

Birds of a feather flock together? The survival of underrepresented groups within parliamentary parties, 1990-2015

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## ABSTRACT

This study focuses on the exit of MPs of underrepresented groups – i.e., women, visible minorities and the lower educated– from parliamentary parties. Research has mostly focused on what brings these politicians into parliament, but not on what determines their survival within parliamentary parties. Based on the economic and sociological literature on organisations, we develop the Homophily Hypothesis, positing that MPs from underrepresented groups will be more likely to exit their parliamentary party if their share within the parliamentary party is low. Utilising the PATHWAYS dataset, based on 5889 unique MPs that served during 36 legislative periods across eight Western European countries between 1990 and 2015, this hypothesis is confirmed. These findings have important implications for the literature on descriptive representation and legislative turnover.

**Keywords:** descriptive representation, underrepresented groups, legislative turnover, homophily, MP renomination

## INTRODUCTION

There has been considerable scholarly interest in the unequal representation of women (Golder et al., 2017; Kenny & Verge, 2016; Krook, 2010; Matland, 2005), visible minorities (Bird et al., 2010; Dancygier et al., 2015; Mansbridge, 1999) and the lower class/educated (Bovens & Wille, 2010, 2017; Carnes, 2012; Hakhverdian, 2015) among elected representatives. Important insights have been provided into how electoral institutions (Krook & Schwindt-Bayer, 2013; Tremblay, 2012), the supply of candidates (Norris & Lovenduski, 1993), candidate-selection procedures (Bjarnegård & Kenny, 2015; Cheng & Tavits, 2011; Gauja & Cross, 2015) and voter bias (Carnes & Lupu, 2016; Portmann & Stojanović, 2019) affect their descriptive representation. Scholarly interest into descriptive representation is clearly warranted, as MPs from underrepresented groups can be better relied upon to substantively represent the interests of individuals with whom they share characteristics (Bovens & Wille, 2017; Franceschet & Piscopo, 2008; Saalfeld, 2011). Additionally, descriptive representation updates perceptions regarding the group's suitability to govern both among members of underrepresented groups and the general public (Mansbridge, 1999; Williams, 2000).

We know quite a lot about what increases the presence of underrepresented groups within parliaments and parties, but a blind spot remains, namely insight into the factors that determine whether MPs from underrepresented groups manage to keep their seat. This is

unfortunate. Becoming an MP is one thing; yet, politicians from underrepresented groups should also get re-elected. Otherwise, they are unlikely to be promoted to senior positions (Daniel, 2013; Erikson & Josefsson, 2019) and have less opportunity to serve as ‘critical actors’ on behalf of their group members (Childs & Krook, 2008) or to ensure symbolic representation by demonstrating to group members and society that they can govern competently (Pitkin, 1967). Thus far, only the voluntary retirement of American Congressional women (Lawless and Theriault 2005) and the (in)voluntary exit of women from regional European parliaments (Vanlangenakker, Wauters, and Maddens 2013) have been examined. We extend this research by studying determinants of whether individual MPs from three underrepresented groups (women, visible minority and the lower-educated) are re-elected within their lower house parliamentary parties.

While today’s parties are increasingly pressured to diversify, we argue that female, visible minority and lower educated legislators’ re-election chances are negatively affected by what is referred to as ‘homophily’ in the economic and sociological literature on organisations. According to the “Attraction, Selection and Attrition” (ASA) model, individuals are attracted to, selected by and stay within organisations whose members mirror their traits and characteristics (McPherson et al., 2001; Schneider et al., 1998). Hence, there could be tension at work between the incentives of parties to promote diversity and individual proclivities toward homogenous groups. We test this homophily effect for the first time in the context of parliamentary parties. Even though several of its underlying mechanisms have been used in political science articles to explain the selection of female candidates by

party selectorates (Cheng & Tavits, 2011; Kunovich & Paxton, 2005; Niven, 1998; Tremblay & Pelletier, 2001) and the role of gendered institutions in parliamentary work (Celis & Wauters, 2010; Erikson & Josefsson, 2019; Kenney, 1996), these studies do not explicitly refer to homophily theory. We apply homophily theory in a more holistic way to study the survival of MPs from several underrepresented groups within their parliamentary parties.

Our *Homophily Hypothesis* posits that female, visible minority and lower educated MPs have higher chances of leaving their parliamentary party – either voluntarily or involuntarily – if the share of individuals similar to themselves within the parliamentary party is proportionately low. Additionally, we test whether the size of homophily effects differs between the three groups and whether homophily effects are conditioned by the descriptive representation of the group. We test these hypotheses using the new PATHWAYS dataset (Morales et al., 2017), allowing us to include 5889 unique MPs that served during 36 legislative periods in eight European countries between 1990 and 2015: Belgium, France, Germany, Greece, Italy, the Netherlands, Spain and the UK.

Our multilevel discrete survival analyses clearly confirm the *Homophily Hypothesis*. That is, homophily effects emerge on each of the three traits, the effects do not differ significantly from one another, and they are not offset by the presence of the group in the parliament at large. Thus, the gains made in the descriptive representation of women (see Best & Semenova, 2014) and visible minorities (see Bird et al., 2010) in Europe's national

parliaments are to a certain extent lost through homophily effects at the point of exit. As for the lower educated, the homophily effect that we find helps to explain the ongoing decline in their descriptive representation (see Bovens & Wille, 2017). Apart from the literature on descriptive representation, our results also have important implications for studies on the individual-level renomination of MPs (Baumann et al., 2017; Hermansen, 2018; Marino & Diodati, 2017; Whitaker, 2014), and macro-level legislative turnover of politicians (Gouglas et al., 2018; Matland & Studlar, 2004).

In advance, we wish to clarify why we focus on gender, visible minority status and education. The former characteristics have received considerable attention in research on descriptive representation (Bird et al., 2010; Kittilson, 2006; Krook, 2010; Lawless & Fox, 2010; Matland, 2005), with interest in the representation of the lower class/lower educated more recently beginning to grow (Bovens & Wille, 2017; Carnes, 2012; Carnes & Lupu, 2016; Hakhverdian, 2015). Interest in their descriptive underrepresentation is warranted, as the lower educated have structurally different political attitudes and exhibit lower levels of political trust (Bovens & Wille, 2010; Hakhverdian, 2015).

Unlike many of the organisations studied by organisational demographers, parliamentary parties have electoral incentives to diversify. Driven by the emergence of a more diverse electorate in many Western societies, there is an increased expectation that parties and indeed parliament should be more representative of wider society. Parties, therefore, aim to pre-empt negative attention among the electorate by fielding and promoting candidates from different backgrounds. Equally, voters may prefer to vote for candidates similar to themselves (McDermott, 2009). Indeed, group-based voting behaviour has been demonstrated among some ethnic groups (Bergh & Bjørklund, 2011; Fisher et al., 2015; Martin, 2015), among women (Dolan, 2008; Holli & Wass, 2010; Sanbonmatsu, 2002) and among the lower class/educated (Carnes & Lupu, 2016; Heath, 2015).

Consequently, a paradox arises. On the one hand, parties wish to diversify, but, as we show below, when they do, they are often unable to retain MPs belonging to the aforementioned underrepresented groups. The question then emerges as to why this might be the case. Beyond a few notable exceptions studying the voluntary retirement of American Congressional women (Lawless & Theriault, 2005) and the (in)voluntary exit of women from regional European parliaments (Vanlangenakker et al., 2013), this has never been examined. In engaging with this paradox, the subsequent section develops the homophily hypothesis.

*Homophily hypothesis*

Our Homophily Hypothesis is motivated by a research tradition in organisational demography known as the “Attraction, Selection and Attrition” (ASA) model. This model suggests that organisations move toward member homogeneity, because individuals are attracted to, selected by and stay within organisations whose members mirror their traits and characteristics. The original ASA model was developed to explain why team members become more alike in terms of attitudes and personalities. Later research has successfully applied ASA to the reproduction of demographic characteristics, particularly in top management team settings (e.g., Boone et al., 2004).

The causal mechanism of why groups move toward homophily is at least threefold (e.g., Westphal & Zajac, 1995). First, the similarity-attraction principle posits that similarity enhances interpersonal attraction. Second, in accordance with self-categorisation theory, people derive their identity and self-esteem from group membership; consequently, groups have incentives to strive toward homogeneity by excluding dissimilar individuals. Past research concludes that demographic attributes (gender, ethnicity and education) are used to predict similarity (e.g., in terms of values and attitudes), which subsequently determines attraction, and to construct in- and out-groups (Tsui et al., 1992). Third, socio-political reasons explain why leaders prefer to work with demographically similar individuals. Recruiting individuals with similar characteristics will ease communication, and will diminish the likelihood of conflict and power struggles (e.g., Westphal & Zajac, 1995).



Given the incentives of parliamentary parties to have demographically diverse MPs, it is unlikely that ASA dynamics will unfold with the same strength as in traditional organisations. Still, we argue that the ASA model is a fruitful perspective to study the turnover of MPs within parliamentary parties by linking the model's components to exit from parliamentary parties. The first component, the *Attraction* principle, falls outside the scope of this study, as this speaks to the entry rather than the survival of MPs. Studying attraction would require data on the characteristics of potential candidates who decide whether or not to seek the nomination, while we only know who was eventually elected. The attraction principle is, however, confirmed in the literature. Gilardi (2015), for instance, shows that the election of female politicians increases the motivation of other women to run (see also Fox & Lawless, 2004).

#### *Selection*

Regarding *Selection*, politicians, unlike members of other organisations who are hired once, will have to be renominated by their party selectorate before each election. ASA theory predicts that selectorates will be more likely to put candidates who are demographically similar to themselves on electable positions on party lists, or in safe electoral districts. Niven (1998) argues that party selectorates will use demographic similarity as a proxy that a candidate will also be similar in other respects like attitudes, personality, competency, and ability to get along with them. Simultaneously, out-group members will be 'lumped together' and evaluated based on stereotypes rather than their actual capabilities. Consequently, candidates from "the in-group" will be evaluated more favourably. These

dynamics have been shown to work against the selection of female and ethnic minority candidates (Cheng & Tavits, 2011; Cross, 2019; Kokkonen & Wängnerud, 2017; Niven, 1998). The homophily literature gives every reason to expect that party selectorates could also use other demographic characteristics such as education levels as cues (McPherson et al., 2001).

Here the question arises whether selectorates can afford to make biased decisions against underrepresented groups during re-selection and electoral list placement given the pressures discussed above to diversify their party. We believe they can afford to do so, because parties can meet diversification objectives without having to ensure the re-election of the exact same MPs from underrepresented groups. When parties select demographically diverse MPs mainly because of their background rather than their capabilities, they become easily replaceable by other members of their group (Vanlangenakker et al., 2013). We expect this tendency to be more accentuated when underrepresented groups are poorly represented within a party's selectorate. The ASA model predicts that the composition of the selectorate and parliamentary party will mirror one another. Hence, lower presence of an underrepresented group in a parliamentary party coincides with poorer representation in the selectorate, thus impeding the re-(s)election of MPs from their ranks.

### *Attrition*

In the case of *Attrition*, we can expect that demographically different MPs have a higher propensity to not fit within their parliamentary parties and to leave. Scholars approaching

gender and political representation from a workplace perspective have shown that men's and women's experiences of parliamentary work are not the same. When a legislature or parliamentary party is dominated by men, formal (e.g., working hours and parental leave) and informal institutions (how one should behave) created by men will be in place (Dahlerup, 1988; Erikson & Josefsson, 2019; Kenney, 1996). This mechanism has been related to higher pressure and anxiety experienced by female MPs (e.g., Erikson and Josefsson 2019). Hence, parliaments and parliamentary parties are gendered institutions. Kim Geybels, a former Belgian national senator for the New Flemish Alliance (N-VA), provides an example. She was criticised by a prominent fellow party member for wearing a style of skirt that was considered inappropriate and unprofessional.

Celis and Wauters (2010) show that this argument extends to visible minority and lower-class MPs (a category substantially overlapping with the lower educated) who must adapt to formal and informal institutions shaped by white, highly educated men, such as drinking alcohol and using technical jargon. The norms as to who should be MP and how MPs should behave still "reflect the life and work style of the kind of MP that was and is numerically dominant: *male, highly educated, white*, and with a partner taking care of their children" (Ibid., 385 emphasis added). In the daily rituals of parliamentary work like presence, dressing, eating and speaking, female, visible minority and lower educated MPs will thus have to adapt. This is echoed by social psychological studies, arguing that nominal distinctions between people (e.g., gender, ethnicity, and education) become tied to performance expectations even if these characteristics are totally irrelevant for task performance.

Consequently, members of the minority group (in this case, female, visible minority and lower educated MPs) face a “burden of proof process”, where they must demonstrate that they are up for the task despite their demographic background (Ruef et al., 2003, p. 200).

The studies above imply that the attrition mechanism is conditional upon the presence of the underrepresented group within the parliamentary party. Kanter’s (1977) well-known ‘critical mass’ argument posits that as soon as a group reaches a certain size, the minority starts to assert itself to eventually trigger a transformation of the institutional culture (see also Dahlerup, 1988, p. 90; Kenney, 1996). The literature on the political representation of women has mainly explored whether a higher proportion of women will result in more women-friendly public policy (substantive representation). Many scholars have been sceptical (Childs & Krook, 2008). However, we focus on a different outcome of critical mass: whether, owing to an increase in relative numbers, minority groups within a parliamentary party can change institutions within their party, which subsequently helps them to fit in and prevents them from leaving. Building on the workplace literature (Celis & Wauters, 2010; Dahlerup, 1988; Erikson & Josefsson, 2019; Kenney, 1996), we expect this to be the case.

So, based on the deselection and attrition mechanism, we expect that MPs from disadvantaged groups will be less likely to be re-selected (and thus re-elected) and more inclined to leave the parliamentary party when constituting a small minority. We expect homophily effects on gender, visible minority status and education because the sociological

homophily literature continuously stresses the relevance of these three characteristics (McPherson et al., 2001; Smith et al., 2014). There is every reason to expect that this insight extends to parliaments and parliamentary parties. In the case of deselection, as discussed above, it has already been shown that male and ethnic majority selectors make biased decisions against women and ethnic minority candidates. Hence, when a party selectorate is dominated by highly educated elites, lower educated candidates could be equally disadvantaged. As for attrition, the qualitative study by Celis and Wauters (2010) cited above shows how the daily rituals still reflect the work and lifestyle of the numerically dominant male, visible majority and highly educated MP.

Thus, while the literature on descriptive representation mostly focuses on women (Golder et al., 2017; Kenny & Verge, 2016; Krook, 2010; Krook & Norris, 2014; Matland, 2005) and visible minorities (Bird et al., 2010), the (growing) importance of education as a cleavage in our contemporary societies gives us every reason to expect homophily effects based on this characteristic too. As argued by Bovens and Wille (2017, p. 142): “educational background is an important marker of stratification [...] The well-educated and the less-well educated live in different social worlds and do not mingle [...] and have different interests and preferences on a number of salient political issues”. In the daily rituals of parliamentary work, they have to adapt to the complex and juridical speech, dress, clothing and cars of their highly educated colleagues (Celis and Wauters 2010: 385). Therefore, we expect that not only female and visible minority MPS will face selection bias by party selectorates and to perceive and/or to be perceived as not fitting in (attrition) when they are poorly represented within a

party; this should also happen to lower educated MPs. Therefore, our first hypothesis is as follows:

*Homophily Hypothesis (H1):* Female, visible minority and lower educated MPs have higher odds of exit than other MPs when their share within the parliamentary party is low.

#### *Differences between characteristics*

Notwithstanding that we expect homophily effects on each of the three traits (see H1), the size of the effect could differ across categories. After an extensive review of the sociological literature, McPherson and colleagues (2001, p. 415) conclude that “race and ethnicity creates the strongest divides in our personal environments, with age, religion, education, occupation, and gender following in roughly that order”. For methodological reasons expressed below, we do not focus on age and religion; yet, the aforementioned quote illustrates that homophily effects can differ across groups depending on the salience of these variables in our societies. Three things affect the size of homophily effects.

First, the size of the underprivileged category in society increases the likelihood of contact with the privileged group. Eventually, this will decrease the salience of this demographic marker (McPherson et al., 2001). This is echoed by psychological research on the ‘contact hypothesis’ (Pettigrew & Tropp, 2006). Given that women make up slightly more than 50 per cent of our societies, and that men and women are linked together in households, we can thus expect lower gender homophily in society as a whole. Also within parliaments, women

are generally higher in number than the other two groups. This structurally higher level of presence can be expected to decrease distrust in their capabilities among their male colleagues within the parliamentary party (Alexander, 2012; Dahlerup, 1988, pp. 284–285; Morgan & Buice, 2013). Moreover, higher levels of women in the parliamentary party would normally also lead to a higher number of women in the selectorate, which would reduce the ‘out-group effect’ (Niven 1998) discussed above.

Second, it matters whether membership of a category can be linked to socially disadvantageous features such as low income and residence in bad neighbourhoods. Being a woman is less likely to yield negative associations regarding residence and class (McPherson et al., 2001). Hence, there may be less negative associations to be overcome by female MPs in the first place.

Lastly, attrition effects are more likely to occur when the gap between functioning in one’s usual environment and the daily rituals of parliamentary work is large. Arguably, this will least be the case for women, as personal networks are much less segregated by sex (McPherson et al., 2001). Hence, we theorise that homophily effects will be structurally weaker for women than for lower educated and visible minority MPs.

*Trait Rank Order Hypothesis (H2):* Homophily effects within parliamentary parties are weaker for female MPs than for lower educated and visible minority MPs.

We refrain from specifying expectations regarding differences in homophily effects between visible minorities and the lower educated. As compared to lower educated MPs, visible minority MPs have the advantage that ethnicity is an ascribed characteristic and thus logically irrelevant for predicting a person's suitability for parliamentary work – even through cultural biases likely exist (Ruef et al., 2003). Alternatively, they enjoy the disadvantage that lower educated MPs tend to be higher in numbers (especially in historical perspective). Hence, analogous to our argument above about the effect of female presence on stereotype reduction, lower educated MPs could be seen as more “normal” by their colleagues than visible minority MPs. Hence, with two counterforces, we cannot make an unambiguous theoretical prediction.

#### *Differences between characteristics across countries*

At this point, the question arises whether country differences exist regarding the parliamentary presence of our three groups. The literature on the descriptive representation of women argues that a higher presence of women increases the cultural appropriateness of having women as politicians (Alexander, 2012; Dahlerup, 1988, pp. 284–285; Schwindt-Bayer & Reyes-Housholder, 2017). This idea speaks to the symbolic function of descriptive representation (Pitkin, 1967). In this case, higher descriptive representation of women



“potentially reverses the harmful internalisation of women’s inferiority in political leadership by reversing the observation that women do not govern and challenging the notion that women are absent because they are unfit to govern” (Alexander, 2012, p. 439). Hence, higher parliamentary representation should reverse this harmful internalisation among both *women and men*.

If we generalise this to visible minorities and lower educated MPs, *country differences in levels* of descriptive representation could be indicative of the extent to which negative perceptions exist regarding the suitability of women, visible minorities and the lower educated to be MPs. This is echoed by social role theory, arguing that stereotypes emerge as the result of the activities different social categories are engaged in (in this case, parliamentary work) (Morgan & Buice, 2013). Regarding *the effect of descriptive representation within countries through time*, this entails that in-group MPs (i.e., male, visible majorities and higher educated) and out-group MPs (i.e., women, visible minorities and lower educated) can update their views regarding the out-group’s suitability to be MPs. On the one hand, the increased presence of women, visible minority and lower educated MPs in the parliament at large could have a role model function (e.g., Gilardi, 2015), encouraging MPs from the same group not to relinquish their seats. In-group members, on the other hand, could update their stereotypical attitudes about the out-group owing to increased exposure to them within the parliament. It has been empirically shown that male politicians’ perceptions of female politicians improves owing to female presence (Alexander, 2012; Dahlerup, 1988; Schwindt-

Bayer & Reyes-Housholder, 2017). We expect that this logic extends to visible minority and lower educated MPs. This yields our last hypothesis:

*Country Variation Hypothesis (H3):* Homophily effects within the parliamentary party decrease with the presence of a group within the parliament as a whole.

*Asymmetry in homophily effects*

Would ASA dynamics similarly unfold when overrepresented groups (e.g., men and ethnic majorities) comprise the minority in a parliamentary party? The ASA model assumes equal dynamics, meaning that it would be equally problematic for male MPs to constitute minorities within female-dominated parties, or for visible majorities to be the minority in a party dominated by visible minorities. In keeping with this literature, we hence expect effects to be symmetrical (but see Tsui et al., 1992). It is noteworthy, however, that some studies suggest that female leaders do not (Tremblay & Pelletier, 2001), or only under certain conditions (Kunovich & Paxton, 2005), favour female candidates (but also see Cheng & Tavits, 2011). Despite the possibility of asymmetry in homophily effects, we choose to be agnostic for practical reasons: as shown below, parties in which either women, the lower educated or visible minorities constitute majorities are too few in number to put this to a systematic test.

## DATA, OPERATIONALISATIONS AND METHODS

Data on legislative exit was collected within the framework of the Open Research Area Funded project 'Pathways to Power: The Political Representation of Citizens of Immigrant Origin' (Morales et al., 2017). This database focuses on the eight European countries listed above between 1990 and 2015. It is the largest available cross-national dataset on parliamentarians, including all MPs from the start of their parliamentary tenures in addition to their replacements for each complete legislative period between 1990 and 2015. Information on MPs comes from parliamentary websites and speeches, MPs' personal websites, party websites, Wikipedia entries, newspaper articles and interviews, Facebook pages and LinkedIn profiles. The analyses below are based on 10,344 MP-legislative period combinations stemming from 5,889 unique MPs from 96 unique parliamentary parties.<sup>1</sup> See Table A3 of the Supporting Information (SI) for the case selection.

*Models specification*

Our dependent variable, *Exit*, is a dummy variable. MPs are coded as '0' if they will represent the same party in parliament from the start of the next legislative term  $t+1$ ,

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<sup>1</sup> The implications of very small parties on our model are negligible: only 2 percent of our observations are MPs of parliamentary parties with four members or less.

whereas those that will not are coded as '1'.<sup>2</sup> This implies that both MPs that exit the legislature and MPs that represent a different party at  $t+1$  are coded as 'exiters'. We code party switchers as exiters since the homophily/ASA theory from which our hypotheses are derived focuses on the survival of individuals within groups. In our case, party switchers did not "survive" in the party they left behind.<sup>3</sup> We note that if a party as a whole exits parliament, its MPs receive missing values on the dependent variable, as it does not make sense to examine determinants of exit if the party itself does not survive.

Our main independent variables are an MP's gender, visible minority status, and level of education. Hence, we distinguish women from men. Visible minorities are operationalised as MPs who could be perceived by voters as belonging to an ethnic minority because of visible traits. This can include perceptions of 'non-whiteness' and perceptions of 'foreignness' due to their names and physical appearance. Where PATHWAYS coders answered this question with a "yes", or indicated that this was ambiguous (4.31 percent of cases), we classified the MP as a visible minority. In case of education, we combine the low and middle educated in one group (henceforth, we simply refer to this group as "lower educated") and compare their exit propensity with the high educated (1=low and middle

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<sup>2</sup> Hence, MPs who were not directly re-elected at the beginning of the next legislative term but entered the parliament later as replacements were coded as exiters at  $t$ .

<sup>3</sup> To identify the parliamentary party within which the MPs must "survive", we rely on the ParlGov database (Döring & Manow, 2015). See Section 1.4 of the SI for further detail.

educated; 0=high educated). It makes sense to place the middle educated with the lower educated as the former are likewise heavily underrepresented in politics. Bovens and Wille (2010) therefore conclude that the main division is between the low and middle educated, on the one hand, and the high educated, on the other.

Above we already explained why we focus on gender, visible minority status and education. We are well aware that the sociological homophily literature suggests that age and religion also create boundaries in our societies; yet, both characteristics do not feature prominently in the political science literature to which we seek to speak (but see Kissau et al., 2012). Moreover, in the case of age, the exit of older age cohorts is largely due to retirement regulations, obfuscating the analysis of potential homophily effects. Robustness analyses with age (available upon request) indeed showed much weaker results. Hence, we control for age, but refrain from depicting the homophily effects. Regarding religion, our dataset includes substantial missing data on this characteristic (58%). Additionally, we chose to focus on characteristics that are clearly visible to colleagues, thus allowing for a more straightforward delineation of the group. In the case of religion, this does not apply. This is also why we measure whether someone either by her physical appearance or name can possibly be identified as an ethnic minority, rather than focusing on someone's objective immigrant background. Furthermore, none of our indicators change when a person enters parliament (unlike social class), and they are relevant in all countries featured in this study (unlike language groups).

To test H1, we interact whether individual MP  $i$  is female, a visible minority or lower educated with the proportion of women, visible minorities and lower educated MPs within his/her parliamentary party. Owing to the low number of instances (especially in cases of lower educated and visible minorities) where these underrepresented groups are overrepresented in their parliamentary party, we mainly evaluate the hypothesis by testing whether the three groups have a significantly higher exit propensity than the reference category when their presence within the party is low. Subsequently, to evaluate H2, we will compare whether the exit propensities at low levels of presence significantly differ between the three groups. Lastly, H3 necessitates a three-way interaction between the demographic trait, the proportion of demographically similar individuals within the party and the proportion of demographically similar individuals within the parliament as a whole.

#### *Control variables*

We consider various controls: MPs may exit voluntarily (supply), or because of decisions taken by party selectorates and voters (demand). To capture *demand* for candidates among selectorates we first control for a country's electoral system. In single-member districts (SMD), party selectorates may want to avoid losing the personal votes from constituency members of the incumbents (e.g., Matland & Studlar, 2004). Second, we include changes in assembly size between two elections. Third, we control for nationwide legislative quotas regarding the minimum share of women on candidate lists. When these quotas are in place, we expect women to have higher chances of legislative survival within their party than men. Therefore, we interact quota with gender. Fourth, we add party family. Parties of the left,

most notably green parties, are anti-elitist by nature, which may lead them to rotate party office holders more frequently (Burchell, 2001). Fifth, we control for the interaction between a party's current number of seats and the difference with the number of seats at legislative period  $t+1$ . This taps into the effect of electoral swings, and considers that seat losses have a higher impact on the exit of MPs within smaller parties.

Turning to the *supply* side, we calculate the difference between the status of being an MP and the occupational status enjoyed before she became an MP. We expect that MPs are more likely to voluntarily exit if their previous job was more prestigious. Next, to tap into voluntary retirement, we include age. To gauge a potential non-linear effect, we add age squared.

Relating to *both demand and supply*, we consider whether MPs served as a cabinet minister during the legislative term (1=yes and 0=no) and their power within the party (from 0=grassroots member to 8=national party leader). Higher status may lower chances of deselection (Hermansen, 2018; Marino & Diodati, 2017) and voluntary exit (Whitaker, 2014). Next, we include the number of days to the next legislative period. When the next elections follow closely, MPs have less time to switch careers and party selectorates have less opportunity to reshuffle candidate lists (Gouglas et al., 2018; Matland & Studlar, 2004). Finally, we control for the electoral volatility observed in the most recent elections. In the case of high volatility, a higher share of MPs lose their seats. Volatility also signals that being

an MP is a risky career, which might fuel voluntary exit (Gouglas et al., 2018). More details on the operationalisations and data sources can be found in Table A2 of the SI.

### *Estimation strategy*

The hypotheses are tested using discrete time duration models (e.g., Rabe-Hesketh & Skrondal, 2008). The model specifications are presented in the SI (Table A1). We manipulated the data structure so that an MP contributes one observation for each legislative period that s/he is included in the sample frame. Demographic dissimilarity during legislative period  $t$  is specified to cause whether an MP will represent the same parliamentary party at legislative period  $t+1$ , meaning that the cause precedes its consequence. The final available legislative period for each country is excluded from the analyses, as we cannot know which MPs did or did not reappear.

The consecutive legislative periods that an MP is a representative for the same parliamentary party are repeated measures. Hence, we specify a multilevel model with MP-legislative term combinations ( $N=10,344$ ) nested within MP-parliamentary party combinations ( $N=5,974$ ). Also, we consider the hazard rate of exit. Relatively inexperienced MPs are less likely to retain their seats (Kjaer, 2011). Yet, in cases of continued tenure, MPs will eventually approach retirement age, or the moment will come when they voluntarily or involuntarily switch careers. To capture the possible nonlinear effect of tenure, we convert this variable into  $n-1$  dummy variables.



## RESULTS

### *Descriptive statistics*

Figure 1 depicts the average share of the three underrepresented groups in the parliaments studied and the average share within those groups that is re-elected. Women and lower educated MPs generally have a higher parliamentary presence than visible minority MPs. This could produce differences in homophily effects across the three traits (H2). All countries in the PATHWAYS data share some fundamental cultural and political features being parliamentary or semi-presidential democracies and countries where gender, ethnicity and education create social divides (e.g., McPherson, Smith-Lovin, and Cook 2001; Bovens and Wille 2017). Still, substantial cross-country variation exists regarding the structural parliamentary presence of the groups. This reflects the different opportunity structures for the groups to become and remain MPs, allowing us to test our theoretical framework in different contexts.<sup>4</sup> As argued, differences in descriptive representation may condition homophily effects (H3).

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<sup>4</sup> The structurally higher presence of visible minorities in the French parliament appears to contradict Bird's (2005) conclusion that they are heavily underrepresented there. Yet, this difference is driven by our inclusive operationalisation of visible minorities. Bird (2005, p. 458) exclusively focuses on MPs of non-Caucasian race and of non-European origin.

[FIGURE 1 HERE]

**Figure 1.** Average parliamentary presence and re-election rate

Note: own calculations based on PATHWAYS dataset. The x-axis reflect percentages.

*Evaluating the Homophily Hypothesis*

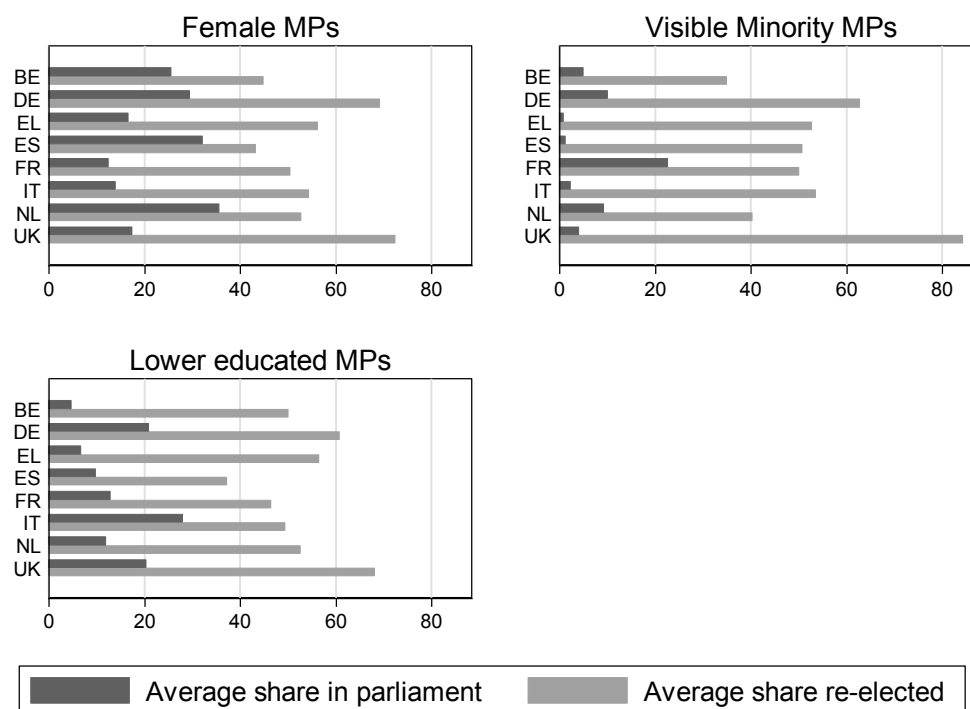


Table A2 of the SI reports the descriptive statistics, while Table A4 presents the regression coefficients from our multilevel logistic regression model. Before turning to the hypothesis, we note that the average exit chance of female and visible minority MPs does not differ significantly from male or visible majority MPs, respectively. Lower educated MPs,

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Moreover, she excludes various (ethnic) groups like Jews and MPs of Eastern European background.

however, do have a significantly higher average chance of exit: being lower rather than higher educated increases the chance of exit by a factor of 1.348 (log odds = 0.299,  $p < .01$ , Table A4).

Our *Homophily Hypothesis (H1)* is about the extent to which the exit of these groups is conditioned by their proportion within the parliamentary party. Model 2 of Table A4 shows that the interactions for female (log odds =  $-.751$ ,  $p > .1$ ), visible minority (log odds =  $-2.045$ ,  $p < .05$ ) and lower educated MPs (log odds =  $-.986$ ,  $p < .1$ ) are negative. This is in line with homophily theory, predicting that the exit chances of a group decrease with its presence. Nonetheless, in non-linear models like ours, interactions cannot be evaluated by looking simply at the sign, magnitude, or statistical significance of the coefficient of the interaction term (Ai & Norton, 2003). Also, H1 expresses predictions about homophily effects for specific levels of presence: exit chances of MPs from underrepresented groups should be higher than the reference categories when their share within the parliamentary party is low. Thus, to evaluate our hypotheses, we must calculate the marginal effects at specific values of a group's presence in the parliamentary party.

Figure 2 (upper-left) reveals that women MPs have significantly higher exit chances than men, as long as they comprise less than 15 percent of the parliamentary party. For instance, when only five percent are women, their predicted probability of exit is .041 higher (on a 0-1 scale,  $p < .1$ ) than for men, which is a non-negligible effect. When women make up 15

percent or more of the parliamentary party, their odds of exit no longer differ significantly from those of men. Hence, 15 percent is the tipping point. The upper-right figure shows that visible minorities have a significantly higher exit propensity when they make up less than 15 percent of the party. When only five percent of a parliamentary party consists of visible minorities, their predicted probability of exit is .058 higher than visible majority MPs. The homophily effect for the lower educated (bottom-left) is largest. When they comprise five percent of the party, their exit propensity is .086 higher ( $p < .05$ ) than for higher educated. The tipping point is also higher, as it takes a presence of 35 percent for the effect to dwindle.

[FIGURE 2 HERE]

**Figure 2.** Marginal effects legislative exit

*Note: the y-axis depicts the marginal effect of being female (upper-left), a visible minority (upper-right), or lower educated (bottom-left) on the chance of exiting the parliamentary party alongside increasing presence within the parliamentary party (x-axis). Positive values denote that female, visible minority or lower educated MPs have higher chances of exit than the reference category. The short and long dashes depict 95 and 90 CI, respectively.*

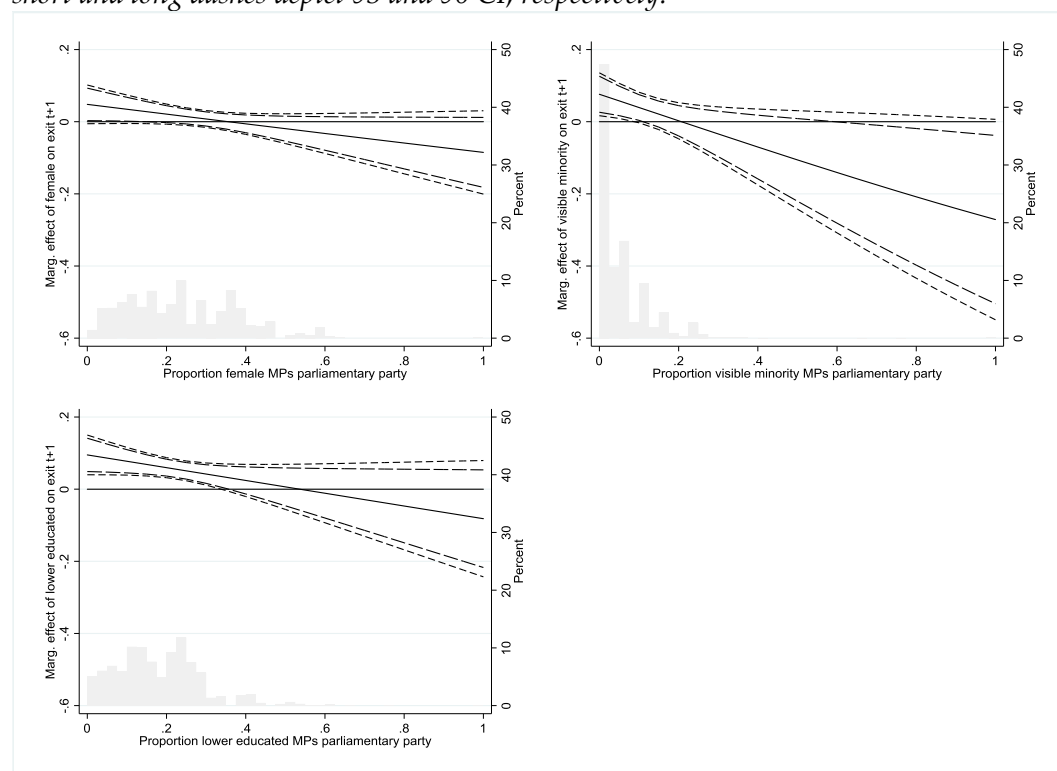


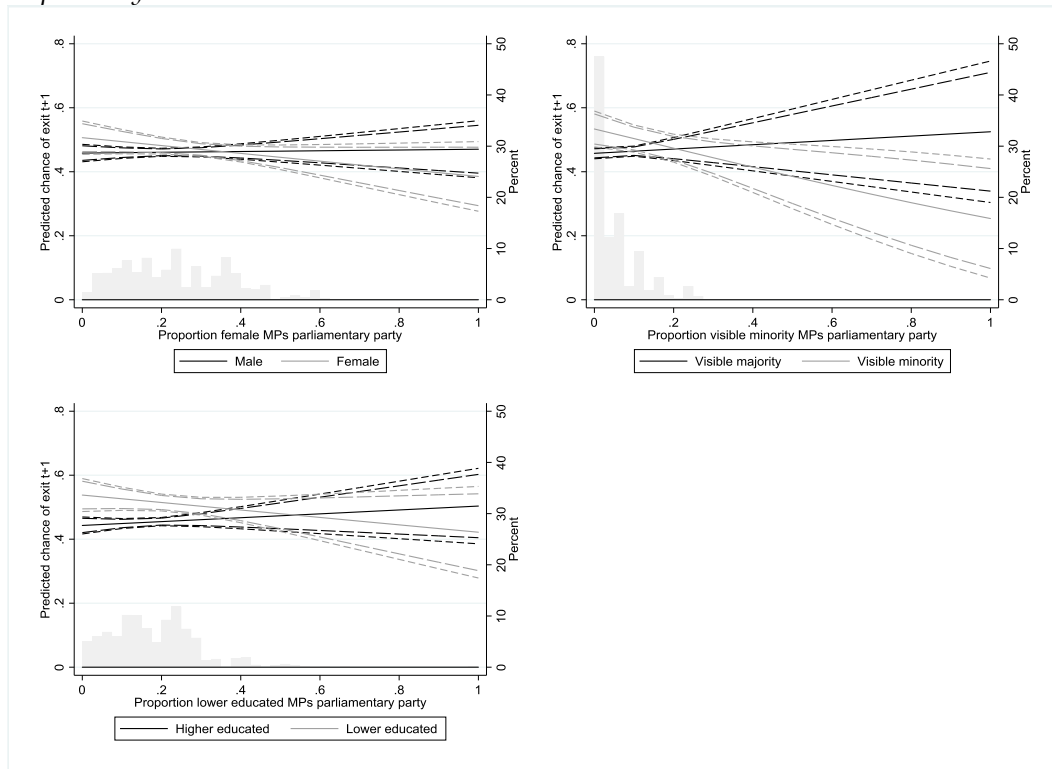
Figure 3 depicts the predicted probabilities of exit. In line with homophily theory, exit chances for women (upper-left), visible minorities (upper-right) and the lower educated (bottom-left) decrease when they are better represented. For instance, the exit chance of a female MP in a parliamentary party with only men would be .507 compared to a chance of .385 if all the MPs would be female.

In sum, we confirm H1 for each group. Interestingly, our tipping points (15 percent for women and visible minorities, and 35 percent for lower educated) coincide with the expectations of Kanter (1977), who argues that a minority becomes strong enough to influence the culture of a group when their share ranges between 15 and 40 percent (the so-called tilted group).

[FIGURE 3 HERE]

**Figure 3.** Predicted margins legislative exit.

Note: the y-axis depicts the predicted chance of exit (versus incumbency) for female (upper-left), visible minority (upper-right), or lower educated (bottom-left) MPs alongside increasing presence within the parliamentary party (x-axis). The short and long dashes depict 95 and 90% CI, respectively.



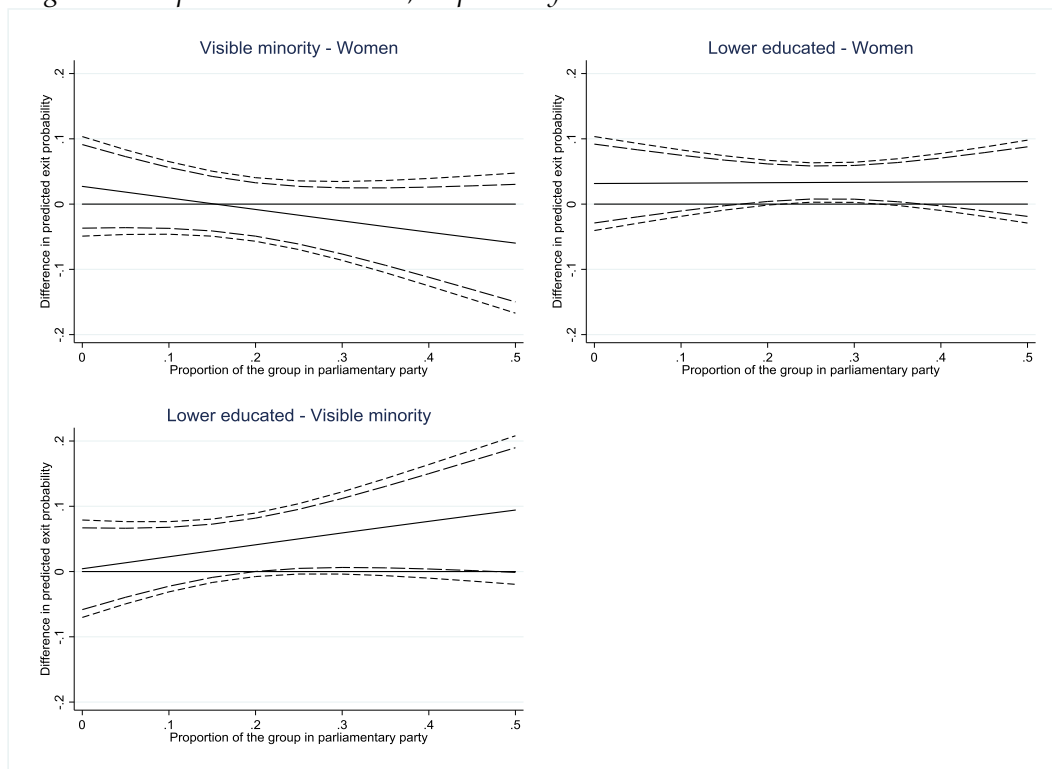
Does the size of the homophily effects significantly differ between female, visible minority and lower educated MPs? Our *Trait Rank Order Hypothesis* (H2) expresses that the effects should be significantly lower for women than for the other two groups. Figure 4 depicts for each pairwise comparison whether the homophily effect (i.e., the marginal effect of a demographic characteristic on exit at a specific level of presence in the parliamentary party) significantly differs between the two groups. We only compare homophily effects when presence within the parliamentary party ranges between 0 and 50 percent, as homophily dynamics emerge when underrepresented groups are in the minority. As shown, only the

homophily effect of female MPs is significantly lower than that for lower educated, and only so when they make up between 25 and 35 percent of the parliamentary party. Since significant differences do not surface for lower levels of presence and as we also fail to confirm that homophily effects are structurally higher for visible minorities than for women (upper-left), there is too little evidence to accept H2.

[FIGURE 4 HERE]

**Figure 4.** Pairwise comparisons between demographic traits

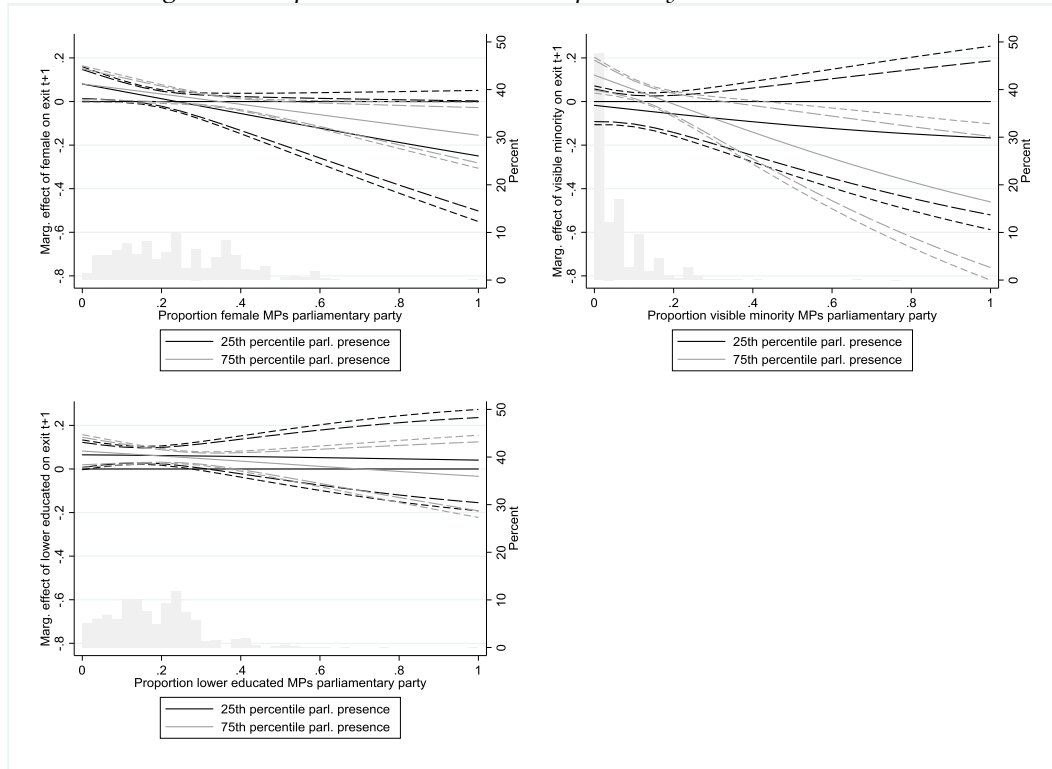
*Note: The y-axis depicts the difference in the marginal effects between visible minorities and women (upper-left), lower educated and women (upper-right) and lower educated and visible minorities (bottom-left) on legislative exit alongside increasing values of group presence (x-axis). The short and long dashes depict 95 and 90% CI, respectively.*



[FIGURE 5 HERE]

**Figure 5.** Marginal effects legislative exit by parliamentary presence

Note: the y-axis depicts the marginal effect of being female (upper-left), a visible minority (upper-right), or lower educated (bottom-left) on the chance of exiting the parliamentary party alongside increasing presence within the parliamentary party (x-axis). Positive values denote that female, visible minority or lower educated MPs have higher chances of exit than the reference category. The black (grey) line denotes the effects when the parliamentary presence of the group is low (high). The short and long dashes depict 95 and 90% CI, respectively.



Finally, our *Country Variation Hypothesis* (H3) posits that homophily effects are dampened when the group is better represented in the parliament as a whole. The coefficients for the three-way interactions and the controls are presented in Table A4 of the SI. In Figure 5, we simply show the effect of a demographic trait on exit (y-axis) alongside increasing presence within the parliamentary party (x-axis) when parliamentary presence is at its 25<sup>th</sup> percentile and at its 75<sup>th</sup> percentile. As shown, the two slopes do not markedly differ for women and lower educated MPs. Hence, for these groups, it is presence in the parliamentary party



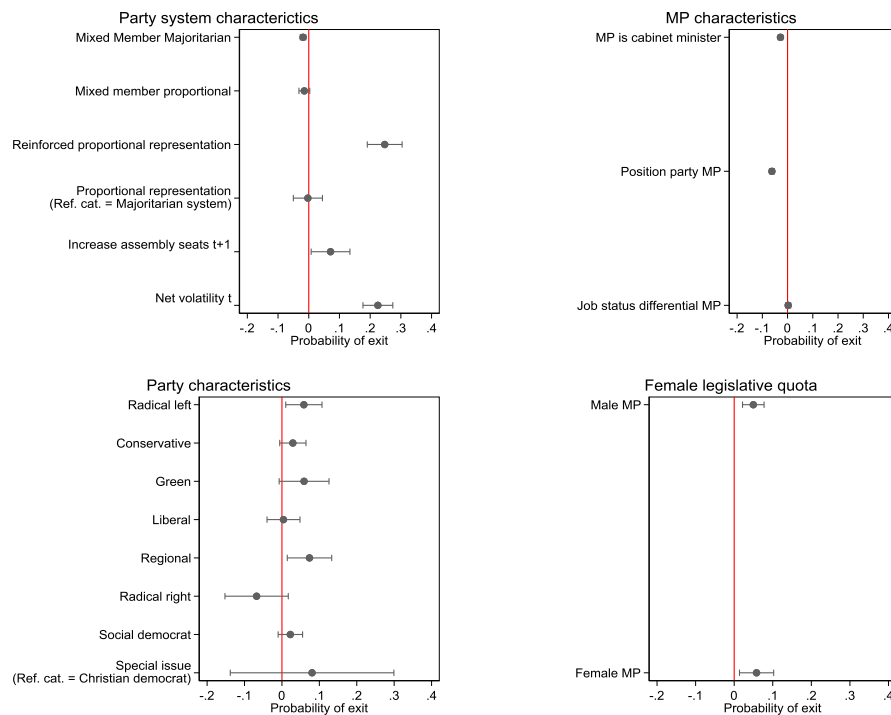
rather than parliament that offsets homophily effects. This suggests that the parliamentary party remains the primary workplace of MPs. While higher parliamentary presence might encourage women and lower educated MPs to not voluntarily give up their seat (the attrition mechanism), attrition dynamics within their own party may prevail. And eventually, (de)selection also takes place within the parliamentary party rather than the parliament.

For visible minority MPs, in turn, we see that homophily effects (i.e., the effect of being a visible minority MP on exit when presence within the parliamentary party is low) are significantly higher rather than lower in parliaments where they are well-represented. Hence, the direction of the effect runs counter to H3. Why is that so? Our explanation holds that ethnic minority MPs are a smaller group than women and lower educated. Moreover, their political incorporation is a more recent phenomenon (Bird, 2005, p. 426). For visible minorities, the 25<sup>th</sup> percentile corresponds with a parliamentary presence of less than 1.7 per cent. In this situation, the parties that have visible minority MPs can be considered early adopters. Most likely they are highly committed to bringing visible minorities into parliament, which subsequently decreases the likelihood of de-selection and attrition. When their parliamentary presence increases to 9.8 percent (the 75<sup>th</sup> percentile), however, we can also expect that some parties will have visible minority MPs mainly for electoral rather than ideological reasons. This could then increase the likelihood of de-selection (visible minority MPs can simply be replaced for other visible minorities) and attrition.

[FIGURE 6 HERE]

**Figure 6.** Marginal effects of controls

*Note: the continuous variables have been standardised around their mean. For the regression table and an elaborate discussion of the controls, see Table A4 and Section 1.7 of the SI. 95% CI.*



Finally, Figure 6 depicts the marginal effects of our most interesting control variables. They are generally in line with expectations from the literature. Strikingly, however, female legislative quotas significantly *increase* the exit of male *and* female MPs. While we know that quotas tend to increase female parliamentary presence (e.g., Tripp and Kang 2008), apparently they do not protect female MPs against exit, which is worrisome. For an elaborate discussion of the controls, we refer to Section 1.7 of the SI.

### *Extensions*

In the SI, we present three additional analyses. First, we assert that homophily effects hold for low and middle educated separately. Second, we find continued support for our conclusions when we specify fixed effects models. Third, we evaluate ASA theory on the likelihood of party switching. We find no evidence that female, visible minority and lower educated MPs are more likely to switch when their presence within the parliamentary party is low nor that they move to parties with more demographically similar colleagues. Hence, homophily within parliamentary parties explains why they leave the parliament (at least temporarily), but not why they switch to other parties. This confirms that party switching is mainly explained by the vote-seeking motives or policy goals of politicians (e.g., O'Brien and Shomer 2013).

### CONCLUSION AND DISCUSSION

A rich literature examines the parliamentary entry and descriptive representation of underrepresented groups (e.g., Bird et al., 2010; Bjarnegård & Kenny, 2015; Bovens & Wille, 2017; Krook, 2010; Matland, 2005; Stockemer, 2015). This study deals with their individual-level survival within their parliamentary parties. Based on 5889 unique MPs from 96 parliamentary parties that served during 36 legislative periods across eight Western European countries between 1990 and 2015, the *Homophily Hypothesis* (derived from the economic and sociological literature on organisations) is validated: women, visible

minorities and the lower educated have higher odds of exit when their share within the parliamentary party is low. While homophily effects do not differ between these underrepresented groups, we do find that higher descriptive representation differently conditions homophily effects across the three groups. For women and lower educated, it fails to matter; for visible minorities, the disadvantage of being a minority within parliamentary parties increases (rather than decreases) with their parliamentary presence.

This study contributes to three literatures. First, we add to the literature on descriptive representation of underrepresented groups (Bjarnegård & Kenny, 2015; Bloemraad & Schönwälder, 2013; Bovens & Wille, 2017; Dancygier et al., 2015; Golder et al., 2017; Krook, 2010). We argue that politicians from underrepresented groups should keep their seat to develop into powerful actors who can ensure substantive and symbolic representation. Against this backdrop, the good news is that we do *not* find that women and visible minorities have a significantly *higher* average exit chance, which is “only” the case for the lower educated. However, these three groups do not have a significantly *lower* average chance of exit either. Hence, given their descriptive underrepresentation in Europe’s national parliaments (Best & Semenova, 2014; Bird et al., 2010; Bovens & Wille, 2017), the latter could still be seen as bad news. Most importantly, we find for each group that their exit chances are conditioned by the presence of their group in the parliamentary party: the lower the share of MPs of a particular group in a parliamentary party, the larger their chances of exit. This implies that homophily effects are an important (and unwanted) cause of their exit. Moreover, our findings imply that MPs from underrepresented groups do not

have equal opportunities across parties to succeed. Within parties where they constitute a small minority, their premature exit is likelier, meaning that they are unlikely to be promoted to senior positions (Daniel, 2013), to take up their role as ‘critical actors’ for the representation of group interests (Childs & Krook, 2008) or to show that they can govern competently.

We also demonstrate that the ‘critical mass’ concept (Kanter, 1977), which is often referred to in literature on the descriptive representation of women, is highly relevant to explain the exit of MPs from underrepresented groups. While evidence is mixed as to whether higher numbers of women translate into female-friendly public policies (some argue that it takes ‘critical actors’ rather than ‘critical mass’) (Childs & Krook, 2008; Dahlerup, 1988), we show that presence within a parliamentary party is paramount to ensure legislative survival of MPs from that group. Our results clearly confirm the existence of a tipping point: 15 percent for women and visible minorities, and 35 percent for the lower educated. Therefore, although the ‘critical mass’ theory is often criticised, it turns out to be a good explanation for legislative exit.

Second, our results speak to the literature on legislative turnover, including studies on aggregate turnover rates (e.g., Gouglass et al., 2018; Matland & Studlar, 2004), as well as research on individual-level determinants of reselection (Baumann et al., 2017; Hermansen, 2018; Marino & Diodati, 2017; Whitaker, 2014). To begin with the first, aggregate turnover

irrespective of demographic characteristics reveals little about the extent to which calls for better representation are mirrored in parliament. If, for instance, exiters from underrepresented groups are replaced by entrants from overrepresented groups, parliaments will become more homogenous despite elite circulation. Hence, we need to consider the demographic characteristics of both entrants and exiters. Next, this literature mainly considers political-institutional determinants at the level of legislatures; yet, we show that the socio-demographic make-up of the parliamentary party must be considered as well. In turn, the individual-level literature on MP re-nomination does consider that survival takes place within parties by focusing on how an MP's legislative activities or position within the party influence re-nomination. Yet, equally, it neither considers the demographic background of MPs (thereby assuming equal dynamics for MPs regardless of whether they are from underrepresented or mainstream groups) nor the demographic composition of their working environment. Our paper provides an important first step in bringing the demographic background of the MP and the demographic composition of the parliamentary party and parliament into the picture.

Third, we apply theories from organisational demography to parliamentary parties. For many types of organisations and (management) teams, evidence was found for ASA dynamics at the point of exit (and entry) (Boone et al., 2004). We find similar homophily effects for parliamentary parties at the exit side. This is far from obvious since contrary to organisations and (management) teams which are under pressure to deliver products and or services, contemporary political parties have strong electoral incentives to be diverse. Hence,

we show that ASA dynamics are very powerful. They also occur in organisations where they would be much less expected.

In future work, we will study party-level and societal conditions that could moderate a party's proclivity toward homophily. For instance, homophily effects may be dampened when there is a higher societal and/or partisan demand for diversity. Second, we would like to examine whether homophily effects also occur at the point of entry. Third, we need to further investigate the causal mechanisms underlying our findings by means of qualitative research methods. Yet, our first objective was to provide robust quantitative evidence that homophily effects play an important role.

#### ONLINE APPENDIX

**Table A1 – Definitions and model specifications**

**Table A2 – Descriptive statistics, operationalizations and data sources**

**Table A3 – Case selection**

**Table A4 – Regression coefficients**

**Table A5 – The effect of party switching on proportion of demographically similar colleagues**

**Figure A1 – Predicted margins legislative exit by age**

**Figure A2 & A3 – Marginal effects of low and middle education on legislative exit**

**Figure A4 – Marginal effects legislative exit with country fixed effects**

**Figure A5 – Marginal effects party switching**

**Figure A6 – Marginal effects legislative exit excluding party switchers**

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