IG				0.0048
				(0.0094)
Peers (IG * Relevant)				0.0225**
				(0.0089)
Sessions seat adjacent				-0.0001
				(0.0002)
Peers IG * Sessions seat adjacent				0.0002
D (IC * D 1) * C				(0.0004)
Peers (IG * Relevant) * Sessions seat adjacent				-0.0006*
				(0.0004)
EPG x Term FEs	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336	6,770,336
Mean Agree	0.707	0.707	0.707	0.707
Joint p-value	0	0.131	0.0322	0.0322
F-stat (KP)		00-	<u>-</u>	188

Notes: This table shows the results of estimating Equation (2) adding as regressors the number of previous plenary sessions in which each legislator has been assigned to sit adjacent to the same two other legislators, as well as the interactions with  $Peers\ IG\$ and  $Peers\ IG\$ \* Relevant, and their correspondent instruments. We denote as Joint p-value the test on the joint significance of all the variables displayed in the table (both at the surname and seating level). A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Figure 1: Strasbourg Seating Plan during the Plenary Session Held on February 4th, 2013

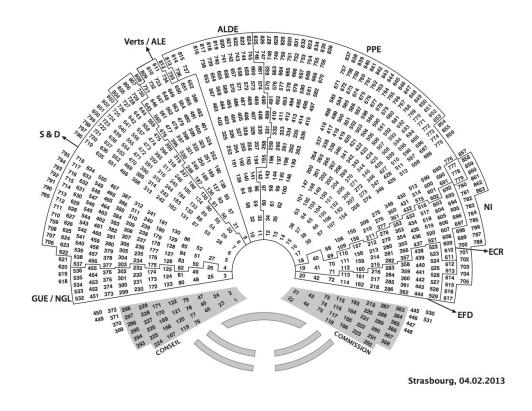
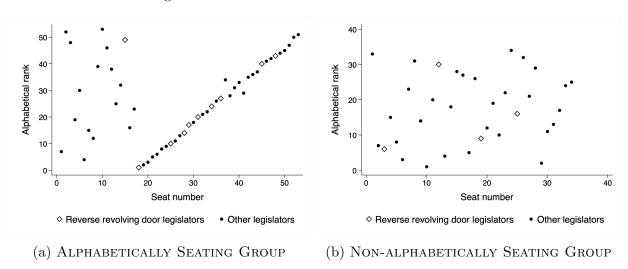
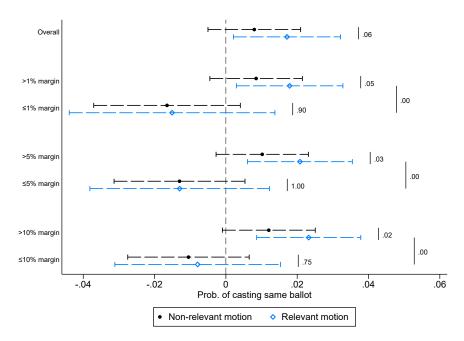


Figure 2: Seating and Alphabetical Rank



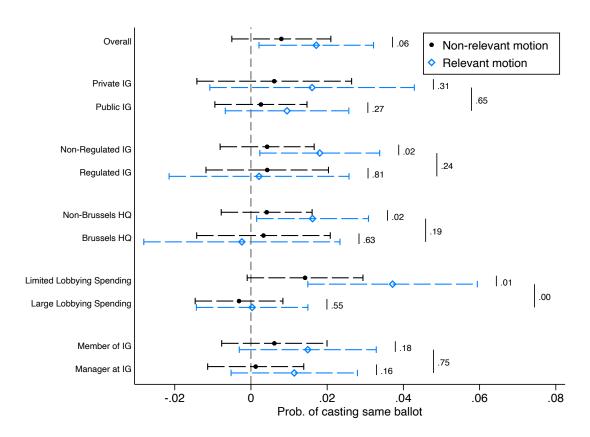
Notes: This figure shows the correlation between within-EPG alphabetic rank and within-EPG seating rank. Subfigure 2a displays the correlation for the ECR group, which adheres to the alphabetic seating rule. Subfigure 2b looks at the GUE/NGL group, which does not adhere to the alphabetic seating rule. The data plotted corresponds to the plenary seating held on February 5, 2013.

Figure 3: Reverse Revolving Doors and Vote Coincidence by Margins of Victory



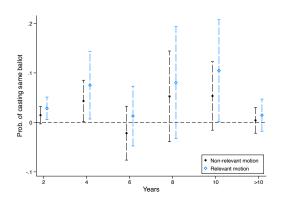
Results of estimating Equation (2), interacted with each one of the following margins of victory, 1, 5, and 10%, respectively. The results shown correspond to the effect of seating adjacently to a legislator who previously worked for an interest group, when the subject of the motion is not relevant for its former employer, *Non-Relevant motion*, and when it is, *Relevant motion*. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors are clustered at the legislator level. Dashed horizontal lines represent the 95% confidence level. *p*-values from Wald tests for the equality of two estimates are reported next to each solid vertical line between the two estimates. Table A13 displays numerically this figure.

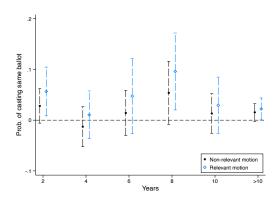
Figure 4: Reverse Revolving Doors and Vote Coincidence by Peer Interest Groups' Characteristics



Notes: This figure shows the results of estimating Equation (2), interacted with the Interest Group's characteristics. The results shown correspond to the effect of seating adjacently to a legislator who previously worked for an interest group, when the topic is not relevant for its former employer, *Non-Relevant motion*, and when the topic is relevant for its former employer, *Relevant motion*. A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. Standard errors are clustered at the legislator level. Confidence intervals represent the 95% confidence level. *p*-values from Wald tests for the equality of two estimates are reported next to each solid vertical line between the two estimates. Table A14 displays numerically this figure.

Figure 5: Temporal Distribution of Reverse Revolving Doors and Vote Coincidence

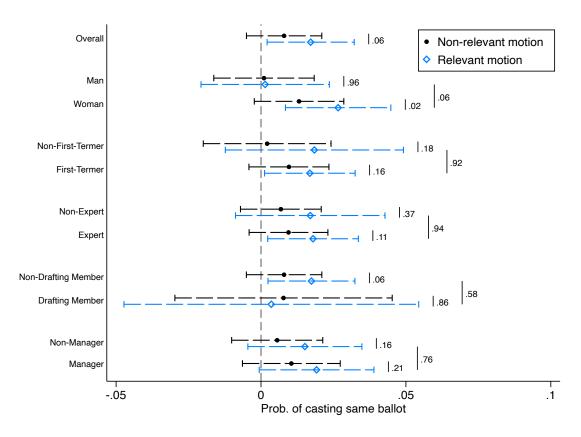




- (a) Last employed by an interest group
- (b) Experience in an interest group

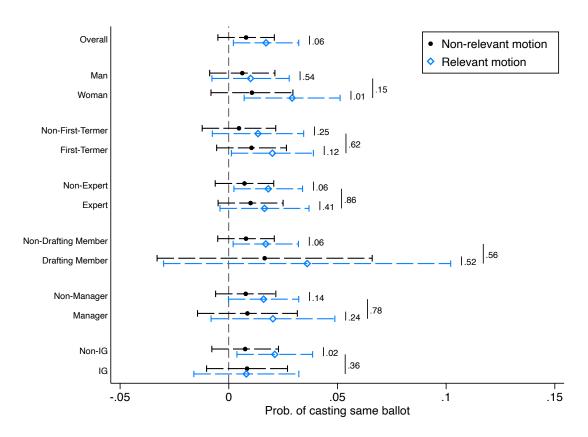
Notes: This figure shows the results of estimating Equation (2) showing the results depending on the years since the employment of the legislators with an interest group background ended and their years of experience. Subfigure 5a studies how this influence evolves vis-à-vis their adjacent peers' years since they last worked for an interest group. Subfigure 5b focuses on how the effect depends on the years of experience adjacent legislators had in interest groups. The results shown correspond to the effect of seating adjacently to a legislator who previously worked for an interest group, when the topic is not relevant for its former employer, Non-Relevant motion, and when the topic is relevant for its former employer, Relevant motion. A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. Standard errors are clustered at the legislator level. Confidence intervals represent the 95% confidence level. Tables A15 and A16 display numerically these two figures, respectively.

Figure 6: Reverse Revolving Doors and Vote Coincidence by Peers' Personal Characteristics



Notes: This figure shows the results of estimating Equation (2), interacted with the adjacent legislators' personal characteristics. The results shown correspond to the effect of seating adjacently to a legislator who previously worked for an interest group, when the subject of the motion is not relevant for its former employer, Non-Relevant motion, and when it is, Relevant motion. A comprehensive set of controls for the focal and peer legislators is used in the analysis. See Appendix B for further information on the included controls. Standard errors are clustered at the legislator level. Confidence intervals represent the 95% confidence level. p-values from Wald tests for the equality of two estimates are reported next to each solid vertical line between the two estimates. Table A17 displays numerically this figure.

Figure 7: Reverse Revolving Doors and Vote Coincidence by Personal Characteristics



Notes: This figure shows the results of estimating Equation (2), interacted with the legislators' personal characteristics. The results shown correspond to the effect of seating adjacently to a legislator who previously worked for an interest group, when the subject of the motion is not relevant for its former employer, Non-Relevant motion, and when it is, Relevant motion. A comprehensive set of controls for the focal and peer legislators is used in the analysis. See Appendix B for further information on the included controls. Standard errors are clustered at the legislator level. Confidence intervals represent the 95% confidence level. p-values from Wald tests for the equality of two estimates are reported next to each solid vertical line between the two estimates. Table A18 displays numerically this figure.

## Appendix

## A Supplementary Materials

Table A1: Summary of Samples by Rapporteur Presence

	With Rapporteur	Without Rapporteur
Panel A: Voting distribution		
Electronic ballots	13,365,545	4,067,500
In favour	51.78	42.52
Abstained	3.49	3.84
Against	31.37	34.62
Absence	13.36	19.03
Panel B: Vote characteristics		
Position on voting order	40.10	35.52
Budget of the Union	13.12	0.09
Legislative & Non-legislative	38.32	2.13
Resolutions and initiatives	48.56	97.78

Notes: Counts and shares by whether a vote had a rapporteur assigned to or not. It displays the absolute frequency of electronic ballots cast with and without rapporteur during the terms 6, 7 and 8. The distributions by vote outcome and by vote characteristics are expressed in percentages. The three type of procedure categories shown in Panel B are based on the procedure description present at the European Parliament website.

Table A2: European Parliament Sample Comparison

	Non-leaders alphabetic EPGs			Leaders alphabetic EPGs		etic EPGs
	Votes cast	MEPs	Votes cast	MEPs	Votes cast	MEPs
Panel A: Legislators' char	racteristics					
Women	0.37	0.36	0.33	0.33	0.31	0.28
Age	53.41	53.22	56.33	55.58	53.14	53.62
Top ranked education	0.30	0.31	0.39	0.37	0.30	0.28
Panel B: Roles in Parliam	nent					
First-term elected	0.57	0.58	0.26	0.34	0.66	0.67
Tenure at the EP	3.21	3.09	6.05	5.41	2.22	2.20
Absence	0.13	_	0.12	_	0.15	_
Rapporteur	0.001	_	0.002	_	0.000	_
Shadow rapporteur	0.003	_	0.003	_	0.01	_
Committee membership	4.96	_	5.37	_	4.65	_
Panel C: Legislators' prior	r experience					
Work spells	12.19	11.90	14.32	13.33	7.94	8.04
Work experience (years)	24.68	24.39	26.69	26.29	22.68	22.86
Managerial profile	0.27	0.26	0.30	0.28	0.23	0.23
Political	0.69	0.70	0.78	0.78	0.56	0.57
Professional	0.27	0.25	0.17	0.18	0.37	0.37
University	0.03	0.04	0.03	0.03	0.07	0.06
Panel D: Legislators' prio	r interest grou	p experience				
Worked in interest group	0.28	0.28	0.31	0.31	0.21	0.19
Work experience in	9.40	9.05	9.19	8.86	9.14	8.90
interest group (years)						
Relevant subject	0.05		0.06	_	0.05	
Total	6,770,336	1,703	3,056,927	828	2,400,508	527

Notes: The table shows counts and shares in three different subsamples representing all the members of the European Parliament. Every member is coded as part of one of these samples or blocks. Columns 1, 3, and 5 represent shares computed using all the votes cast, while Columns 2, 4, and 6, show those same shares computed using individual legislators. The sample selection criterion used to construct each of these three blocks is the same applied to obtain the sample used in the baseline analysis: we use only votes with an assigned rapporteur and containing at least one subject. In Columns 1 and 2, we look at non-leader legislators in an alphabetic seating group. In Columns 3 and 4, we look at those legislators who are leaders in an alphabetic seating group. Finally, in Columns 5 and 6, we look at all other legislators who are affiliated to non-alphabetic seating groups. Moreover, for all three categories, we use only members who sit beside at least one other legislator belonging to the same category.

Table A3: Mapping of Expertise and Vote Subjects

Variable as in Yordanova (2009)	Vote subjects
Business/Industry	Common commercial policy in general; Competition; Enterprise policy, inter-company cooperation; Free movement of goods; Free movement of services, free- dom to provide; Industrial policy; Taxation
Economics/Finance	Common commercial policy in general; Competition; Economic union; Enterprise policy, inter-company co- operation; European statistical legislation; Free move- ment of capital; Monetary union; Taxation
Education	Common cultural area, cultural diversity; Education, vocational training and youth; Research and technological development and space
Farming	Agricultural policy and economies; Fisheries policy
Green ties	Agricultural policy and economies; Environmental policy; Fisheries policy
International relations	Common foreign and security policy; Development co- operation; Emergency, food, humanitarian aid, aid to refugees, Emergency Aid Reserve; Enlargement of the Union; Relations with third countries
Legal	Citizen's rights; Consumers' protection in general; EU law; Free movement and integration of third-country nationals; Fundamental rights in the EU, Charter; Institutions of the Union; Judicial cooperation; Justice and home affairs; Police, judicial and customs cooperation in general; Revision of the Treaties, intergovernmental conferences; Treaties in general
Local government	Common cultural area, cultural diversity; Regional policy; Tourism
Media	Information and communications in general
Medicine	Public health
Science/Engineering	Energy policy; Environmental policy; Information and communications in general; Research and technological development and space
Social group	Citizen's rights; Free movement and integration of third-country nationals; Fundamental rights in the EU, Charter; Social policy, social charter and protocol
Trade Union	Employment policy, action to combat unemployment; Free movement of workers; Social policy, social charter and protocol
Transport/Telecommunications	Transport policy in general

Notes: The table displays how the expertise topics, as in Yordanova (2009), map into the vote subjects at the European Parliament.

Table A4: Vote and Interest Groups Share by Procedure Subject

Vote Subjects	Share votes	Share IGs	Num. MEPs	Extra subjects
Budget of the Union	16.52	0	0	2.068
Environmental policy	12.08	3.824	15	2.558
Social policy, social charter and protocol	10.24	4.706	17	2.032
Employment policy, action to combat unemployment	8.815	10.29	35	2.366
Agricultural policy and economies	8.577	3.529	12	2.361
Industrial policy	7.753	3.235	11	2.767
Institutions of the Union	6.804	0.588	3	2
Consumers' protection in general	6.757	1.765	7	2.673
Common commercial policy in general	6.728	0.882	4	2.433
Transport policy in general	6.221	3.824	14	2.359
Common foreign and security policy	5.296	3.824	16	1.886
Energy policy	5.218	3.235	11	2.638
Police, judicial and customs cooperation in general	4.871	0.294	1	2.253
Relations with third countries	4.812	0	0	2.123
Research and technological development and space	4.120	5.588	20	2.394
Enterprise policy, inter-company cooperation	3.697	3.529	14	2.468
Fisheries policy	3.672	0.588	2	2.195
Public health	3.596	4.706	19	2.426
Free movement and integration of third-country nationals	3.498	1.471	5	1.821
Regional policy	3.346	8.529	30	2.311
Economic union	3.187	0	0	2.125
Free movement of capital	3.080	8.529	31	2.133
Free movement of services, freedom to provide	3.050	0.294	1	2.561
Information and communications in general	2.993	16.18	55	2.292
Free movement of goods	2.836	0	0	2.781
Development cooperation	2.719	1.176	5	2
Economic growth	2.660	0	0	2.417
Citizen's rights	2.657	0.588	3	2.441
Monetary union	2.300	0.294	1	1.833
Taxation	2.203	0.588	2	2.122
Judicial cooperation	1.917	0	0	2
Fundamental rights in the EU, Charter	1.867	1.471	6	2.148
Competition	1.661	0	0	2.308
Cooperation between administrations	1.489	0.294	1	2.532
Enlargement of the Union	1.409	0.294	2	1.375
Education, vocational training and youth	1.406	27.35	95	1.933
Revision of the Treaties, intergovernmental conferences	1.249	0	0	1.400
EU law	1.130	0	0	2.163
Common cultural area, cultural diversity	0.814	1.176	4	2.222
Global economy and globalisation	0.766	0.294	2	1.789
Treaties in general	0.672	0.294	2	1.222
Free movement of persons	0.338	0	0	2
Emergency, food, humanitarian aid, aid to refugees, Emergency Aid Reserve	0.281	1.471	5	1.786
Tourism	0.231	0.294	1	1.143
European statistical legislation	0.223	0.201	0	1.429
Free movement of workers	0.126	Ö	0	2.857
Justice and home affairs	0.0851	0	0	2
Civil protection	0.0774	0.294	1	1.250

Notes: Share of votes by procedure subject in Column 1. Column 2 shows the share of legislators who previously worked for an interest group, and for which the subject is considered to be relevant, and Column 3 shows the total number of them. Column 4 displays the average number of subjects each procedure classified with a particular subject is accompanied by. The sample used is the same as in the main analysis, namely only votes with a rapporteur and cast by legislators identified as non leader in alphabetically organized groups with peers satisfying the same requirements.

Table A5: Reverse Revolving Doors Connections and Vote Coincidence - Rapporteurs' and National Party's Influence

	(1)	(2)	(3)
	OLS	OLS	2SLS
	Agree	Agree	Agree
		0	
Name Peers IG	0.0066	0.0059	
	(0.0049)	(0.0050)	
Name Peers (IG * Relevant)		0.0073*	
		(0.0039)	
Peers IG			0.0080
			(0.0066)
Peers (IG * Relevant)			0.0091*
_			(0.0049)
Rapporteur	0.0766***	0.0765***	0.0765***
	(0.0132)	(0.0132)	(0.0132)
Shadow Rapporteur	0.0305***	0.0305***	0.0307***
D D	(0.0085)	(0.0085)	(0.0085)
Peer Rapporteur	0.0832***	0.0830***	0.0830***
D Cl l D	(0.0184)	(0.0184)	(0.0184)
Peer Shadow Rapporteur	0.0304**	0.0301**	0.0301**
Cama National nantu	(0.0123) $0.0392*$	(0.0123) $0.0392*$	(0.0123) $0.0395*$
Same National party	(0.0392)	(0.0392)	(0.0393)
	(0.0200)	(0.0200)	(0.0200)
EPG x Term FEs	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes
Name controls	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336
Mean Agree	0.707	0.707	0.707
Joint p-value		0.0239	0.0257
F-stat 1			1056
F-stat 2			1308

Notes: Results of estimating Equation (2). It is analogous to the Columns 5, 6, and 7, in Table 3, respectively. Joint p-value of a test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A6: First Stage Estimates of Name Adjacency on Seating Adjacency

	(1)	(2)
	OLS	OLS
	Peers IG	Peers (IG $\times$ Relevant)
Name Peers IG	0.7507***	-0.0083***
Twille I coll I c	(0.0164)	(0.0020)
Name Peers ( $IG \times Relevant$ )	0.0020	0.8007***
,	(0.0051)	(0.0157)
$EPG \times Term FEs$	Yes	Yes
Sessions since term started FEs	Yes	Yes
Procedure type FEs	Yes	Yes
Vote subject FEs	Yes	Yes
Name controls	Yes	Yes
Focal MEP controls	Yes	Yes
Peers controls	Yes	Yes
Observations	6,770,336	6,770,336

Notes: Estimates for the baseline first stage regressions. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A7: Reverse Revolving Doors Connections and Vote Coincidence by Name Distance

	(1)	(2)	(3)	(4)	(5)
	OLS Agree	OLS Agree	OLS Agree	OLS	OLS Agree
	Agree	Agree	Agree	Agree	Agree
Name Peers IG dist. 1	0.0058	0.0051	0.0049	0.0041	0.0039
	(0.0049)	(0.0048)	(0.0048)	(0.0047)	(0.0047)
Name Peers $IG \times Relevant dist.$ 1	0.0071 *	$0.0071^{*}$	$0.0071^{*}$	$0.0073^{*}$	$0.0073^{*}$
	(0.0039)	(0.0039)	(0.0039)	(0.0039)	(0.0039)
Name Peers IG dist. 2	$0.0027^{'}$	$0.0025^{'}$	0.0013	$0.0005^{'}$	-0.0001
	(0.0047)	(0.0046)	(0.0047)	(0.0046)	(0.0046)
Name Peers IG $\times$ Relevant dist. 2	0.0078**	0.0073*	0.0072*	0.0072*	0.0076**
	(0.0039)	(0.0039)	(0.0039)	(0.0039)	(0.0038)
Name Peers IG dist. 3		0.0050	0.0055	0.0041	0.0033
		(0.0042)	(0.0042)	(0.0042)	(0.0042)
Name Peers IG $\times$ Relevant dist. 3		0.0076**	0.0068*	0.0065*	0.0067*
		(0.0036)	(0.0036)	(0.0036)	(0.0036)
Name Peers IG dist. 4			-0.0001	-0.0005	-0.0011
			(0.0050)	(0.0050)	(0.0050)
Name Peers IG $\times$ Relevant dist. 4			0.0073*	0.0077*	0.0078*
			(0.0042)	(0.0042)	(0.0041)
Name Peers IG dist. 5				0.0019	0.0014
				(0.0040)	(0.0040)
Name Peers IG × Relevant dist. 5				0.0017	0.0014
N. D. IG. II.				(0.0037)	(0.0037)
Name Peers IG dist. 6					0.0002
N D IC DI LIL C					(0.0038)
Name Peers IG $\times$ Relevant dist. 6					0.0037
					(0.0038)
$\overline{\text{EPG} \times \text{Term FEs}}$	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes
Observations	6,767,838	6,742,171	6,718,746	6,704,043	6,724,801
Mean Agree	0.707	0.707	0.706	0.706	0.705
p-value, all coef. = zero	0.0202	0.0108	0.00671	0.0116	0.0129
p-value, coef. dist. $1 = \text{dist. } 2$	0.764	0.770	0.663	0.642	0.641
p-value, coef. dist. $1 = \text{dist. } 3$	-	0.957	0.980	0.909	0.867
p-value, coef. dist. $1 = \text{dist. } 4$	-	-	0.603	0.645	0.620
p-value, coef. dist. $1 = \text{dist. } 5$	-	-	-	0.302	0.261
p-value, coef. dist. 1 = dist. 6	-	_	_	-	0.317

Notes: Results of estimating how name adjacency to legislators with interest group background affect their probability of voting alike at different distance levels. Joint p-value of a test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1

Table A8: Reverse Revolving Doors Connections and Vote Coincidence - Row-Level Analysis

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
	Agree	Agree	Agree	Agree
Num. IG members	0.0835**	0.0509**	0.0511**	0.0396
	(0.0339)	(0.0225)	(0.0227)	(0.0243)
Num. IG members $\times$ Relevant	,	,	,	0.0737**
				(0.0209)
$EPG \times Term FEs$	No	Yes	Yes	Yes
Sessions since term started FEs	No	Yes	Yes	Yes
Procedure type FEs	No	No	Yes	Yes
Vote subject FEs	No	No	Yes	Yes
MEP controls	No	No	No	Yes
Observations	638,461	638,455	638,455	638,455
Mean Agree	0.704	0.704	0.704	0.704
Joint p-value				0.000249

Notes: Results of estimating Equation (2) collapsed at the row by aisle level. It tests whether the presence of more legislators with interest group background in a given chamber row affects the row voting agreement. Joint p-value of a test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls of the focal and peer legislators collapsed at the row level is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the plenary session times the row-by-aisle level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A9: Average Effect of Reverse Revolving Doors Connections on Vote Coincidence using Different Clustering Levels

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
	Agree	Agree	Agree	Agree
N D IC	0.0050	0.0050	0.0050	0.0050*
Name Peers IG	0.0059	0.0059	0.0059	0.0059*
	(0.0050)	(0.0050)	(0.0047)	(0.0034)
Name Peers (IG * Relevant)	0.0073*	0.0074*	0.0073*	0.0073**
	(0.0039)	(0.0042)	(0.0041)	(0.0035)
EPG x Term FEs	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336	6,770,336
Mean of Dependent Var.	0.707	0.707	0.707	0.707
Joint p-value	0.0239	0.0453	0.0360	0.00602

Notes: This table shows the results of estimating Equation (2) using different clustering levels. All columns mimic Column 6 in Table 3, with differences in the clustering level, i) Column 1 clusters at the legislator level, ii) Column 2 clusters at the legislator and plenary session levels, iii) Column 3 clusters at the row and plenary session level, and iv) Column 4 clusters at the EPG and plenary session level. We denote as Joint p-value the test on the joint significance of the name adjacency to a legislator with previous interest group, and when the topic is relevant for such interest group. A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A10: Reverse Revolving Doors Connections and Vote Coincidence with Multiple Topics of Interest

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	2SLS
	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Name Peers IG	0.0350*** (0.0076)	0.0207*** (0.0067)	0.0206*** (0.0067)	0.0126** (0.0053)	0.0066 (0.0049)	0.0056 (0.0050)	
Name Peers (IG $\times$ Relevant)	,	,	,	,	,	0.0049* (0.0029)	
Peers IG						(0.0020)	0.0076
Peers (IG $\times$ Relevant)							(0.0066) 0.0061* (0.0036)
$EPG \times Term FEs$	No	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	No	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	No	No	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	No	No	Yes	Yes	Yes	Yes	Yes
Name controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	No	No	No	Yes	Yes	Yes	Yes
Peers controls	No	No	No	No	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336	6,770,336
Mean Agree	0.707	0.707	0.707	0.707	0.707	0.707	0.707
Joint p-value						0.0504	0.0540
F-stat 1							1052
F-stat 2							2023

Notes: Results of estimating Equation (2). Joint p-value of a test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A11: Reverse Revolving Doors Connections and Vote Coincidence in  $$\operatorname{Cross-EPG}$$ 

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Agree	Agree	Agree	Agree	Agree	Agree
Peer IG	-0.0005	-0.0021	-0.0013	0.0022	0.0006	0.0005
100110	(0.0118)	(0.0088)	(0.0088)	(0.0075)	(0.0077)	(0.0077)
Peer ( $IG \times Relevant$ )	(0.0110)	(0.0000)	(0.0000)	(0.0010)	(0.0011)	0.0010
_ 332 (23: 23:23:33)						(0.0130)
EPG x Term FEs	No	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	No	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	No	No	Yes	Yes	Yes	Yes
Vote subject FEs	No	No	Yes	Yes	Yes	Yes
27	N.T.	3.7	3.7	3.7	3.7	3.7
Name controls	No	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	No	No	No	Yes	Yes	Yes
Peers controls	No	No	No	No	Yes	Yes
Observations	582,833	582,833	582,833	582,833	582,833	582,833
Mean Agree	0.654	0.654	0.654	0.654	0.654	0.654
Joint p-value						0.916

Notes: Results of estimating Equation (2) using only those legislators with adjacent colleagues from a different European group. Peer IG takes a value of 1 if the peer who was part of an interest group is from a different party, and a value of 0 if no peer was part of an interest group. Joint p-value of a test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls of the focal and peer legislators is used, see Appendix B for further information on the controls included. Standard errors, in parenthesis, are clustered at the legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A12: Average Effect of Reverse Revolving Doors Connections on Vote Coincidence Persistence by Voting Days

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	2SLS
	Agree	Agree	Agree	Agree
N D IO	0.0000	0.0046	0.000	
Name Peers IG	0.0060	0.0046	0.0037	
N D (IC * D L L)	(0.0050)	(0.0068)	(0.0068)	
Name Peers (IG * Relevant)	0.0073*	0.0073*	0.0164**	
X7 1	(0.0039)	(0.0039)	(0.0065)	
Vote days name adjacent	-0.0000	-0.0000	-0.0000	
N D IO VII I	(0.0000)	(0.0000)	(0.0000)	
Name Peers IG * Vote days name adjacent		0.0000	0.0000	
N D (ICI * D 1 + 1 * V + 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(0.0001)	(0.0001)	
Name Peers (IG * Relevant) * Vote days name adjacent			-0.0001	
D IC			(0.0001)	0.0050
Peers IG				0.0052
D (IC * D 1 4)				(0.0093)
Peers (IG * Relevant)				0.0225**
X7				(0.0089)
Vote days seat adjacent				-0.0000
D IC * V 1 1 1				(0.0001)
Peers IG * Vote days seat adjacent				0.0001
D (IC * D.1 ) * W 1 1'				(0.0001)
Peers (IG * Relevant) * Vote days seat adjacent				-0.0002*
				(0.0001)
EPG x Term FEs	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes
N	3.7	3.7	3.7	3.7
Name controls	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes
Observations	6,770,336	6,770,336	6,770,336	6,770,336
Mean Agree	0.707	0.707	0.707	0.707
Joint p-value		0.125	0.0308	0.0306
F-stat (KP)				172

Notes: This table shows the results of estimating Equation (2) adding as regressors the number of previous voting days in which each legislator has been assigned to sit adjacent to the same two other legislators, as well as the interactions with  $Peers\ IG$  and  $Peers\ IG * Relevant$ , and their correspondent instruments. We denote as joint p-value the test on the joint significance of all the variables displayed in the table (both at the surname and seating level). A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1.

Table A13: Average effect of reverse revolving doors connections on vote coincidence by margins of victory

	(1)	(2)	(3)	(4)
	2SLS - Overall	$2 {\rm SLS}$ - Margin $1\%$	$2 {\rm SLS}$ - Margin $5\%$	$2 {\rm SLS}$ - Margin $10\%$
	Agree	Agree	Agree	Agree
Peers IG	0.0080	0.0085	0.0102	0.0120*
	(0.0066)	(0.0066)	(0.0066)	(0.0066)
Peers (IG x Relevant)	0.0092*	0.0094*	0.0106**	0.0112**
,	(0.0049)	(0.0049)	(0.0048)	(0.0047)
Peers IG x Winning Margin X	,	-0.0250***	-0.0232***	-0.0225***
		(0.0079)	(0.0067)	(0.0063)
Peers (IG x Relevant) x Winning Margin X		-0.0080	-0.0106	-0.0086
, , , ,		(0.0097)	(0.0074)	(0.0068)
EPG x Term FEs	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes
Observations	6,769,638	6,769,638	6,769,638	6,769,638
Mean Agree	0.707	0.707	0.707	0.707
Joint p-value	0.0256			
< XX% Joint p-value		0.305	0.313	0.504
> XX% Joint p-value		0.0192	0.00566	0.00186
<% vs. $>$ XX%: p-value		0.00436	0.000629	0.000790
F-stat (KP)	1048	524	524	524

Notes: This table shows the results of estimating Equation (2) interacting  $Peers\ IG$  and  $Peers\ IG$  x Relevant and their correspondent instruments by an indicator variable with the vote wining margin indicated at the top of each column. We denote as joint p-value<sup>a</sup> the test on the adjacency to a reverse revolver in a vote for a relevant topic when the endogenous variables are interacted with our trait of interest, b on the adjacency to a reverse revolver in a vote for a relevant topic when the endogenous variables are not interacted with our trait of interest, and (c) the difference between (a) and (b). The interacted variable in columns 2, 3, and 4 refers to whether a motion was won by a margin lower than a 1, 5, and 10% margin of victory, respectively. A comprehensive set of controls at the focal and peer legislators is used in the analysis, see Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.1.

Table A14: Average effect of reverse revolving doors connections on vote coincidence by Interest Group's Characteristics

	(1) 2SLS	(2) 2SLS	(3) 2SLS	(4) 2SLS	(5) 2SLS	(6) 2SLS
	Agree	Agree	Agree	Agree	Agree	Agree
Peers IG	0.0080	0.0061	0.0043	0.0041	0.0142*	0.0061
i cels iq	(0.0066)	(0.0104)	(0.0043)	(0.0041)	(0.0078)	(0.0071)
Peers (IG x Relevant)	0.0092*	0.0099	0.0138**	0.0120**	0.0230**	0.0088
,	(0.0049)	(0.0098)	(0.0061)	(0.0053)	(0.0091)	(0.0066)
Peers IG x Public IG		-0.0035				
		(0.0098)				
Peers (IG x Relevant) x Public IG		-0.0031				
Described Described IC		(0.0116)	0.0000			
Peers IG x Regulated IG			0.0000 $(0.0085)$			
Peers (IG x Relevant) x Regulated IG			-0.0159			
Tools (13 A Holovalle) A Hogalatoa 13			(0.0110)			
Peers IG x Brussels HQ			()	-0.0008		
				(0.0095)		
Peers (IG x Relevant) x Brussels HQ				-0.0177		
D 70 7 7 11 1 0 1				(0.0127)	بالعادة المحادة	
Peers IG x Large Lobbying Spending					-0.0173**	
Peers (IG x Relevant) x Large Lobbying Spending					(0.0075) -0.0195*	
Peers (IG x Relevant) x Large Lobbying Spending					(0.0196)	
Peers IG x Manager at IG					(0.0100)	-0.0049
Toold to it intuitinger at to						(0.0076)
Peers (IG x Relevant) x Manager at IG						0.0013
						(0.0096)
EPG x Term FEs	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,769,638	6,547,850	6,587,181	6,769,638	6,769,638	6,769,638
Mean Agree	0.707	0.707	0.707	0.707	0.707	0.707
Joint p-value <sup>a</sup>	0.0256	0.252	0.860	0.856	0.967	0.179
Joint p-value <sup>b</sup>		0.241	0.0246	0.0310	0.00108	0.104
Joint p-value <sup>c</sup>	1049	0.651 $182$	0.236 $935$	$0.188 \\ 740$	0.00239 $166$	0.749 $481$
F-stat (KP)	1048	102	950	740	100	401

Notes: This table shows the results of estimating Equation (2) interacting  $Peers\ IG$  and  $Peers\ IG$  x Relevant and their correspondent instruments by Interest Group characteristics. We denote as joint p-value<sup>a</sup> as the joint significance test of all the variables displayed in each column, b on the adjacency to a reverse revolver in a vote for a relevant topic when the endogenous variables are not interacted with our trait of interest, and (c) the difference between (a) and (b). A comprehensive set of controls at the focal and peer legislators is used in the analysis, see Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1.

Table A15: Average effect of reverse revolving doors connections on vote coincidence by time since IG employment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	2SLS - Overall	2SLS - [0-2]	2SLS - [2-4]	2SLS - [4-6]	2SLS - [6-8]	2SLS - [8-10]	2SLS - [>10]
	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Peers IG	0.0080	0.0147	0.0433**	-0.0218	0.0526	0.0535	0.0041
	(0.0066)	(0.0090)	(0.0214)	(0.0277)	(0.0467)	(0.0353)	(0.0132)
Peers (IG x Relevant)	0.0092*	0.0137	0.0318	0.0345	0.0279	0.0512	0.0106
	(0.0049)	(0.0088)	(0.0268)	(0.0212)	(0.0333)	(0.0392)	(0.0100)
EPG x Term FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,769,638	4,847,629	3,992,505	3,968,052	3,882,154	3,880,900	4,571,588
Mean Agree	0.707	0.705	0.700	0.699	0.701	0.703	0.702
Joint p-value	0.0256	0.0154	0.0314	0.680	0.163	0.0461	0.377
F-stat (KP)	1048	396	39	42	16	29	192

Notes: This table shows the results of estimating Equation (2), using in each regression a subsample of the reverse revolvers according to the number of years since they left their interest group. We denote as joint p-value the test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A16: Average effect of reverse revolving doors connections on vote coincidence by experience in an interest group

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	2SLS - Overall	2SLS - [0-2]	2SLS - [2-4]	2SLS - [4-6]	2SLS - [6-8]	2SLS - [8-10]	2SLS - [>10]
	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Peers IG	0.0080	0.0281	-0.0130	0.0141	0.0538*	0.0131	0.0154*
	(0.0066)	(0.0173)	(0.0200)	(0.0226)	(0.0317)	(0.0199)	(0.0091)
Peers (IG x Relevant)	0.0092*	0.0285	0.0234	0.0333	0.0421*	0.0162	0.0068
	(0.0049)	(0.0177)	(0.0165)	(0.0285)	(0.0235)	(0.0195)	(0.0083)
EPG x Term FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,769,638	4,257,103	4,150,842	4,023,051	3,957,335	3,987,886	4,766,611
Mean Agree	0.707	0.702	0.698	0.702	0.703	0.699	0.706
Joint p-value	0.0256	0.0211	0.664	0.210	0.0132	0.301	0.0435
F-stat (KP)	1048	92	88	45	30	62	366

Notes: This table shows the results of estimating Equation (2), using in each regression a subsample of the reverse revolvers according to the number of years they worked for their interest groups. We denote as joint p-value the test on the joint significance of the adjacency to a legislator with background in an interest group, and when the topic is relevant for such interest group. A comprehensive set of controls at the focal and peer legislators is used in the analysis. See Appendix B for further information on the controls included. Standard errors are clustered at legislator level. \*\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A17: Average effect of reverse revolving doors connections on vote coincidence by Peers' personal characteristics

	(1) 2SLS	(2) 2SLS	(3) 2SLS	(4) 2SLS	(5) 2SLS	(6) 2SLS
	Agree	Agree	Agree	Agree	Agree	Agree
Peers IG	0.0080 (0.0066)	0.0010 (0.0088)	0.0021 (0.0112)	0.0069 (0.0071)	0.0080 (0.0066)	0.0056 (0.0080)
Peers (IG x Relevant)	0.0092* (0.0049)	0.0004 $(0.0078)$	0.0163 $(0.0122)$	0.0101 $(0.0114)$	0.0094* $(0.0049)$	0.0095 $(0.0069)$
Peers IG x Female Peer	(0.0010)	0.0121 (0.0101)	(0.0122)	(0.0111)	(0.0010)	(0.0003)
Peers (IG x Relevant) x Female Peer		0.0131 $(0.0095)$				
Peers IG x Freshperson Peer		,	0.0075 $(0.0114)$			
Peers (IG x Relevant) x Freshperson Peer			-0.0091 (0.0129)			
Peers IG x Expert Peer			, ,	0.0026 $(0.0048)$		
Peers (IG x Relevant) x Expert Peer				-0.0017 $(0.0125)$		
Peers IG x Drafting Member Peer					-0.0002 (0.0183)	
Peers (IG x Relevant) x Drafting Member Peer					-0.0137 $(0.0239)$	
Peers IG x Manager Peer					(0.0_00)	0.0049
Peers (IG x Relevant) x Manager Peer						(0.0100) -0.0008 (0.0097)
EPG x Term FEs	Yes	Yes	Yes	Yes	Yes	Yes
Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes
Procedure type FEs	Yes	Yes	Yes	Yes	Yes	Yes
Vote subject FEs	Yes	Yes	Yes	Yes	Yes	Yes
Name controls	Yes	Yes	Yes	Yes	Yes	Yes
Focal MEP controls	Yes	Yes	Yes	Yes	Yes	Yes
Peers controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,769,638	6,769,638	6,769,638	6,769,638	6,769,638	6,769,638
Mean Agree	0.707	0.707	0.707	0.707	0.707	0.707
Joint p-value $^a$	0.0256	0.00418	0.0347	0.0247	0.891	0.0578
Joint p-value <sup><math>b</math></sup>	-	0.899	0.240	0.197	0.0231	0.132
Joint p-value $^c$	-	0.0636	0.922	0.939	0.577	0.757
F-stat (KP)	1048	491	514	111	562	430

Notes: This table shows the results of estimating Equation (2) interacting  $Peers\ IG$  and  $Peers\ IG$  x Relevant and their correspondent instruments by personal characteristics of the peer legislator. We denote as joint p-value<sup>a</sup> as the joint significance test of all the variables displayed in each column, b on the adjacency to a reverse revolver in a vote for a relevant topic when the endogenous variables are not interacted with our trait of interest, and (c) the difference between (a) and (b). A comprehensive set of controls at the focal and peer legislators is used in the analysis, see Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\*\* p<0.05, \*\* p<0.1.

Table A18: Average effect of reverse revolving doors connections on vote coincidence by personal characteristics

	(1) 2SLS Agree	(2) 2SLS Agree	(3) 2SLS Agree	(4) 2SLS Agree	(5) 2SLS Agree	(6) 2SLS Agree	(7) 2SLS Agree
Peers IG	0.0080	0.0062	0.0047	0.0072	0.0079	0.0078	0.0075
Peers (IG x Relevant)	(0.0066) 0.0092* (0.0049)	(0.0077) $0.0038$ $(0.0063)$	(0.0086) $0.0088$ $(0.0076)$	(0.0069) 0.0109* (0.0057)	(0.0066) 0.0091* (0.0049)	(0.0071) $0.0082$ $(0.0055)$	(0.0078) 0.0136** (0.0060)
Peers IG x Female	(0.0010)	0.0044 (0.0108)	(0.0010)	(0.0001)	(0.0010)	(0.0000)	(0.0000)
Peers (IG x Relevant) x Female		0.0108) 0.0147 (0.0096)					
Peers IG x Freshperson		(0.000)	0.0058 $(0.0104)$				
Peers (IG x Relevant) x Freshperson			0.0008 (0.0096)				
Peers IG x Expert			(0.0000)	0.0028 $(0.0056)$			
Peers (IG x Relevant) x Expert				-0.0046 (0.0092)			
Peers IG x Drafting Member				(0.0032)	0.0086 (0.0249)		
Peers (IG x Relevant) x Drafting Member					0.0105 (0.0306)		
Peers IG x Manager					(0.0500)	0.0008	
Peers (IG x Relevant) x Manager						(0.0122) $0.0035$	
						(0.0113)	0.0009
Peers IG x IG							(0.0110)
Peers IG x IG							(0.0110) -0.0139 (0.0100)
Peers (IG x Relevant) x IG  EPG x Term FEs	Yes	Yes	Yes	Yes	Yes	Yes	-0.0139 (0.0100) Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs	Yes	Yes	Yes	Yes	Yes	Yes	-0.0139 (0.0100) Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	-0.0139 (0.0100) Yes Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	-0.0139 (0.0100) Yes Yes Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	-0.0139 (0.0100) Yes Yes Yes Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	-0.0139 (0.0100) Yes Yes Yes Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls Peers controls	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	-0.0139 (0.0100)  Yes Yes Yes Yes Yes Yes Yes Yes Yes
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls Peers controls Observations	Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes	Yes Yes Yes Yes Yes Yes Yes 6,769,638	Yes Yes Yes Yes Yes Yes Yes 6,769,638	Yes Yes Yes Yes Yes Yes Yes 6,769,638	Yes Yes Yes Yes Yes Yes Yes 6,769,638	Yes Yes Yes Yes Yes Yes Yes 6,769,638	Yes Yes Yes Yes Yes Yes Yes Yes Yes 6,769,638
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls Peers controls Observations Mean Agree	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes Yes Yes Order Yes Yes Yes Yes Yes Order Order Yes Yes Yes Order Or
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls Peers controls Observations Mean Agree Joint p-value <sup>a</sup>	Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes     Yes	Yes Yes Yes Yes Yes Yes 6,769,638 0.707 0.00973	Yes Yes Yes Yes Yes Yes Yes O.707 0.0371	Yes Yes Yes Yes Yes Yes 6,769,638 0.707 0.116	Yes Yes Yes Yes Yes Yes 0.707 0.285	Yes Yes Yes Yes Yes Yes 6,769,638 0.707 0.162	Yes Yes Yes Yes Yes Yes Yes One Yes Yes Yes Yes Yes Yes One
Peers (IG x Relevant) x IG  EPG x Term FEs Sessions since term started FEs Procedure type FEs Vote subject FEs Name controls Focal MEP controls Peers controls Observations Mean Agree	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes 6,769,638 0.707	Yes Yes Yes Yes Yes Yes Yes Yes Order Yes Yes Yes Yes Yes Order Order Yes Yes Yes Order Or

Notes: This table shows the results of estimating Equation (2) interacting  $Peers\ IG$  and  $Peers\ IG$  x Relevant and their correspondent instruments by personal characteristics of the focal legislator. We denote as joint p-value<sup>a</sup> as the joint significance test of all the variables displayed in each column, b on the adjacency to a reverse revolver in a vote for a relevant topic when the endogenous variables are not interacted with our trait of interest, and (c) the difference between (a) and (b). A comprehensive set of controls at the focal and peer legislators is used in the analysis, see Appendix B for further information on the controls included. The reported F Statistics has been calculated following Kleibergen and Paap (2006). Standard errors are clustered at legislator level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## B Description of Controls Used for Focal and Peer Legislators

This section presents the variables used as control in our main analysis, both for focal and peer legislators. We classify them into *Name controls*, *Focal MEP controls* and *Peers controls*.

- i) Name controls: Owing to the possibility that surnames may represent the individuals, observable and unobservable, characteristics, such as socioeconomic background or family ties, in the spirit of Harmon, Fisman and Kamenica (2019), we control by the fraction of focal and individuals in the same group of peers sharing the same surname, and by the absolute alphabetic rank across EPGs and terms.
- ii) Focal MEP controls: We characterize legislators using a wide set of controls. As for the legislators' personal characteristics, we control for their age, gender, national party, country of origin and whether they attended a top 500 university. As for the legislators' professional characteristics, we control for their years of professional experience before entering parliament, the total number of working positions, whether they have a managerial profile, whether their professional experience was conducted in the public, private, or academic sector, and their number of professional spells. We also control their topics of expertise, measured using Yordanova (2009)'s classification, and the number of those topics, as well as whether they previously worked for an interest group and if the topic is relevant for their previous employers. Regarding their previous interest groups' characteristics, we control by whether they have their headquarters in Brussels, and by their average reported EU lobbying budget. As for the legislator's in parliament characteristics, we control for their freshman status, their share of previous dates absent, their role at their EPG, whether they are part of the alphabetically seated leader sector in ALDE, whether they are the rapporteur or shadow rapporteur in the specific procedure voted, whether their EPG had one of these figures, whether the procedure refers to their own country, and whether they were at the responsible and opinion committees of the procedure voted on. We further control by whether the motion voted upon was a final vote or an amendment.
- iii) Peers controls: We characterize connections, i.e., adjacent (left and right) siting peers, by expanding the above mentioned variables. We include as controls the fraction of the adjacent peers in the same EPG as the focal, the fraction in the same national party as the focal, the fraction from the same country as the focal, the fraction with the same EPG role as the focal, the fraction with the same profession profile as the focal, the fraction with the same freshman status as the focal, the fraction with the same gender

as the focal, the fraction having the same "Top 500" education as the focal, and the fraction of the peers in the same committee as the focal. We also use peer controls that are irrespective of the focal characteristics such as the fraction of peers with freshman status, the fraction of female peers, the fraction of peers with a Top 500 education, the fraction of peers with a managerial profile, the fraction of rapporteur and shadow rapporteur peers, the fraction of peers in the committee responsible or committee of opinion for the procedure voted on, the fraction of peers with expertise in the topics voted on, the fraction of the peers for which the procedure voted on is of national relevance, the number of peers (from 1 to 2), the average absenteeism rate of the peers, the average number of topics of expertise of the peers, as well as, the fraction of peers with an interest group based in Brussels, and the average EU lobbying budget of these interest groups. Additionally, using information from peers and focal legislators, we control for the standard deviation in their age, professional experience, number of positions at the European Parliament, number of working positions, number of topics of expertise, and absenteeism rate.

Table B1: Summary Statistics

	Mean	SD	Min	Max	N
Agree	0.71	0.38	0	1	6770336
Absention	0.02	0.14	0	1	6770336
Lobbyist Legislator	0.28	0.45	0	1	6770336
Ratio Relevant Topic (not political) (main)	0.01	0.07	0	1	6770336
Peers IG Peers (IG * Relevant)	$0.28 \\ 0.03$	$0.33 \\ 0.16$	$0 \\ 0$	1 1	6770336 6770336
Name Peers IG	$0.03 \\ 0.28$	$0.10 \\ 0.33$	0	1	6770336
Name Peers (IG * Relevant)	0.03	0.17	ŏ	$\overset{1}{1}$	6770336
Final vote	0.23	0.42	Ŏ	$\bar{1}$	6770336
Expertise	0.28	0.45	0	1	6770336
Age	53.42	10.68	26	86	6770336
Rapporteur	0.00	0.04	0	1	6770336
Shadow Rapporteur	0.00	0.06	0	1 1	6770336
Part of the responsible committee Part of the opinion committee	$0.01 \\ 0.00$	$0.08 \\ 0.07$	$0 \\ 0$	$\stackrel{1}{1}$	6770336 6770336
National law	0.00	0.01	0	1	6770336
National party	241.45	129.08	$\overset{\circ}{2}$	$4\overline{5}3$	6770336
Country	16.07	7.85	1	28	6770336
EPG Role	4.87	0.50	2	5	6770336
Female	0.37	0.48	0	1	6770336
Part of the ALDE leader section	0.05	0.22	0	1	6770336
Freshman status	0.58	0.49	0	1	6770336
Number of professional positions Rapporteur in the EPG	$\frac{4.95}{0.70}$	$\frac{1.24}{0.46}$	$0 \\ 0$	12 1	6770336 6770336
Top 500 education	0.70	0.46	0	1	6770336
Previous sector of activity	1.34	0.54	$\tilde{1}$	3	6770336
Professional experience	24.68	10.97	ī	56	6770336
Managerial profile	0.27	0.45	0	1	6770336
Number of working spells	12.19	9.84	1	87	6770336
Share previous days absent	0.13	0.11	0	1	6770336
IG - Brussels HQ	0.05	0.20	0	1	6770336
IG - EU Lobbying budget Number of expertise topics	$127203.57 \\ 11.01$	$447452.89 \\ 5.95$	$0 \\ 0$	5002500 $31$	6770336 6770336
National law (peers)	0.00	0.01	0	1	6770336
Freshman (peers)	0.58	0.37	ŏ	i	6770336
Female (peers)	0.37	0.36	0	1	6770336
Managerial profile (peers)	0.27	0.33	0	1	6770336
Top 500 education (peers)	0.31	0.34	0	1	6770336
Rapporteur (peers)	0.00	0.03	0	1	6770336
Shadow Rapporteur (peers)	$0.00 \\ 0.01$	$0.04 \\ 0.06$	$0 \\ 0$	1 1	6770336 6770336
Part of the responsible committee (peers) Part of the opinion committee (peers)	$0.01 \\ 0.00$	0.05	0	1	6770336
Number of peers	1.91	0.09	$\overset{0}{1}$	$\overset{1}{2}$	6770336
Expertise (peers)	0.28	0.36	Ō	$\overline{1}$	6770336
Share previous days absent (peers)	0.13	0.08	0	1	6770336
IG - Brussels HQ (peers)	0.04	0.14	0	1	6770336
IG - EU Lobbying budget (peers)	129014.55	335746.82	0	5002500	6770336
Number of expertise topics (peers)	11.03	4.42	0	31	6770336
Same gender (peers)	0.53	0.38	0	1	6770336
Same EPG (peers)	$0.96 \\ 0.08$	$0.14 \\ 0.21$	$0 \\ 0$	1 1	6770336 6770336
Same national party (peers) Same country (peers)	0.10	$0.21 \\ 0.23$	0	1	6770336
Same EPG role (peers)	0.93	0.21	ŏ	ī	6770336
Same freshman status (peers)	0.51	0.38	0	1	6770336
Same previous sector of activity (peers)	0.57	0.40	0	1	6770336
Same managerial profile (peers)	0.61	0.38	0	1	6770336
Same Top 500 education (peers)	0.57	0.39	0	1	6770336
Same position at the same committee (peers)	0.20	0.30	0	1	6770336
Age SD (peers) Professional experience SD (peers)	$9.43 \\ 9.73$	$\frac{4.98}{5.14}$	$0 \\ 0$	$\frac{34}{33}$	6770336 6770336
Number of professional positions SD (peers)	1.03	0.65	0	55 6	6770336
Share previous days absent SD (peers)	0.08	0.06	ŏ	1	6770336
Number of working spells SD (peers)	7.39	6.42	ŏ	60	6770336
Number of Expertise Topics SD (peers)	5.29	2.81	0	20	6770336
<u> </u>					

Notes: Mean, standard deviation, minimum and maximum value for every variable used in the baseline regression. For further information, see Appendix B.