Power versus Ideology:

Party Switching in the European Parliament

Simon Hix

London School of Economics and Political Science

Abdul Noury

New York University, Abu Dhabi

Abstract

In this paper we examine why legislators switch political party affiliation. We seek to identify whether such 'party switching' is mainly for power reasons (to join a more powerful or more pivotal party) or for ideological reasons (because a legislator more closely shares the policy goals of another party). We focus on the European Parliament, and the 557 cases of party switching by 504 Members of the European Parliament (MEPs) between 1979 and 2009: almost 10% of all MEPs in this period. We find that most of these cases are consistent with Riker's hypothesis that political "migration" should be mainly from smaller, more marginal, and oppositional groups, to larger, more powerful, and governing groups. We also find that, independent of power considerations, ideological congruence (between an MEP and his or her prospective party) is an even more important determinant of party switching in this particular context.

1. Introduction

Most switching of politicians between political parties, and relatedly the formation of new parties, has historically happened in the legislative arena rather than in the electoral arena (cf. La Palombara and Weiner 1966). These changes in legislative parties might be driven by electoral considerations, such as positioning ahead of an upcoming legislative election. However, these changes are also due to policy goals and career incentives inside legislatures. For example, a parliamentarian might decide to join another parliamentary party because she is ideologically closer to the average member of the new parliamentary group than her old one. Alternatively, she might decide to switch parties because the new party is in government or holds more key committee positions. Nevertheless, switching parties is not cost-free, as it usually involves a politician starting from scratch. For example, leaving one party and joining a new one involves investing time and resources convincing voters and/or fellow parliamentary party members that the politician does indeed share the policy objectives of the new party and not the old party.

We investigate these issues by looking at what factors drive Members of the European Parliament (MEPs) to switch between parliamentary 'political groups'. The European Parliament is now a powerful legislative chamber in the European Union (EU) decision-making; more akin to the U.S. Congress in the U.S. 'separated-powers' system of government than legislatures in 'fused-powers' parliamentary systems at the national level in Europe and elsewhere. As in the U.S. Congress, legislative majorities in the European Parliament have to be built issue by issue because neither the EU Commission nor the EU governments command an in-built majority in the chamber to push bills through. This gives the political groups in the

European Parliament significant legislative power, broadly in proportion to their size in chamber.

What is also interesting about the European Parliament from the point of view of party switching is that legislative bargaining inside the European Parliament is largely isolated from electoral incentives. European Parliament elections are fought as 'national second-order contests' – on the performance of national politicians and parties rather than on the performance of the MEPs or the political groups inside the European Parliament (Reif and Schmitt 1980; Hix and Marsh 2007). As a result, this enables us to isolate the internal legislative policy and career incentives that drive legislative party switching from the external electoral incentives. This is often difficult to do in studies of party switching in other democratic parliaments.

Switching political groups inside the European Parliament also has relatively low transactions costs compared to most other legislatures. In addition to the lack of any potential electoral punishment for switching parties inside the chamber, power inside the political groups (such as committee assignments) is allocated almost exactly in proportion to the size of each national 'party delegation' in a group (Benedetto 2007). This means that MEPs and national party delegations can reasonably accurately calculate the costs and benefits of switching, in terms of committee assignments (such as key committee chair or vice-chair positions) when considering whether to stay in a particular political group or switch to another one.

Out of 5,179 individual MEPs in the seven elected sessions of the European Parliament 1979 and 2014, 504 switched political group at least once (almost 10 per cent). At face value this might seem a high proportion of the members of a democratic parliament in a 35 year period. In most established democracies,

switching between political parties is a rare occurrence. Yet, given the lack of potential electoral punishment of switching, the low transactions costs of joining another group, and the potentially high policy or career incentives to change groups, the fact that almost 90 per cent of MEPs remained in the same political group for the duration of their careers in the European Parliament suggests that the political groups in the European Parliament do represent a certain complex equilibrium of the individual-level and collective incentives of the MEPs.

The rest of the paper is organized as follows. We first discuss the existing literature on party switching in legislatures before setting out our own theoretical understanding of how party switching works in the European Parliament context. In short, we see each European Parliament election every five years as an exogenous shock to the party system equilibrium inside the chamber; adding new MEPs and new national party delegations and usually new EU member states too, changing the balance of power between the existing political groups, and changing the balance of power between the national parties within the political groups. Individual MEPs and national parties then consider their policy goals and strategic career incentives and decide whether to stay or switch political groups, until a new equilibrium emerges. A key reason why some MEPs want to switch is related to learning. MEPs learn over time whether their incentives are compatible with their existing political groups or whether they would be better off joining a new political group. MEPs tend to be risk averse, however, so think carefully before giving up the policy and office benefits they derive from their existing political group.

We test these ideas in a statistical model of party switching. One empirical innovation in our study is the use of roll-call voting data to measure actual divergence between individual MEPs and their groups' positions in votes. We are

the first to analyze switching for the entire history of the European Parliament, a growing and empowering supra-national legislative body. Using a conditional logit model we find that both power and ideology are important determinants of party switching in the European Parliament. Power difference has a positive effect on the probability of switching, meaning that MEPs move to more powerful political groups. MEPs are also likely to switch to ideologically closer political groups. Our results also indicate that loyalty, a measure of how often a member votes with his or her party leader, decreases the probability of switching, indicating that loyal members are less likely to switch party.

2. General Literature on Legislative Party Switching

In a comprehensive review of existing research on legislative party switching, Carol Mershon (2014) points out that a common feature of most research is that "politicians switch in search of both office and policy rewards" (cf. O'Brien and Shomer 2013). In terms of office rewards, MPs with leadership positions inside parties or in governmental office are less likely to switch to another party than 'backbenchers' (e.g. Nokken and Poole 2004, Castle and Fett 2000 in the US, Desposato 2006 in Brazil), although this is not always true. Parties in government are more likely to retain members than parties in opposition, which again suggests that the office benefits that governing parties can distribute reduces the incentives of members to switch (Mershon and Heller 2003 on Spain, Desposato 2009 on Brazil, Heller and Mershon 2005 on Italy, Thomas 2007 on Ukraine, Young 2014 on Malawi). Related to this, MPs tend to switch from smaller parties to larger parties (or majority parties in US legislatures), presumably in search of greater influence

over the legislative agenda and control of governmental and legislative positions (Castle and Fett 2000 on the US, Shor and Tomkowiak 2010 on US state legislatures, Thames 2007 on Ukraine, Heller and Mershon 2005 on Italy).

Existing empirical research also points to ideological or policy-based motivations for switching between legislative parties. In general, legislators tend to join and stay with parties with which they are ideologically closer and are then more likely to follow in roll-call votes (e.g. Heller and Mershon 2008 on Italy, Herron 2002 on Ukraine, Desposato 2006 on Brazil). For example, Reed and Scheiner (2003) and Desposato and Scheiner (2008) find that support for political reform amongst junior backbenchers was the key determinant of switching out of the Japanese Liberal Democrats. On the other hand, enforcing party discipline in an ideologically heterogeneous party can backfire, leading to switching out of a cohesive party to less disciplined parties, as Heller and Mershon (2008) found in Italy.

Most existing research on legislative party switching also points to electoral level incentives. For example, Mershon and Shvetsova (2008) find that in Italy and Russia different stages of the electoral cycle provide different sorts of incentives for legislative party switching; where switching increases as the next election approaches, as MPs try to increase their re-election chances by obtaining better positions on party lists. Zielinski, Slomczynski and Shabad (2005) find that in Poland voters in economically deprived districts rewarded politicians who switched out of the governing party. But, as party organizations stabilize at the electoral level in new democracies, party switching tends to decline, as Shabad and Slomczynski (2004) find in Poland and the Czech Republic. Nevertheless, in an analysis of party switching across 20 countries, O'Brien and Shomer (2013) find

that institutional contexts – such as whether a county is a presidential or parliamentary system, or whether a country has a candidate-centred or party-centred electoral system – are less significant than (policy-based or office-based) "legislators' motivations".

Scholars of party switching face two common identification problems: (1) how to independently identify policy/ideological incentives from office/career incentives; and (2) how to identify internal legislative incentives from electoral incentives. On the former, it is often difficult to know whether an MP switches parties because she feels ideologically closer to another party or because shes sees potential career benefits (such as government office or better committee positions) from switching, as usually both factors are observed together. On the latter, it is often difficult to know whether an MP switches parties because she expects immediate policy or office benefits or future electoral rewards, as these two sets of factors are usually not possible for scholars to observe at the same time.

These factors are more easily isolated at a theoretical level. The earliest theoretical model of party switching we know of is William Riker's (1959) theory of "party migration" as he called it. Riker assumes that each individual legislator is primarily motivated by "power", although he acknowledges ideological motivations too. He assumes at the party level that power is determined by the probability of being pivotal in a majority vote, using the Shapley-Shubik (1954) power index. But, within each party, he assumes that power is divided equally amongst the party members: "Assuming that each member of a party has l/m of the power of a party with m members, the power of a particular member, i, of a party, A , is defined thus: $P_i = P_A/m$." (pp. 123-4). He then assumes that a legislator will choose to 'migrate' to another party if he/she can increase her 'power' in the legislature. This model

suggests that legislators should leave weak smaller parties and join more 'pivotal' larger parties. Riker illustrates these findings with the case of party switching in the French Assembly in 1953-54.

More recently, Michael Laver and Ken Benoit (2003) have developed a theory of party switching based on cost-benefit calculations of individual legislators and potential recipient parties (cf. Laver and Sargenti 2011). In their set-up, power is distributed between and within parties in a similar way to Riker's model: with majoritarian coalition bargaining between parties, and proportional power within parties. However, a switch between parties only occurs if there is (1) an exogenous "event" for a legislator in his/her current party, which provides an incentive so switch, and (2) another party is more "attractive" for a legislator *and* this party is willing to accept the legislator (if it increases the party's overall power). Since the number of possible alternatives and moves in such a game is so huge (and intractable using classical game theory), Laver and Benoit assume that party systems inside legislatures, and decisions by legislators to switch parties, evolves in an evolutionary, iterative way. Using a computational approach they discover that a dominant large party is highly attractive to other legislators, and significantly more attractive (and willing to accept switchers) than the second-largest party, but that smaller parties will also be attractive and sustainable (against exit) if they are large enough to be pivotal in coalition bargaining.

Existing research on switching in the European Parliament has built on the general empirical research on party switching as well as these theoretical ideas. The most comprehensive studies to date of party switching in the European Parliament are by Gail McElroy and Kenneth Benoit (McElroy 2008, McElroy and Benoit 2007, 2009, 2010). A consistent theme in these papers is that party

9

switching in the European Parliament is driven primarily by ideology/policy preferences of national parties and individual MEPs. McElroy (2008) argues that national parties try to maximize the policy congruence between their own positions and their European political groups, and so will join a group whose policies are closest to their own. This theory is tested in McElroy and Benoit (2010) who use expert survey data of national party and European political group policy positions to show that only a very small number of national parties are in the "wrong" political group; where across all major policy issues, these parties would be closer to the average of another political group than the one they sit in. Furthermore, at the individual MEP level, McElroy and Benoit (2009) find that holding a senior office position in a political group does not necessarily reduce the likelihood that an MEP will switch to another group.

Nevertheless, Ana Maria Evans (2009) challenges McElroy and Benoit's policy-congruence explanation. Based on extensive interviews of former MEPs and staff in the European Parliament, as well as archival research, Evans finds that strategic incentives – such as better committee positions or more influence over the policy agenda – are powerful triggers of political group switching. Evans and Vink (2012) build on this approach, by providing detailed descriptive evidence of the types of office benefits MEPs have before and after switching, such as *rapporteurships* (legislative report authorships) and senior positions in committees, political groups, and the European Parliament as a whole.

We build on this existing research in several ways. By focusing on party switching in the European Parliament we aim to isolate internal legislative incentives for switching from external electoral incentives. We also design an empirical estimation strategy to identify the independent effects of ideology

(policy-driven) and strategic (office-driven) motivations for switching. Our measurement of ideology and policy-distance builds on Desposato (2006) and McElroy and Benoit (2007), while our measurement of strategic-incentives builds on Riker (1959) and Laver and Benoit (2003). We have also extended the time span of the existing research on the European Parliament, as we look at switching across a 35 year period, from 1979 to 2014.

Figure 1. European Parliament political groups at the start and end of each session
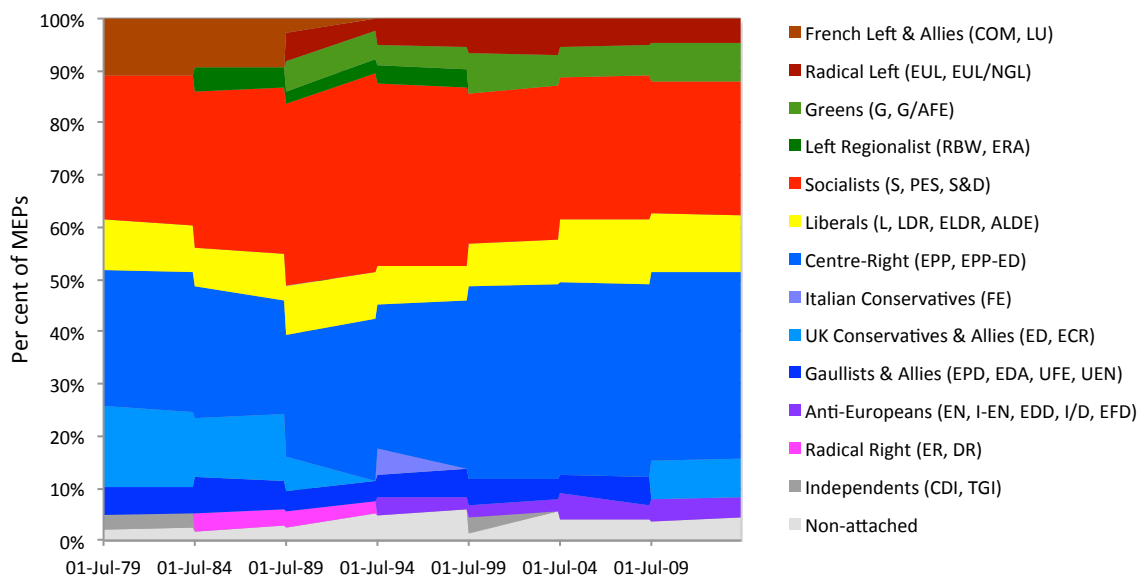
3. Explaining Party Switching in the European Parliament

Figure 1 shows the evolution of the political groups in the European Parliament at the start and end of each of the 7 directly elected parliaments between 1979 and 2014. The changes at the start of each parliament illustrate the shifts that result from the outcome of the European wide elections every five years. For example, in June 1999 the centre-right European People's Party (EPP) "won" the elections as they replaced the centre-left Socialists (S) as the largest political group. The

11

evolution between the beginning and the end of each session, meanwhile, is driven

by two other factors: (1) enlargement of the EU to new member states in the

middle of a session; and (2) switches of MEPs between political groups. For

example, during the 1994-99 session (EP4) the centre-right Forza Europa (FE)

group was formed at the beginning of the Parliament but dissolved into the EPP

before the end of that Parliament.

Table 1 illustrates the changing composition of the European Parliament as

a result of EU enlargements, changes in the political groups, and MEP party

switches in a bit more detail. The number of MEPs increased between 1979 and

2014, as a result of successive enlargements and changes to the EU treaties, which

reapportioned the MEPs between the EU member states. The EU enlarged during

every session of the elected European Parliament except 1989-94 (EP4).

With the exception of 1999, each European Parliament election led to

increased fragmentation of the party system inside the Parliament compared to the

end of the previous Parliament: either the number of political groups increased (in

1989), or the existing groups were more fragmented (in 2004 and 2009), or both

(in 1984 and 1994). This increased fragmentation is largely driven by the second-

order (protest) nature of European Parliament elections, which throws up new

national parties and protest votes against governing parties. By adding new MEPs

and new national parties, and by changing the balance of power between the

political groups as well as inside the groups (between the national member parties

in each group), each round of elections is an "exogenous shock" to the equilibrium

of the party system that emerged during the previous session of the Parliament. A

new party system is then formed at the beginning of each new Parliament, based

largely on the previous groups, but with new groups formed and/or existing groups slightly changed.

Table 1. EP composition and MEP party switchers

EP (years)	Period	Size of EP	Member states	Political groups	ENP	Total MEPs	No. of switchers	% switchers
1 (1979-84)	Start	410	9	8	5.167	544	9	1.7%
	End	434	10	8	5.021			
2 (1984-89)	Start	434	10	9	5.278	634	33	5.2%
	End	518	12	9	5.286			
3 (1989-94)	Start	518	12	11	5.017	601	131	21.8%
	End	518	12	9	3.842			
4 (1994-99)	Start	567	12	10	4.601	729	125	17.1%
	End	626	15	9	4.209			
5 (1999-2004)	Start	626	15	9	4.133	872	89	10.2%
	End	788	25	8	4.039			
6 (2004-09)	Start	732	25	8	4.254	943	88	9.3%
	End	785	27	8	4.195			
7 (2009-14)	Start	736	27	8	4.510	856	82	9.6%
	End	766	28	8	4.508			
Total						5179	557	10.8%

Note: ENP = Effective number of parties (Laakso and Taagepera 1979). The number of political groups in a Parliament includes the non-attached members as a single group.

However, the new party system that is formed is not usually a stable equilibrium, as MEPs and national parties "learn" that they might be better off (closer in policy terms, or with more access to political power) in a different political group than the one they found themselves in at the start of a Parliament. This leads to switching between groups within a Parliamentary session. Interestingly, this process of switching during a session has tended to reduce party system fragmentation, as the fall in the Effective Number of Parties (ENP) index between the start and the end of each Parliament shows (cf. Bardi 1994). This declining fragmentation suggests that MEPs have tended to leave the smaller groups and join the larger groups, most dramatically in EP3 (1989-94) and EP4

13

(1994-99), which both experienced a high proportion of switchers and a large reduction in party system fragmentation.

The declining party system fragmentation already gives us an indication of what might be driving party switching in the European Parliament: that MEPs leave smaller groups and join larger ones. Larger political groups in the European Parliament have a greater influence over agenda-setting and policy outcomes in the chamber for two reasons: first, larger groups have greater bargaining power than smaller groups in coalition building before (majority) legislative votes; and, second, larger groups control more key committee positions (Chairs and *rapporteurships*) than their simple size would suggest.

Where legislative bargaining is concerned, the larger groups are more likely to be on the winning side in legislative votes than the smaller groups. And, where committee positions are concerned, the number of committee chairs and vice-chairs each group obtains, as well as the order in which they are allocated, is determined by the d'Hondt divisor method of proportional representation. This method is broadly proportional, but nonetheless over-represents the larger groups in terms of the number of key committee positions they can obtain, and also favours the larger groups as they are able to "pick" all the best positions before the smaller groups have a chance to choose theirs (e.g. Corbett, Jacobs and Shackleton 2011). Meanwhile, *rapporteurships* are allocated in committees by an auction system, where each political group has an allocation of points in proportion to its size in the chamber as whole; which again means more points for the larger groups. Then, within the groups, power is allocated between the national delegations in a broadly proportionally, which means that the larger national delegations are able to obtain the key committee positions and *rapporteurships* won by a group.

In other words, where strategic incentives are concerned, national parties and individual MEPs often face a trade-off when deciding whether to switch groups. Is it better to be one of many relatively small national parties in a larger political group, or one of the largest national parties in a smaller group? To operationalize this trade-off we adapt Riker's (1959) index and calculate the power of a national party (P_n) in a political group as follows:

$$P_n = P_g \theta_n$$

where P_g is the power of political group g in the chamber as a whole – we use the Banzhaf (1965) power index – and θ_n is the size of a national delegation as a proportion of the MEPs in a political group.

For example, in June 2009 the UK Conservative Party left the European People's Party-European Democrats (EPP-ED) and formed a new group (together with several allies) called European Conservatives and Reformists (ECR). At the end of the 2004-09 Parliament, the EPP-ED group had 288 of the then 785 MEPs, which meant a voting power of 38.60. Within the group, the UK Conservatives had 27 MEPs (9.4% of EPP-ED), which meant an overall power of 3.62. Then, at the start of the 2009-14 Parliament, the ECR group had 55 of the then 736 MEPs, which meant a voting power of 8.04. The UK Conservatives had 25 MEPs (45.5% of ECR), which meant an overall power of 3.65.

In other words, in pure power terms, the decision to leave the larger EPP, where the UK Conservatives where one of many mid-sized national parties, to join the smaller ECR, where the UK Conservatives were by far the largest national party, was finally balanced. Interestingly, after switching groups, the UK Conservatives managed to hold on to the chairmanship of the Internal Market Committee, which is one of the most powerful committees in the Parliament. This is consistent with

our power calculations, which suggest that this switch had only a marginal effect on the overall decision-making power of UK Conservatives.

This discussion leads to the following hypothesis:

Hypothesis 1 (Power): All other things being equal, MEPs and national parties will switch political groups if their overall decision-making power will increase.

Of course, all other things are not equal! This is where policy preferences come in. National parties and MEPs prefer to be part of a group that shares their policy preferences. National parties are more likely to have their policies supported by their political group if the national party is ideologically close to the average member of the group. There are also costs for an MEP of being a member of a group that does not share the MEP's policy preferences. Political groups issue voting instructions on key votes, monitor their MEPs' voting behaviour, and employ "whips" to enforce the instructions. An MEP or a national party can be expelled from a group if the MEP/party votes against the group in a key vote (although this is rare). There is also evidence that MEPs are less likely to become *rapporteurs* if their national party is more ideological distant from the average member of a group, as measured by how often an MEP's national party votes against the group (Yoshinaka et al. 2010). The political groups have also become highly cohesive in legislative votes as a result of policy homogeneity inside the groups and because of these incentive structures (Hix et al. 2005, 2007).

To operationalize these policy concerns we focus on the policy "distance" between an MEP's national party and the average member of his or her political group on the two main dimensions of EU politics: left-right, and pro-/anti-Europe (cf. Hix et al. 2006). We use the Chapel Hill Experts Survey (Bakker at al. 2015) and

earlier related experts' surveys by Ray (1999) and Steenbergen and Marks (2007), to identify the left-right (1 to 10 scale) and pro-/anti-Europe (1 to 7 scale) positions of all national parties in each session of the European Parliament between 1979 and 2014. From these data and the numbers of MEPs of each national party in each group, we calculate the left-right and pro-/anti-Europe positions of the *median* member of each political group in each session between 1979 and 2014. We then calculate the absolute distance of each MEP's national party from the median left-right and pro-/anti-Europe position of his or her group in each session, as well as the MEP's distance from the median member of every other political group in a given session.

For example, in the 2004-09 Parliament the UK Conservatives were close to the EPP-ED average on a left-right scale but considerably less pro-European than the average member of that group: the UK Conservatives were at 6.56 on a 1-10 left-right scale compared to an EPP-ED median of 6.74, but at 2.56 on a 1-7 anti-/pro-Europe scale compared to an EPP-ED median of 5.55. In fact, when averaging across all the policy positions of the national parties and European political groups, Benoit and McElroy (2010) found that the UK Conservatives were closer to the average member of the (more right-wing and Eurosceptic) Union for a Europe of the Nations (UEN) group than the average member of the EPP-ED. From a policy congruence point of view then, it made sense for the UK Conservatives to leave the EPP-ED group and form a new more Eurosceptic group (ECR), which they did in June 2009 (cf. Benoit and McElroy 2011). In this new group in the 2009-14 Parliament, the UK Conservatives we much closer to the average: at 7.13 on a left-right scale compared to an ECR median of 7.42, and at a 2.27 on an anti-/pro-Europe scale compared to an ECR median of 2.79.

This leads to the following hypothesis:

Hypothesis 2 (Ideology): All other things being equal, MEPs and national parties will switch political groups if they are closer in policy terms to the average member of another political group than their current group.

There are, of course, multiple other intervening factors which influence whether a national party or an individual MEP switches political groups. The powers of the European Parliament have changed over time with the successive changes to the EU treaties. To control for this, as well as other European Parliament session specific factors, we add *dummy variables for each European Parliament session* (EP1 to EP7).

At the individual level, there may also be personal or idiosyncratic reasons why an MEP decides to switch groups, independent of strategic or ideological motivations. To control for these factors we include *MEP age*: we are agnostic about whether age or seniority is likely to lead an MEP to be more or less likely to switch groups. We also include a measure of the frequency with which an MEP votes against his or her group in all roll-call votes in a particular European Parliament session (*MEP loyalty*). This measure correlates with the policy distance between an MEP's national party and the average member of a group (Hix et al. 2005, 2006). Hence, because we already control for ideological distance with our policy distance measures, a significant amount of the remaining variance in each MEP's loyalty to his or her group is likely to explained by personal idiosyncratic factors. Presumably if an MEP votes against his or her group for non-policy or non-power idiosyncratic reasons, then he or she may also want to switch to another group. We hence expect *Loyalty* (the proportional of times an MEP votes *the same*

way as the majority of his or her group) to be *negatively* correlated with switching groups, after controlling for national party-level policy distance and power.

Other reasons for switching between groups may be related to national-specific factors, such as the type of electoral system used, national political cultures, the level of institutionalisation of a party system, or exogenously shocks to domestic party systems (e.g. Kreppel 2004, on Italy). *We hence include a dummy variable for each EU member state.* In some models we also control for whether a national party is *in government* at the national level or has an *EU Commissioner*.

Figure 2. MEP Political Group Switching ("Migration") 1979-2014
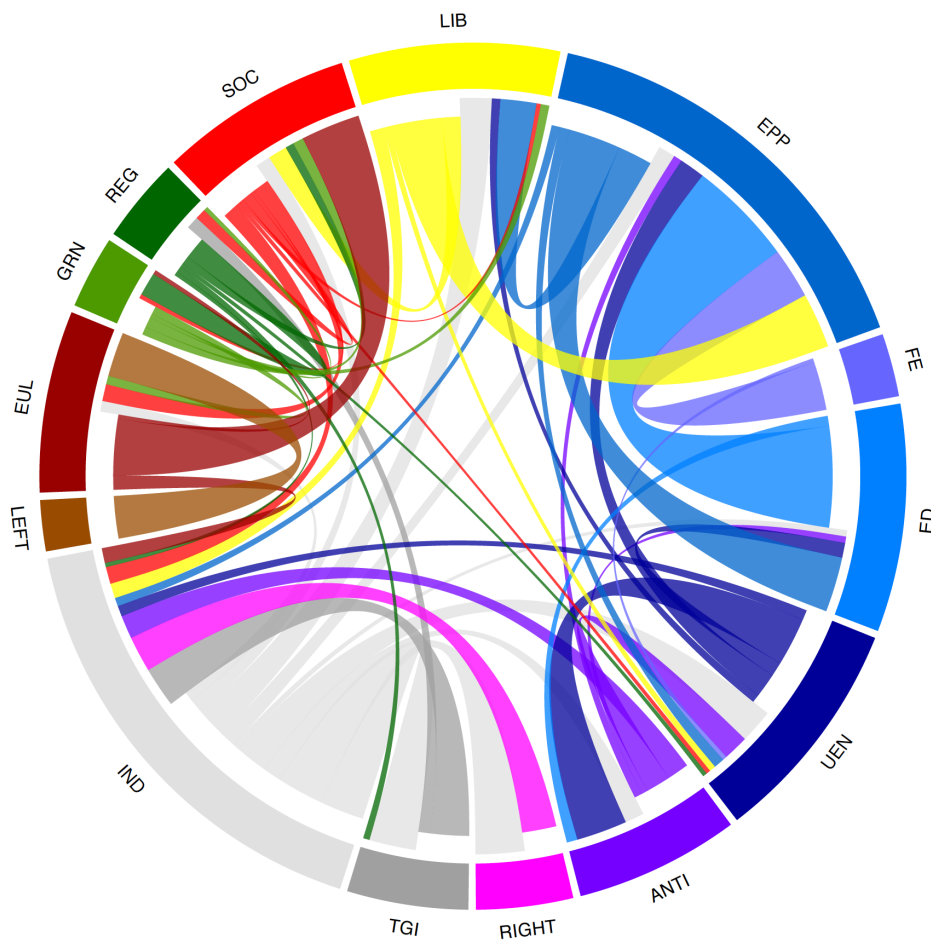
Note: The groups are ordered left to right, with TGI and IND placed between the furthest left and furthest right party. The Appendix contains a table of the 'from' and 'to' switches between the groups, on which this figure is based. See the Appendix for the key to the political groups.

4. An Empirical Analysis of Switching using Conditional Logit Model

The 577 political group switches by 504 MEPs between 1979 and 2014 constitute the dependent variable for our statistical model. Inspired by "migration flow" figures, Figure 2 shows the pattern of these switches. The two key determinants are both clearly observable: *power*, the relative volume of switching into the two largest groups, the EPP and SOC (as well into and out of the "group" of non-attached (IND) members); and *ideology*, the relative volume of switching between political groups adjacent to each other on the left-right spectrum.

To estimate the determinants of group switching we use McFadden's additive random utility model (ARUM):

$$U_{ijt} = V_{ijt} + \varepsilon_{ijt}$$

Here, the utility MEP *i* derives from staying with political group *j* at time *t* has two components: a deterministic component, V_{ijt}; and a random component, ε_{ijt}. If $U_{ijt} > U_{ikt}$ MEP *i* will stay with political group *j* at time *t* and will not switch. Otherwise, the MEP will join the political group *k* that is associated with the highest utility to the MEP. So, the probability that MEP *i* chooses political group *k* at time *t* is given by:

$$\Pr(S_{ikt} = 1 \mid x) = \Pr(U_{ikt} > U_{ijt}) \forall j \neq k$$

$$= \Pr(V_{ikt} + \varepsilon_{ikt} > V_{ijt} + \varepsilon_{ijt}) \forall j \neq k$$

$$= \Pr(\varepsilon_{ijt} - \varepsilon_{ikt} < V_{ikt} - V_{ijt}) \forall j \neq k$$

where S_{ikt} is a dummy variable indicating whether MEP *i* switched to political group *k* at time *t*.

The legislator compares all alternatives and chooses the alternative k that gives the highest utility among all alternatives. In this case, $\Pr(S_{it} = k) = \Pr(U_{itk} > U_{ijt})$ for all j.

If we make the assumption that the random components are iid type I extreme value distributed, we obtain the conditional logit model:

$$\Pr(S_{ijt} = k) = \frac{\exp(\sigma_{it}V_{ikt})}{\sum \exp(\sigma_{it}V_{ijt})}$$

where σ_{it} is a scale parameter usually normalized to 1. The deterministic component of the utility is a linear function of national party and European political group, as well as MEPs' personal characteristics:

$$V_{ikt} = \alpha + \beta\, x_{ikt} + z'_{it}\gamma_k$$

where x_{ikt} and z_{it} are alternative-specific and MEP-specific regressors, respectively. We then assume that our main independent variables are alternative-specific.

To summarize, our dependent variable is whether MEP i, who is currently member of political group j, switched party and moved to political group k. Our key independent variables are as discussed above, namely: (1) the power of each political group and the power of an MEP's national party before and after a political group switch; and (2) the ideological distance between an MEP's national party and each political group on the left-right dimension and an ant-/pro-EU dimension.

5. Results and Discussions

To compare political group switchers to non-switchers we first run a series of simple logit models, which are shown in Table 2, which include all switchers whether they switched at the start of the legislature ("start-switchers") or in the

21

middle ("mid-switchers"). Table 2a and 2b in the Appendix report the results for

mid-switchers and start-switchers separately. Looking first at power

considerations, in Table 2 we find that political group power decreases the

probability if switching. In other words, MEPs in more powerful (larger) political

groups switch less than those in less powerful (smaller) groups. Also, as the power

of an MEP's national party increases, the probability that the MEP will switch

groups also increases. Recall that we calculate national party power as proportion

of a political group controlled by a national party multiplied by the "power" of the

group in the chamber as a whole. Nevertheless, when controlling for national party

size (*NP prop before*), the effect of national party power changes direction. In other

words, for a given national party delegation size within a group, MEPs are less

likely to switch group if their national party is a powerful player in a group.

Table 2. Logit Models of Switching (Mid-Switchers and Start-Switchers Combined)

Independent variable	(1)	(2)	(3)	(4)	(5)
	Dependent variable: switched political group (1,0)				
NP power before	-0.3731***	0.1077***		-0.3459***	-0.3756***
	(0.0604)	(0.0325)		(0.0559)	(0.0605)
NP prop before	0.0563***		0.0372***	0.0554***	0.0563***
	(0.0043)		(0.0031)	(0.0042)	(0.0043)
EPG power before	-0.0190***	-0.0882***	-0.0435***	-0.0188***	-0.0193***
	(0.0072)	(0.0069)	(0.0068)	(0.0072)	(0.0072)
NP-EPG LR distance before	0.0805	-0.0343	0.1248	0.0772	0.0778
	(0.0770)	(0.0734)	(0.0760)	(0.0769)	(0.0771)
NP-EPG EU distance before	0.4465***	0.4533***	0.4558***	0.4418***	0.4554***
	(0.0709)	(0.0699)	(0.0710)	(0.0709)	(0.0704)
MEP loyalty	-3.0700***	-2.5473***	-2.9531***	-3.0294***	-3.0965***
	(0.3288)	(0.3276)	(0.3284)	(0.3269)	(0.3279)
MEP age	0.0158***	0.0162***	0.0169***	0.0163***	0.0159***
	(0.0059)	(0.0056)	(0.0059)	(0.0059)	(0.0059)
NP in government	-0.1384	-0.1392	-0.1802	-0.0651	
	(0.1485)	(0.1362)	(0.1461)	(0.1372)	
NP has a Commissioner	0.2325	0.0131	-0.1989		0.1708
	(0.1751)	(0.1608)	(0.1664)		(0.1618)
Constant	-4.5581***	-2.6147***	-4.3987***	-4.5399***	-4.5352***
	(0.6859)	(0.6078)	(0.6438)	(0.6847)	(0.6861)
EP Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	4,410	4,410	4,410	4,410	4,410
Pseudo R-squared	0.225	0.160	0.193	0.225	0.225

Turning to ideological considerations, the results suggest that policy congruence on the anti-/pro-Europe dimension is more important than policy congruence on the left-right dimension. Interestingly, as the results in (Appendix) Tables 2a and 2b show, we find a difference between MEPs who switch at the start of the Parliament and MEPs who switch during a parliamentary session: namely, whereas greater anti-/pro-Europe distance increases switching for at the beginning of a parliament and during a parliament, while left-right policy distance decreases switching at the start of a parliament but *increases* switching during a parliament. One way of interpreting this result is that different policy issues are dominant at different stages of the European Parliament's cycle: with attitudes towards the EU dominating MEPs' concerns immediately after a European Parliament election (which has been fought as a national contest), and left-right policy positions dominating MEPs' concerns once the legislative agenda of EU kicks in.

In addition, MEPs who are more loyal to their group are less likely to switch. Note that here we measure the loyalty of an MEP (in roll-call votes) to his or her first political group. Although loyalty is driven by numerous factors, such as ideological affinity with a group, group pressure, lobbying by interest groups and so on, the way we have estimated it here means that loyalty is not a direct consequence of switching. Because we measure the loyalty of an MEP before a switch to another group, the loyalty of an MEP to his or her previous group is not endogenous to the decision to switch, but is rather an exogenous determinant of the decision to switch.

In addition, we find that older MEPs are more likely to switch than younger MEPs. But, whether an MEP's national party has a commissioner or is in government at the national level are not significant.

These simple logit models only look at motivations to switch away *from* a political group: the "demand" side of an MEP's decision to switch groups. The other side is the "supply" side: the existence of an alternative and more desirable group to join. Without a better group to join (for power or ideological reasons), an MEP will stay put. We hence use conditional logit models to analyse the effect of power differences and ideological distances between MEPs and all political groups as correlates of political group switching. The results of this analysis are presented in Table 3 (and Tables 3a and 3b in the Appendix report the results for the start-switchers and mid-switchers separately).

Table 3. Conditional Logit Models of Switching

Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dependent variable: switched political group (1,0)						
EPG power difference	0.0188*** (0.0044)		0.0226*** (0.0041)	0.0191*** (0.0044)	0.0185*** (0.0044)	0.0188*** (0.0043)	0.0183*** (0.0044)
EPG size difference		0.4131*** (0.0626)					
NP power				-0.0397 (0.0820)	0.1161 (0.1341)	0.1350 (0.1170)	-0.0858 (0.1111)
LR distance	-0.7149*** (0.0524)	-0.7195*** (0.0528)	-0.7073*** (0.0516)	-0.7140*** (0.0523)	-0.7154*** (0.0524)	-0.7346*** (0.0514)	-0.7114*** (0.0520)
EU distance	-0.2813*** (0.0475)	-0.2861*** (0.0480)	-0.3082*** (0.0476)	-0.2827*** (0.0475)	-0.2804*** (0.0475)	-0.3162*** (0.0465)	-0.2847*** (0.0475)
NP switched	2.6402*** (0.2772)	2.5568*** (0.2775)		2.6264*** (0.2737)	2.6515*** (0.2776)	2.6349*** (0.2532)	2.6238*** (0.2692)
NP size	-0.0306 (0.0239)	-0.0284 (0.0236)	-0.0315* (0.0161)		-0.0553 (0.0374)	-0.0623* (0.0329)	-0.0182 (0.0353)
Loyalty	-1.1054 (0.9016)	-1.1953 (0.8926)	-0.0214 (0.6600)	-1.3758 (0.8796)	-0.9073 (0.9287)		-1.5305 (0.9352)
MEP age	0.0554*** (0.0208)	0.0515** (0.0209)	0.0678*** (0.0171)	0.0535** (0.0232)	0.0673*** (0.0250)	0.0661*** (0.0231)	
Observations	8,502	8,502	8,502	8,502	8,502	9,421	8,502
Pseudo R-sq.	0.261	0.271	0.198	0.260	0.261	0.273	0.258

Note: Standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

The conditional logit results, which exclude non-switchers and hence compare switchers with other switchers, confirm the additive effects of power and ideology we find with the simple logit models. An MEP is more likely to switch to a more powerful (larger) political group. This result holds across all possible specifications here. We also control for whether an MEP switched groups as part of a national party delegation switching *en bloc* from one political group to another.

Equally, an MEP is more likely to switch to an ideologically closer political group. In all specifications, the two policy distances variables have a negative sign, and both the left-right and EU policy distances are highly significant, although the effect of left-right distance is substantively larger. The results in (the Appendix) Tables 2a and 2b also show that the left-right effect is substantially larger for mid-session switchers than for start-switchers, although it is significant and in the same direction for both types of switching MEPs. In short, MEPs prefer to join political groups in which they will be closer in policy terms to the average member of a group, as was the case with the UK Conservatives when they moved from EPP-ED to ECR.

Finally, given that we focus here only on MEPs who switched groups, MEP loyalty is not generally significant. This is because other factors independently influence whether an MEP votes against his or her political group: MEPs in more powerful national parties and from national parties who are closer to the average member of a group are less likely to find themselves voting against a group position. Hence, once these factors are controlled for, individual level (idiosyncratic) determinants of MEP loyalty to a group do not significantly influence whether an MEP then decides to switch groups.

6. Conclusions

Elected politicians leaving one political party and joining another is more common than many scholars think. This "party switching" may be more common in new democracies or where political parties are weakly institutionalised. Yet, party switching is also common in many established democracies, and may become increasingly so as politics becomes more personalised and the power of parties over individual politicians erodes.

We investigate party switching in the European Parliament as an interesting laboratory, both of an elected legislature in a part of the world where many national parties have long histories, as well as a legislature where the "political groups" in the chamber are relatively weak organisations and continue to evolve. The European Parliament is also interesting from a general perspective, because of the disconnection between the politics inside the chamber and the national-focussed European Parliament election campaigns. This lack of a strong electoral connection means that party switching inside the European Parliament is driven by incentives internal to the legislature rather than potential electoral costs or benefits.

We find that both "power" and "ideology" play a role in MEPs' decisions to leave one political group and join another. MEPs are more likely to switch if the national party to which they belong is likely to have more influence over the policy agenda by switching groups. We measure this "power" as the size of a national

party weighted by the voting power of a political group in the chamber as a whole. For example, many national parties face a choice between being one of several medium-sized parties in a larger group and being a larger national party in a smaller, and less powerful, group. In general, these power incentives have led MEPs to switch from smaller groups to larger groups.

Ideology also plays a role. MEPs prefer to be in political groups that share their policy preferences. If an MEP is an ideological outlier in a group, she is more likely to find herself being asked by the group "whips" to vote against her ideological positions on key policy issues. Hence, MEPs who are ideological outliers tend to switch to groups whose policy positions are more congruent with their views. Looking at different measures of policy distance we found that both left-right and anti-/pro-Europe positions matter.

More generally, we find convincing evidence that internal legislative politics can be a powerful determinant of politicians changing parties in a parliament, independently of any electoral considerations. Once elected to a parliament, politicians aim to be promoted up the "slippery poll" of politics and to secure policy outcomes as close as possible to their own political views. A politician will consider moving to another party if it will further her political career and/or help her achieve her policy goals, particularly if the electoral costs of making such a move are likely to be low or non-existent, as is the case in the European Parliament.

References

Bakker, Ryan, Catherine de Vries, Erica Edwards, Liesbet Hooghe, Seth Jolly, Gary Marks, Jonathan Polk, Jan Rovny, Marco Steenbergen, and Milada Anna Vachudova (2015) Measuring Party Positions in Europe: The Chapel Hill Expert Survey Trend File, 1999–2010. *Party Politics* 21(1) 143-152.

Banzhaf, John F. (1965) Weighted Voting Doesn't Work: A Mathematical Analysis. *Rutgers Law Review* 19(2) 317–343

Bardi, Luciano (1994) Transnational Party Federations, European Parliamentary Groups, and the Building of Euro-Parties. In Richard S. Katz and Peter Mair (eds) How Parties Organize: Adaptation and Change in Party Organizations in Western Democracies. London: Sage, 357-372.

Benedetto, Giacomo (2007) Consensus and the Proportionality of Office Distribution in the European Parliament, 1994-2007. Paper presented at the 10th EUSA Biennial Conference, Montréal, Québec, 17-19 May.

Castle, David and Patrick J. Fett (2000) Member Goals and Party Switching in the US Congress. In William T. Bianco (ed.) *Congress on Display: Congress at Work*. Ann Arbor, MI: University of Michigan Press, pp. 231–241.

Corbett, Richard, Francis Jacobs and Michael Shackleton (2011) *The European Parliament*, 8th edn. London: John Harper.

Desposato, Scott W. (2006) Parties for Rent? Ambition, Ideology, and Party Switching in Brazil's Chamber of Deputies. *American Journal of Political Science* 50(1) 62-80.

Desposato, Scott W. (2009) Party Switching in Brazil: Causes, Effects, and Representation. In William Heller and Carol Mershon (eds) *Political Parties and Legislative Party Switching*. Basingstoke: Palgrave, 109-144.

Desposato, Scott and Ethan Scheiner (2008) Governmental Centralization and Party Affiliation: Legislator Strategies in Brazil and Japan. *American Political Science Review* 102(4) 509–524.

Evans, Ana Maria (2009) Bringing Back a Larger Pie from Brussels: The Adjustment of National Party Strategy Through Party Switching in the European Parliament. COES E-Working Paper, http://www.cies.iscte.pt/destaques/documents/cies-wp62_Evans.pdf.

Evans, Ana Maria, and Maarten Peter Vink (2012) Measuring Group Switching in the European Parliament: Methodology, Data and Trends (1979-2009). *Análise Social* 202(1) 92-112.

Heller, William B., and Carol Mershon (2005) Party Switching in the Italian Chamber of Deputies, 1996-2001. *Journal of Politics* 67: 536–59.

Heller, William B., and Carol Mershon (2008) Dealing in Discipline: Party Switching and Legislative Voting in the Italian Chamber of Deputies, 1988–2000. *American Journal of Political Science* 52(4) 910-925.

Herron, Erik S. (2002) Causes and Consequences of Fluid Faction Membership in Ukraine. *Europe-Asia Studies* 54: 625–639.

Hix, Simon, and Michael Marsh (2007) Punishment or Protest? Understanding European Parliament Elections. *Journal of Politics* 69(2) 495-510.

Hix, Simon, Abdul Noury and Gérard Roland (2005) Power to the Parties: Cohesion and Competition in the European Parliament, 1979-2001. *British Journal of Political Science* 35(2) 209-234.

Hix, Simon, Abdul Noury and Gérard Roland (2006) Dimensions of Politics in the European Parliament. *American Journal of Political Science* 50(2) 494-511.

Hix, Simon, Abdul Noury and Gérard Roland (2007) *Democratic Politics in the European Parliament*. Cambridge: Cambridge University Press.

Kreppel, Amie (2004) Moving in the other Direction? The Impact of Domestic Party System Change on Italian MEPs. *Journal of European Public Policy* 11(6) 975-999.

Laakso, Markku and Rein Taagepera (1979) Effective Number of Parties: A Measure with Application to West Europe. *Comparative Political Studies* 12(1) 3-27.

LaPalombara, Joseph and Myron Weiner (eds) (1966) *Political Parties and Political Development*. Princeton, NJ: Princeton University Press.

Laver, Michael and Kenneth Benoit (2003) The Evolution of Party Systems Between Elections. *American Journal of Political Science* 47(2) 215-233.

Laver, Michael and Ernest Sergenti (2011) *Party Competition: An Agent-Based Model*. Princeton, NJ: Princeton University Press.

McElroy, Gail (2008) Intra-Party politics at the trans-national level: Party switching in the European Parliament. In Daniela Giannetti and Kenneth Benoit (eds) Intra-Party Politics and Coalition Governments in Parliamentary Democracies. London: Routledge, 205-226.

McElroy, Gail, and Kenneth Benoit (2007) Party Groups and Policy Positions in the European Parliament. *Party Politics* 13(1) 5-28.

McElroy, Gail and Kenneth Benoit (2009) Party Group Switching in the European Parliament. In William Heller and Carol Mershon (eds) *Political Parties and Legislative Party Switching*. Basingstoke: Palgrave, 147–172.

McElroy, Gail, and Kenneth Benoit (2010) Party Policy and Group Affiliation in the European Parliament. *British Journal of Political Science* 40, 377–398.

McElroy, Gail, and Kenneth Benoit (2011) Policy Positioning in the European Parliament. *European Union Politics* 13(1) 150-167.

Merson, Carol (2014) Legislative Party Switching. In Shane Martin, Thomas Saalfeld, and Kaare W. Strøm (eds) *The Oxford Handbook of Legislative Studies*. Oxford: Oxford University Press.

Merson, Carol and William B. Heller (2003) Party Switching and Political Careers in the Spanish Congress of Deputies, 1982-1996. Paper presented at the annual meetings of the Midwest Political Science Association, Chicago, IL, 3-6 April.

Mershon, Carol and Olga Shvetsova (2008) Parliamentary Cycles and Party Switching in Legislatures. *Comparative Political Studies* 41(1) 99–127.

Nokken, Timothy and Keith Poole (2004) Congressional Party Defection in American History. *Legislative Studies Quarterly* 29(4) 454-568.

O'Brien, Diana Z., and Yael Shomer (2013) A Cross-National Analysis of Party Switching. *Legislative Studies Quarterly* 38(1) 111-141.

Ray, Leonard (1999) Measuring Party Orientations Toward European Integration: Results from an Expert Survey. *European Journal of Political Research* 36(2) 283-306.

Reed, Steven R., and Ethan Scheiner (2003) Electoral Incentives and Policy Preferences: Mixed Motives Behind Party Defections in Japan. *British Journal of Political Science* 33(3) 469–490.

Reif, Karlheinz and Hermann Schmitt (1980) Nine Second-order National Elections–a Conceptual Framework for the Analysis of European Election Results. *European Journal of Political Research* 8(1) 3-44.

Riker, William H. (1959) A Test of the Adequacy of the Power Index. *Behavioral Science* 4(2) 120–131.

Shor, Boris, and Mateusz Tomkowiak (2010) The Causes and Consequences of Party Switching in American State Legislatures. Paper presented at the Annual Meetings of the American Science Association, Washington, DC, 2-5 September.

Shabad, Goldie, and Kazimierz M. Slomczynski (2004) Inter-Party Mobility among Parliamentary Candidates in Post-Communist East Central Europe. *Party Politics* 10(2) 151-176.

Shapley, Lloyd S., and Martin Shubik (1954) A Method for Evaluating the Distribution of Power in a Committee System. *American Political Science Review* 48(3) 787–792.

Steenbergen, Marco and Gary Marks (2007) Evaluating Expert Judgments. *European Journal of Political Research* 46(3) 347-366.

Thames, Frank C. (2007) Searching for the Electoral Connection: Parliamentary Party Switching in the Ukrainian Rada, 1998–2002. *Legislative Studies Quarterly* 32(2) 223-256.

Yoshinaka, Antoine, Gail McElroy and Shaun Bowler (2010) The Appointment of Rapporteurs in the European Parliament. *Legislative Studies Quarterly* 35(4) 457-486.

Young, Daniel J. (2014) An Initial Look into Party Switching in Africa: Evidence from Malawi. *Party Politics* 20(1) 105–115.

Zielinski, Jakub, Kazimierz M. Slomczynski and Goldie Shabad (2005) Electoral Control in New Democracies: The Perverse Incentives of Fluid Party Systems. *World Politics* 57(3) pp. 365-395.

Table A1. Political Group Switches in the European Parliament, 1979-2014

To: From:	LEFT	EUL	GRN	REG	SOC	LIB	EPP	FE	ED	UEN	ANTI	RIGHT	TGI	IND	Total
LEFT	0	21	0	0	1	1	0	0	0	0	0	0	0	0	23
EUL	0	0	2	0	28	0	0	0	0	0	0	0	0	7	37
GRN	0	4	0	2	5	4	1	0	0	0	0	0	0	0	16
REG	1	0	11	0	4	1	0	0	0	2	0	0	3	2	24
SOC	0	8	2	5	1	2	1	0	0	2	0	0	1	8	30
LIB	0	0	0	0	9	0	26	0	0	3	0	1	0	7	46
EPP	0	0	1	1	0	17	0	1	26	5	1	1	0	4	57
FE	0	0	0	0	0	1	24	0	0	2	0	0	0	0	27
ED	0	0	0	0	0	1	50	0	0	0	5	1	0	0	57
UEN	0	0	0	1	1	4	12	0	7	0	24	0	0	5	54
ANTI	0	1	0	0	0	0	4	0	3	12	0	0	0	11	31
RIGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
TGI	0	0	0	6	1	0	0	0	0	1	1	0		19	28
IND	0	5	1	1	7	15	8	0	3	16	9	23	22	0	110
Total	1	39	17	16	57	46	126	1	39	43	40	26	26	80	557

Key to political groups:
LEFT = French Left and Allies (Communist and Allies Group, Left Unity)
EUL = Radical Left (European United Left, European United Left/Nordic Green Left)
GRN = Greens (Green Group, Greens/European Free Alliance)
REG = Left Regionalists (Rainbow Group, European Radical Alliance)
SOC = Socialists (Socialist Group, Party of European Socialists, Socialists and Democrats)
LIB = Liberals (Liberal and Democratic Group, European Liberal Democratic and Reform Group, Alliance of Liberals and Democrats for Europe)
EPP = Centre-Right (European People's Party, European People's Party-European Democrats)
FE = Italian Conservatives (Forza Europa)
ED = UK Conservatives and Allies (European Democratic Group, European Conservatives and Reformists)
UEN = French Gaullists and Allies (European Progressive Democrats, European Democratic Alliance, Union for Europe, Union for Europe of the Nations)
ANTI = Anti-Europeans (Europe of Nations, Independents for a Europe of Nations, Europe of Democracies and Diversities, Independence/Democracy, Europe of Freedom and Democracy)
RIGHT = Radical Right (European Right, Technical Group of the European Right)
TGI = Independents (Technical Coordination and Defence of Independents, Technical Group of Independents)
IND = non-attached MEPs

Description of the Variables

Switched political group *(dependent variable)*
Whether an MEP switched from one political group to another political group in a particular session of the European Parliament (1,0). If an MEP switched several times in a session, only the first and last group are counted.

NP power before
The power of an MEP's national party (P_n) in a political group (before an MEP switched groups), which is calculated as $P_n = \Theta_n P_g$, where P_g is the power of political group g in the chamber as a whole and Θ_n is the size of a national delegation as a proportion of the MEPs in a political group.

NP power difference
The difference in the power of an MEP's national party, between the national party's power in the MEP's current political group and the national party's power if it joined another political group.

NP prop before
The size (number of MEPs) of an MEP's national party (0 to 1), as a proportion of the number of MEPs in the political group, before the MEP switched groups.

NP size
The number of MEPs in an MEP's national party.

NP size difference
The difference in the size of an MEP's national party, between the national party's size in the MEP's current political group and the national party's size if it joined another political group.

EPG power before
The voting power of an MEP's political group (0 to 1), calculated as the average of the Banzhaf (1965) power index of a group at the beginning of a Parliament and at the end of a Parliament, using the number of MEPs at the beginning and end of a Parliament and a simple majority rule.

NP-EPG LR distance before
The absolute distance between an MEP's national party and the median member of his/her political group on a 0-10 left-right scale before the MEP switched groups.

NP-EPG EU distance before
The absolute distance between an MEP's national party and the median member of his/her political group on a 0-7 anti-/pro-EU scale before the MEP switched groups.

LR distance
The absolute distance between an MEP's national party and the median member of a political group, on a 0-10 left-right scale.

EU distance
The absolute distance between an MEP's national party and the median member of a political group on a 0-7 anti-/pro-EU scale.

MEP loyalty
The proportion of times (0 to 1) an MEP voted with the plurality of his/her political group, in all roll-call votes in a particular European Parliament session. For the MEPs who switched groups, this for all votes before an MEP switched groups.

MEP age
The age of an MEP, in years, at the start of a session of the European Parliament.

NP in government
The MEP's national party was in government at the national level for a majority of a session of the European Parliament (1,0).

NP has a Commissioner
The MEP's national party had an EU Commissioner for a majority of a session of the European Parliament (1,0).

NP switched
Dummy variable (1,0) for if an MEP switched between political groups as part of a national party delegation switching *en bloc* from one political group to another.

EP1-EP7
Dummy variables (1,0) for each session of the European Parliament: 1979-84 (EP1), 1984-89 (EP2), 1989-94 (EP3), 1994-99 (EP4), 1999-2004 (EP5), 2004-09 (EP6), 2009-14 (EP7).

Table A2. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Switched political group	5179	0.065	0.247	0	1
NP power before	5171	2.486	3.013	0	16.16
NP prop before	5167	17.85	21.51	0	242.86
NP size	5170	14.87	13.96	0	62
EPG power before	5179	20.62	12.99	1.75	41.96
NP-EPG LR distance before	4683	0.628	0.641	0	7.39
NP-EPG EU distance before	4746	0.667	0.721	0	4.76
MEP loyalty	4718	0.889	0.133	0	1
MEP age	5177	50.03	10.19	18	88
NP in government	5179	0.439	0.488	0	1
NP has a Commissioner	5179	0.381	0.481	0	1
NP switched	5179	0.419	0.200	0	1
EP session	5179	4.352	1.952	1	7

Note: EPG = European political group. NP = national party.

Table 2a. Simple Logit (Mid-switchers)

Independent variable	(1)	(2)	(3)	(4)	(5)
	Dependent variable: switched political group (1,0)				
NP power before	-0.2038***	0.2173***		-0.1703***	-0.2030***
	(0.0658)	(0.0360)		(0.0608)	(0.0658)
NP prop before	0.0528***		0.0408***	0.0514***	0.0530***
	(0.0059)		(0.0037)	(0.0057)	(0.0059)
EPG power before	-0.0523***	-0.1541***	-0.0732***	-0.0502***	-0.0522***
	(0.0119)	(0.0122)	(0.0111)	(0.0116)	(0.0120)
NP-EPG LR distance before	0.3055***	0.1277	0.3156***	0.3014***	0.3063***
	(0.0914)	(0.0817)	(0.0873)	(0.0897)	(0.0916)
NP-EPG EU distance before	0.3622***	0.3315***	0.3677***	0.3476***	0.3606***
	(0.0883)	(0.0845)	(0.0870)	(0.0871)	(0.0883)
MEP loyalty	-2.3294***	-1.9037***	-2.1795***	-2.2391***	-2.3270***
	(0.5387)	(0.5133)	(0.5254)	(0.5268)	(0.5400)
MEP age	-0.0011	0.0006	-0.0005	-0.0003	-0.0011
	(0.0072)	(0.0066)	(0.0070)	(0.0071)	(0.0072)
NP in government	0.0486	0.0128	-0.0104	0.2002	
	(0.1868)	(0.1723)	(0.1817)	(0.1652)	
NP has a Commissioner	0.4016*	0.4009**	0.2137		0.4274**
	(0.2182)	(0.2019)	(0.2091)		(0.1949)
Constant	-4.4730***	-2.6061***	-4.4056***	-4.4278***	-4.4922***
	(0.8745)	(0.7707)	(0.8102)	(0.8565)	(0.8735)
EP Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	4,410	4,410	4,410	4,410	4,410
Number of mepno	2,762	2,762	2,762	2,762	2,762

Table 2b. Simple Logit (Start-switchers)

Independent variable	(1)	(2)	(3)	(4)	(5)
	Dependent variable: switched political group (1,0)				
NP power before	-0.4759***	-0.1593***		-0.4968***	-0.4781***
	(0.0955)	(0.0614)		(0.0882)	(0.0953)
NP prop before	0.0373***		0.0136***	0.0382***	0.0378***
	(0.0068)		(0.0043)	(0.0066)	(0.0068)
EPG power before	-0.0295***	-0.0500***	-0.0503***	-0.0294***	-0.0310***
	(0.0099)	(0.0095)	(0.0092)	(0.0100)	(0.0099)
NP-EPG LR distance before	-0.3948***	-0.3854***	-0.2606*	-0.3966***	-0.4027***
	(0.1453)	(0.1429)	(0.1370)	(0.1456)	(0.1463)
NP-EPG EU distance before	0.7585***	0.6894***	0.7268***	0.7601***	0.8003***
	(0.1222)	(0.1173)	(0.1185)	(0.1221)	(0.1206)
MEP loyalty	-4.7850***	-5.5042***	-5.1580***	-4.8365***	-4.8202***
	(0.9558)	(0.9336)	(0.9350)	(0.9511)	(0.9589)
MEP age	-0.0014	0.0033	0.0001	-0.0018	-0.0010
	(0.0110)	(0.0107)	(0.0108)	(0.0109)	(0.0109)
NP in government	-0.4059	-0.4823**	-0.4356*	-0.4540*	
	(0.2522)	(0.2416)	(0.2426)	(0.2369)	
NP has a Commissioner	-0.1614	-0.5069*	-0.9811***		-0.3253
	(0.2978)	(0.2882)	(0.2796)		(0.2779)
Constant	0.5982	1.4545	0.3055	0.6619	0.5273
	(1.1323)	(1.1032)	(1.1167)	(1.1258)	(1.1299)
EP Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	1,641	1,641	1,641	1,641	1,641
Pseudo R-squared	0.316	0.280	0.283	0.316	0.313

Table 3a. Conditional Logit Models of Switching (Mid-switchers)

Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Dependent variable: switched political group (1,0)				
EPG power difference	0.0188***		0.0226***	0.0191***	0.0185***	0.0188***	0.0183***
	(0.0044)		(0.0041)	(0.0044)	(0.0044)	(0.0043)	(0.0044)
EPG size difference		0.4131***					
		(0.0626)					
NP power				-0.0397	0.1161	0.1350	-0.0858
				(0.0820)	(0.1341)	(0.1170)	(0.1111)
LR distance	-0.7149***	-0.7195***	-0.7073***	-0.7140***	-0.7154***	-0.7346***	-0.7114***
	(0.0524)	(0.0528)	(0.0516)	(0.0523)	(0.0524)	(0.0514)	(0.0520)
EU distance	-0.2813***	-0.2861***	-0.3082***	-0.2827***	-0.2804***	-0.3162***	-0.2847***
	(0.0475)	(0.0480)	(0.0476)	(0.0475)	(0.0475)	(0.0465)	(0.0475)
NP switched	2.6402***	2.5568***		2.6264***	2.6515***	2.6349***	2.6238***
	(0.2772)	(0.2775)		(0.2737)	(0.2776)	(0.2532)	(0.2692)
NP size	-0.0306	-0.0284	-0.0315*		-0.0553	-0.0623*	-0.0182
	(0.0239)	(0.0236)	(0.0161)		(0.0374)	(0.0329)	(0.0353)
Loyalty	-1.1054	-1.1953	-0.0214	-1.3758	-0.9073		-1.5305
	(0.9016)	(0.8926)	(0.6600)	(0.8796)	(0.9287)		(0.9352)
MEP age	0.0554***	0.0515**	0.0678***	0.0535**	0.0673***	0.0661***	
	(0.0208)	(0.0209)	(0.0171)	(0.0232)	(0.0250)	(0.0231)	
Observations	8,502	8,502	8,502	8,502	8,502	9,421	8,502
Pseudo R-sq.	0.261	0.271	0.198	0.260	0.261	0.273	0.258

Table 3b. Conditional Logit Models of Switching (Start-switchers)

Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Dependent variable: switched political group (1,0)				
EPG power difference	0.0229***		0.0231***	0.0235***	0.0230***	0.0220***	0.0229***
	(0.0087)		(0.0079)	(0.0086)	(0.0087)	(0.0085)	(0.0087)
EPG size difference		0.7042***					
		(0.1146)					
NP power				-0.1645	-0.0379	-0.0470	-0.0611
				(0.2035)	(0.2610)	(0.2379)	(0.2383)
LR distance	-0.8780***	-0.9096***	-0.7749***	-0.8782***	-0.8774***	-0.8305***	-0.8772***
	(0.0986)	(0.1034)	(0.0870)	(0.0988)	(0.0986)	(0.0915)	(0.0986)
EU distance	-0.7101***	-0.8320***	-0.7109***	-0.7093***	-0.7092***	-0.6744***	-0.7098***
	(0.1016)	(0.1150)	(0.0976)	(0.1017)	(0.1017)	(0.0966)	(0.1017)
NP switched	3.3666***	3.5210***		3.1769***	3.3554***	3.4457***	3.3161***
	(0.5833)	(0.6474)		(0.5236)	(0.5926)	(0.5822)	(0.5616)
NP size	-0.0756	-0.0685	-0.0310		-0.0679	-0.0841	-0.0597
	(0.0681)	(0.0743)	(0.0350)		(0.0862)	(0.0753)	(0.0776)
Loyalty	-0.6559	-1.1266	-2.1212	-1.2504	-0.7503		-0.9909
	(2.7075)	(2.7513)	(2.0325)	(2.7036)	(2.7857)		(2.5689)
MEP age	0.0127	-0.0099	-0.0209	-0.0045	0.0101	0.0011	
	(0.0407)	(0.0414)	(0.0293)	(0.0400)	(0.0444)	(0.0398)	
Observations	2,854	2,779	2,854	2,854	2,854	3,069	2,854
Pseudo R-sq.	0.390	0.449	0.304	0.389	0.390	0.376	0.390

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.