Ideological positions of party switchers*

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Abstract

Hardly any other parliament has seen as many MPs switching their legislative party membership during legislative periods as the Polish parliament. This allows for a detailed assessment whether MPs switch their party to be more in accord with the positions defended by their party leaders, or if after a party switch, party discipline affects the ideological positions. Drawing on the complete record of voting by Polish MPs, the paper demonstrates that MPs’ positions are strongly influenced by their legislative party membership.

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1 Introduction

One of the most vexing problems in the literature on congressional politics is how to determine the independent effect of political parties on the roll-call behavior of their members. For more than a century, scholars have sought to separate the effects of party, constituency, and personal preferences, with varying degrees of success. (Roberts 2007, 350f.)

The phenomenon that members of parliament (MPs) change their party group affiliation during their legislative term (or during an election campaign) is hardly new. Such party switching has been studied mostly under two angles. First of all scholars attempted to understand under what circumstances MPs change their allegiance from one party to the other. A series of explanations have been provided to account for this phenomenon. Second, scholars have used MPs that switch party to assess the effect of party discipline. More specifically, scholars in this field argue that if an MP changes his ideological position due to a party switch, this change must be due to party pressure and thus offer some estimates of the effects of party discipline.

These two literatures have evolved to a large degree in a separate fashion. This is unfortunate, as the results obtained in each of these literatures have a direct bearing on the other. More precisely, if the recent work trying to explain party switching is correct, then the MPs that leave a party and are accepted by another (e.g. Laver and Benoit 2003) are not your average MPs, but distinguish themselves from the MPs that stay put in their party. This has a direct implication on the second literature in which scholars attempt to infer effects of party discipline by comparing ideological positions of party switchers. As such analyses only make sense if party switchers are approximately a random sample of all MPs, and thus do not distinguish themselves systematically from the party stayers, finding specific reasons for party switching undermines this research strategy.

In the present paper we start engaging the two literatures by employing novel tools. More precisely we want to estimate in a more accurate way the effects of party switching on ideological positions and prepare the way for a more precise estimation of the causal effect of party discipline. To do so we rely on the complete voting record of the Polish parliament’s lower chamber (Sejm) during its III (1997-2001), IV (2001-2005), and V (2005-2007) legislative periods. Using the Polish Sejm as case has several advantages. First of all it is one of the parlia-
ments that has seen the most extensive party switching (Noury, Dobrowolski and Mazurkiewicz 1999; Shabad and Slomczynski 2004; Zielinski, Slomczynski and Shabad 2005; Makowski 2008; McMenamin and Gwiazda 2011 (forthcoming)).

Second, given that a complete voting record from the Sejm is available, we do not need to worry about possible selection issues (Hug 2010a).

Based on this large dataset we estimate ideal-points for all MPs, where MPs that switched party appear as additional observations after each party switch. We then rely on a hierarchical model with which we estimate at the same time the ideal-points of MPs and the effect a switch in party allegiance has on these positions. We find that party switching in all of the considered legislatures induced frequently a shift to the left of MPs. When assessing more closely the effect of the “receiving” party, we find context dependent effects.

In the remainder of the paper we proceed as follows. We start in section two with a discussion of the two literatures dealing with the phenomenon of party switching. In section three we present in more detail the data we employ and discuss the empirical models we rely upon. Section four presents the empirical results, and in section five we conclude and present the next steps in this research endeavor.

2 Party Switching and Party Discipline

As mentioned above, party switching has been studied in two rather separate literatures which we will discuss below as they pertain to our research question.

2.1 Party Switching

In general party switching is not a widespread phenomenon in contemporary legislatures (Heller and Mershon 2009). In some parliaments, often in countries with not very strongly institutionalized party systems, party switching is, however, more common. The most systematic theoretical assessment of party switching appears in Laver and Benoit (2003). They argue that in order to understand party switching it is necessary to consider the incentives both of the “sending” party, the MP in question and the “receiving” party. For all these actors there is a trade-off between increasing party influence and having to share the benefits with a larger set of party members.
The remaining theoretical literature draws mostly on the objectives that political parties pursue, and that might also induce MPs to switch their allegiance (e.g. Heller and Mershon 2009). Consequently, the motivations of switching MPs may be related to vote-, office- or policy-seeking (e.g. Desposato 2006b; McElroy 2008; McElroy and Benoit 2009; McMenamin and Gwiazda 2011 (forthcoming)). The vote-seeking argument relies on the idea that an MP switches his party if he considers his reelection chances to be higher when running for the new party. When the office-seeking motivation applies, an MP may switch to another party that can offer him offices in the party group or parliament, which the “sending” party may not do (or want to do). Finally, an MP may also switch party if he considers that the new party will be more forthcoming in supporting policies that he is particularly interested in.

At the empirical level, several studies have found evidence for motivations related to vote seeking (e.g. Desposato 2006b), also in the context of Poland (e.g. McMenamin and Gwiazda 2011 (forthcoming)). Office-seeking motivations appear to play a role as well in some contexts, as in Brazil (e.g. Desposato 2006b) or the European Parliament (e.g. McElroy and Benoit 2009). Quite clearly then, if these theoretical arguments apply and the empirical analyses point to a real phenomenon, assessing the effect of party discipline on the basis of party switchers is far from an easy task.

2.2 Explaining Legislative Voting Behavior

As discussed above, party switching has also been used to answer the fundamental question in legislative research: What drives MPs’ legislative voting behavior? To some extent, a legislator’s voting decisions can simply be explained by her idiosyncratic policy preferences (Krehbiel 1993). Strategic legislators, however, will hardly make any of their voting choices entirely in isolation from others. Since their behavior typically takes place in an interactive political context, legislative decision makers are well advised to take into account the preferences of those actors who have control over resources that are critical to the achievement of legislators’ goals.

According to the legislative behavior literature, political parties – i.e. party leaders – pursue a combination of three different but interrelated broad objectives: they are (i) vote-seekers, (ii) office-seekers, and (iii) policy-seekers (Budge and
Laver 1986; Strøm 1990; Strøm and Müller 1999). As this paper’s focus is on the behavior of parliamentary parties’ rank-and-file members, we more generally assume that all MPs are concerned with policy-making, career advancement, and reelection (see also Kam 2009, 17; Fenno 1973, 1f.). Whatever weight is attached to each of these goals, there is a set of resources outside of the individual MP’s direct and exclusive control that are crucial to the achievement of her desired mix of objectives. Of what elements the set consists, however, depends in large part on the institutional environment in which legislators are embedded.

In parliamentary democracies with party-list PR electoral systems, reelection-seeking MPs may draw on two (non-individual) resources, the first being the collective reputation – or public record – of their party and the second being some product of their party’s vote share and district magnitude relative to the candidate’s position on the party-list. A party’s public record, as defined by Cox and McCubbins (2007, 102), “consists of actions, beliefs, and outcomes commonly attributed to the party as a whole”. Since voters usually only have very incomplete and imperfect information on the candidates running for (re)election, party labels can provide valuable informational cues about candidates’ preferences and behavior once they enter or return to office (Jones and Hudson 1998). However, in order to reap the benefits of bearing a party label, incumbent MPs have to be nominated for reelection by their party organization. Nomination for reelection is also a necessary condition for taking advantage of the second resource. If this condition is fulfilled, the probability of reelection ultimately depends on the candidate’s placement on the party list and the share of votes received by the party and, contingent upon the electoral system, the candidate. The rather sparse available information on candidate selection processes in Polish parties suggests that the constituency electoral lists, in an initial stage, are selected locally. In most cases, however, the central party leadership has considerable gatekeeping powers, such as the power of approving and positioning candidates and taking final decisions on the composition of the lists (Szczerbiak 1999, 2000).

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1 The two terms parliamentary democracy and parliamentary government are used interchangeably throughout this article. Both refer to Strøm’s (2000, 265) minimal definition of parliamentarism as an “institutional arrangement by which the executive is accountable, through a confidence relationship, to any parliamentary majority”.

2 However, similar to long-established democracies in Western Europe (see Gallagher and Marsh 1988), the decentralization of candidate selection varies across parties. For example, the Civic Platform’s (PO) selection procedure seems to be fairly decentralized, since in the 2001
substantial overlaps in leadership of the parliamentary and extra-parliamentary parties, the dominant role of parliamentary party leaders is further strengthened (Szczerbiak 2000).

Since its introduction in 1991, semi-open (or flexible) list proportional representation was used throughout all elections to the Sejm (Birch et al. 2002, 28). By exercising preferences for individual candidates, voters can change their position on the party list. As a consequence, candidates’ (re)election prospects depend not only on the general support for their party as a whole, but additionally on the individual support they receive among the electorate (Hix 2004, 196). Although this institutional setting increases incentives to cultivate a personal reputation versus the party’s collective reputation (Carey and Shugart 1995), Hix (2004, 197) argues that “[…] the overwhelming majority of voters choose to vote for the preordered list rather than for individual politicians”. Therefore, personal (or preference) votes rarely determine which candidates are elected.

Having strong incentives to advance their career, office-seeking MPs are interested in gaining prestigious positions, such as seats or leadership positions in legislative committees. Committee chairs are generally selected by their own committees. Mattson and Strøm (1995, 277f.) however suggest that this is just the “formal part of the story” and even where committees elect their chairs, the actual decisions have already been taken elsewhere. Although the centralization of committee assignment procedures varies between parliaments (Mattson and Strøm 1995, 275ff.), these assignments are usually of vital importance to party leaders (Cox and McCubbins 2007; Damgaard 1995). Much of the literature agrees in that committee assignment is one of the resources at the disposal of party group leaders in order to reward loyal MPs (or punish defectors from the party line).

Policy-seeking legislators may be in a more difficult position, since the single rank-and-file hardly can influence her parliamentary party group’s policy positions in a decisive way. A possible solution is the building of factions – i.e. intra-party subunits (Brady and Bullock 1983, 600f.) – in order to promote certain policy positions vis-à-vis the party leadership; this, however, requires the overcoming of collective action problems and the challenges of rivalry (Bowler, Farrell and Katz 1999, 14ff.). Thus, it could be less costly to secure one’s influence (for the most part) primaries were used as selection mechanism (Millard 2003, 75).
ence on policy through maintaining a good relationship to party leaders or to run for an influential position inside the legislature.

In sum, independently of how a legislator weights reelection to parliament, career advancement and policy-making, there are two sets of principals who control resources that are crucial to the achievement of her goals: (i) party leader(s) and (ii) constituents. Rational legislators’ voting decisions will thus not solely be determined by idiosyncratic ideology, but also reflect the preferences of these principals. This relationship is illustrated in figure 1.

![Diagram](image)

**Figure 1: Determinants of Legislative Voting Behavior**

As is shown in figure 1, an individual legislators’ voting behavior is considered to be responsive to both the preferences of her party group and constituents’ interests. To what extent an MP will also take into account preferences of voters outside her district, depends, *inter alia*, on the electoral system. From 1991 to 1997, Poland had a two-tier PR system: additionally to the 391 MPs that were chosen from constituency party lists (1st tier), voters elected 69 deputies from national party lists (2nd tier; abolished in 2001) (Birch et al. 2002, 27). Since seats from the national list were allocated in proportion to the district seats won, candidates from the national list should have been concerned with more general constituency interests.

Much research has been done to estimate the effects these factors have on an individual MP’s legislative voting decisions (see e.g. Levitt 1996). The results, however, have been mixed. While some scholars argue that parties have min-
imal influence on legislators’ behavior (e.g. Krehbiel 1993; McCarty, Poole and Rosenthal 2001), others suggest that their effect is decisive (e.g. Ansolabehere, Snyder and Stewart 2001). Disentangling the effects of the various principals, and especially the one of the political party, is, however, difficult as many scholars noted (Roberts 2007, 350ff.). Due to the strong correlation between both a legislator’s ideology and party and MP ideology and district constituency preferences, estimating the true effect of parties is complicated (see also Shor and Tomkowiak 2010). Recently, in order to address such problems, scholars have begun to make use of the phenomenon of legislative party switching (e.g. Nokken 2000; McCarty, Poole and Rosenthal 2001; Nokken and Poole 2004; Desposato 2006a). Such studies are based on the presumption that when switching a party all other determinants of an MP’s voting behavior (i.e. ideology and constituency preferences) remain the same and that these MPs are a random subset of all MPs of a party. If the literature dealing with explaining party switching is correct, however, these assumptions are very unlikely to be correct. Consequently, we try in what follows to prepare the empirical groundwork to allow for a more accurate assessment of the ideological positions of party switchers and how (and why) they change.

3 Data and Empirical Models

3.1 The Data

This paper focuses on a single legislative institution, the Sejm, which is Poland’s lower house of parliament. We collected data for the last three legislatures, thus covering a period of 10 years (1997-2001: III Cadence; 2001-05: IV Cadence; 2005-07: V Cadence). Voting in the Sejm is systematically carried out by roll-call. All votes are recorded and made publicly available on the Sejm’s web page at the conclusion of each parliamentary session (Kistner 2006b, 20). By using SQL and R’s (R Development Core Team 2010) abilities for parsing text, the data was striped directly from this web site. Drawing on the complete record of votes cast on the chamber’s floor has the advantage of mitigating the risk that our inference is prone to selection bias. In contrast, as Roberts (2007) and Hug

3More precisely, votes are cast by hand raising and simultaneously using an electronic vote-recording device (Kistner 2006b, 20).

4See http://www.sejm.gov.pl/
(2010b) have demonstrated, analyses of roll call votes that are based on only a (non-random) subset of all votes taken in parliament may be considerably biased.

Considering only votes with strictly binary decision outcomes (yea or nay; votes on, for instance, the selection of the Sejm Marshal are omitted) and excluding unanimous votes, our dataset contains a total of 24693 roll call votes.\(^5\) During our period of investigation, 1047 individuals were elected to the Sejm. Each time an MP changed party affiliation or switched to independent status, we generated a new observation and thus obtained a total of 1823 observations. Of the 1047 MPs, 293 legislators switched party (or to independent status) at least once but at most 11 times (an overview of the occurrence of party switching is given in appendix A.2). Not all the party groups were equally affected by party switching. Using the standard deviation (sd), minimum (min) and maximum (max) party size as rough indicators, table 3 (in appendix A.3) shows the variation in party membership turnover subclassified by parliamentary term. While in the III Sejm it was mainly the two post-Solidarity parties Solidarity Election Party (AWS) and Freedom Union (UW) which saw large fluctuations in their membership, in the IV Sejm it was the successor party Alliance of the Democratic Left (SLD) as well as the two populist parties Self-Defence (Samoobrona) and League of Polish Families (LPR) that were characterized by large turnover rates. By contrast, party group membership was generally much more stable in the V Cadence. An exception is Samoobrona, whose number of members fluctuated again at some higher level.

### 3.2 The Method

The empirical analysis proceeds in two steps. First, our aim is to explore whether party switchers have different ideological positions before and after switching their partisan affiliation. Provided this is true, we want to know to what extent the MPs converge ideologically to their new parties’ ideal points. A Bayesian roll call analysis, as described by Clinton, Jackman and Rivers (2004), was performed in order to estimate legislators’ ideal points.\(^6\) This approach requires one to specify \textit{a priori} the dimensionality of the policy space. Although this is mainly a sub-

\(^5\)The rate of missing data in the dataset is very low and remains similar across the three parliamentary terms. Appendix A.1 gives a more detailed overview of the incidence of missing data.

\(^6\)The model was estimated in R using the \texttt{pscl} package (Jackman 2010).
stantial problem (Poole 2005, 141-155), the large size of our dataset (and both restricted computing power and time) only allowed us the estimation of unidimensional spatial voting models. Since several scholars located Polish parties in a two-dimensional space (e.g. Noury, Dobrowolski and Mazurkiewicz 1999; Benoit and Hayden 2004; Markowski 2006; Hix and Noury 2007), we used optimal classification (OC) (see e.g. Poole 2000) to get a sense of how well a one-dimensional model fits our data. With one dimension, OC correctly classified 92.1% of the choices with an aggregate proportional reduction in error (APRE) of 0.698. The correct classification in two dimensions was 93.4% (APRE of 0.749). Thus, although the second dimension has some additional predictive power, it is relatively small. Settling for one dimension, we fitted our data via a two-parameter item-response (IRT) model. To obtain (local) identification of the model parameters, the model was estimated by imposing a normalizing restriction (i.e. that the estimates are transformed to have a mean of 0 and a standard deviation of 1) (Jackman 2001, 230f.).

After the estimation of legislators’ ideal positions, two different measures of party ideology are computed, which then can be compared to the party switchers’ individual ideal points. The first is measuring the ‘overall’ ideological position of a party group and is simply calculated as the mean of the ideal points of all MPs who ever have been affiliated to that respective party. The second measure of parliamentary party ideology is based on a temporally restricted set of legislators’ ideal points: it is again computed as the mean of its members’ ideological positions but takes account of just those MPs whose membership shows some temporal overlap with the period of affiliation of the party switcher to whom party ideology shall be compared. Due to its more dynamic nature, we consider the latter as the preferred measure for a comparison with party switchers’ ideal positions.

In a second step, we wish to estimate the effect of party switching on the

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7With our data on \( n = 1823 \) legislators and \( m = 24693 \) roll call votes, a spatial voting model with \( d = 1 \) dimension gives rise to a statistical model with \( p = nd + m(d + 1) = 51209 \) parameters (Clinton, Jackman and Rivers 2004, 357). Using R’s ideal package on a MacBook Pro (2.66 GHz Intel Core i7), 50000 iterations of the MCMC algorithm required about 100 hours of computing time.

8Optimal classification was performed in R using the oc package (Poole et al. 2010).

9To estimate the model, 50000 iterations were run. Of these, the first 40000 were thrown away and the remaining 10000 thinned by 10. The chain seems to have converged (trace plots for three legislators are presented in appendix B.1.)
estimated ideal-points of MPs. To do so we can rely on a hierarchical IRT-model as proposed by Malecki (2008), based on work by Fox and Glas (2001) (see also Fox 2007; 2010, 141-192).\textsuperscript{10} Proceeding in this way, the estimation of the ideal-points also takes into consideration the fact that party switchers are different from the remaining MPs, something the theoretical literature on party switchers has heavily argued. More precisely then, and taking as starting point the classic “two-parameter” item-response theory (IRT) model we have on the one hand the probability ($\pi_{ij}$) of a yes-vote ($y_{ij}$) by actor $i$ on issue $j$ which is modeled as follows (Jackman 2009, 455):

$$\pi_{ij} = Pr(y_{ij}|\theta_i, \beta_j, \alpha_j) = F(\theta_i \beta_j - \alpha_j)$$

(1)

$\theta_i$ in this context is the estimated ideal-point, while $\beta_j$ reflects the discrimination of issue $j$ and $\alpha_j$ the difficulty of issue $j$. $F$ is normally assumed to be a normal cumulative density function. To allow the ideal-points to vary systematically as a function of party switching we assume the following:

$$\theta_i = x_i \beta_\theta + \epsilon_\theta$$

(2)

In our empirical work $x_i$ reflects on the one hand simply the fact whether an MP has switched his or her party, or on the other hand the interaction between this party switching dummy with the “receiving” party.\textsuperscript{11}

4 Empirical Results

4.1 Ideal Points of MPs and Parties over Time

As a first step to assess whether MPs’ ideological positions are systematically affected by party influence, we plotted a party switcher’s ideal points (one for each affiliation) next to the two measures for party ideology. This was done for

\textsuperscript{10} Lauderdale (2010) presents also a hierarchical item-response theory model to address a slightly different problem.

\textsuperscript{11} In the next iteration we will also estimate an interaction between “sending” and “receiving” party. Given that most party switching is grouped (i.e. several MPs move from one particular party to another) our simplification is probably not too constraining for the moment.
each of the 293 party switchers, and we subsequently present four of them for illustration.

Figure 2 to 5 show the ideological travels of four party switchers. These are (i) Anna Sobecka, (ii) Lech Zielonka, (iii) Stanislaw Glebocki, and (iv) Wojciech Mojzesowicz. In each case, the y-axis shows the labels of those party groups a legislator has successively been a member of (or “niez.” in case of independent status) during the three parliamentary terms considered here. The variable is thus ordered chronologically, with the first label indicating the party group a switcher initially was affiliated to. The x-axis represents the ideological positions. It ranges from $-2.43$ to $2.83$, where the former is the 0.5% and the other the 99.5% quantile of all the MPs’ posterior means. The figures display both the ideal points for the individual MP and the (two different) estimations of party group ideology. Black dots represent the individual party switcher’s ideal points and gray lines the corresponding 95% Credible Intervals (CIs). Overall party ideal points are shown as yellow circles and the blue dots, finally, indicate the location of the temporally restricted ideological positions of parties. We now turn to consider each of these plots in more detail.

Figure 2 shows the case of Anna Sobecka, who switched her partisan affiliation 11 times during the period considered. Note that the first five group affiliations refer to the III term of the Sejm (1997-2001). There is not much variation in her ideal points during this Cadence, but after switching from independent status to NK (and subsequently to Polish Understanding, PP), Sobecka strongly toes to the (temporally restricted) parties’ ideological means. During the whole IV (2001-05) and for approximately the first six months of the V term (2005-07), Sobecka was affiliated to the League of Polish Families (LPR). Again, her ideal point and the party’s ideological position strongly overlap. The remaining six switches took place in the V Cadence. With the exception of the first two switches in this Cadence (to independent and NKP), Sobecka’s ideal positions remained very constant throughout the term. In total, she changed four times to independent status. Since independent MPs are little susceptible to party whipping, it is remarkable that Sobecka’s ideal points as independent vary considerably. Two (admittedly ad hoc) explanations can be put forward. First, variation in independents’ ideal points may reflect changes in underlying constituency preferences, possibly due to a redistricting of constituencies. While the
1997 election was based on 52 (3-17 seats) districts, the number of constituency districts decreased to 41 (7-19 seats) in the election of 2001 (Birch et al. 2002, 27; Kubát 2006, 56) and remained constant for the 2005 election. To some extent, differences in independents’ voting behavior prior and after the election of 2001 thus might be explained by changes in the institutional setting. Second, some of the relatively ‘extreme’ ideal points might have been estimated based on a very low number of voting decisions. The estimation of Sobecka’s 7th ideal point, for instance, is based on 67 roll call votes which took place over a period of four days. Hence, this estimate might not describe her ideological position very accurately.

Figure 3 illustrates the party switches of Lech Zielonka, who initially was a member of Samoobrona. The entire sequence falls into the IV parliamentary term. Generally, there seems to be a systematic relationship between Zielonka’s ideal points on the one hand, and the ideological positions of the parties to whom he switched on the other. However, there are several exceptions. With the 3rd, 6th and 11th switch, Zielonka’s ideal points moved in a direction opposite to the ones of the parties he joined. The estimates of these ideal points are based on 343 roll call votes (in six days), 56 votes (on one day) and 1534 voting decisions (in a period of 25 days), respectively. At least the first two of the three may be not very valid measures for individual ideology.

Stanislaw Glebocki’s ideological travel is plotted in Figure 4. As Lech Zielonka, Stanislaw Glebocki was a member of only the IV Sejm. The party switcher’s and the party groups’ ideal points are consistently located very close to each other. The differences between the three ideological positions as independent member aside, there is another issue that is noteworthy. After the 5th and 7th switch, Glebocki’s ideal point not only moved to the direction of his new party but even was located at a more extreme position than the party’s ideal point.

Finally, Figure 5 shows the case of Wojciech Mojzesowicz, who was an MP in the IV and V Sejm. The first six of his eight switches took place in the IV Cadence and in 2005, he was reelected to Sejm still being a member of Law and Justice (PiS). In 2007, Mojzesowicz switched to independent status and only a little less than a month later back again to PiS. Mojzesowicz’s ideal points generally moved in tandem with the parties’ ideal points. An exceptional case is his first period of membership in Law and Justice: instead of approaching to PiS’ ideal point, Mojzesowicz’s ideological position remained at a similar level as
it was before and after his affiliation to PiS (i.e. when he was an independent MP).

Obviously, the four examples presented above are not representative and no general conclusions on legislative behavior can be drawn. Nevertheless, they suggest that legislators’ ideology and parliamentary party membership are related. This finding serves as the motivation for the second stage of our empirical analysis.

4.2 The estimated effect of party switching

The results presented so far clearly show that party switchers change their ideal-points when moving from one party to the other. As mentioned above, there might be different reasons why these changes in ideological positions can be observed. To take fully advantage of the information on party switching to estimate the ideal-points and the effects of party switching on the former, we rely, as discussed above, on a hierarchical IRT-model.

Our starting point is a model where at the second level we only introduce a dummy indicating whether an MP has switched his or her party. We estimate this hierarchical model for each of the three legislative periods separately for two main reasons. As the electoral system has changed over time, comparisons become potentially difficult to make if we want to assess the effect of one principal (party) compared to another (voters). In addition, estimates covering the whole period had considerable convergence problems, some of which reappear in the results presented below for the fourth legislative period.

In figure 6 we present first the resulting estimates of the ideal-points ($\theta$).$^{12}$ For the third and fifth legislative period we find clearly distinct groups of MPs, with especially a smaller group of MPs on the right (positive values for the III Sejm, and negative values for the V Sejm) setting itself apart. In the fourth legislative period we also find potentially such a distinction, however, the convergence problem result in large credible intervals, making distinguishing the various MPs difficult or even impossible.

These results, however, relate quite nicely to Noury, Dobrowolski and Mazurkiewicz’s

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$^{12}$Negative values correspond to the left and positive values to the right, with the exception of the fifth legislative period, in which the positions are inversed. This will be taken into account when comparing the effects of party switching (and will also be corrected in a future version of the present paper).
(1999) and Hix and Noury’s (2007) work that is based on a NOMINATE-estimation of ideal-points for the 1997-1999 Sejm data. More generally, the results jibe well with studies showing the considerable party cohesion in the Polish Sejm (Zielinski 2001; Kistner 2006a), as figure 6 clearly shows groups of MPs voting largely together.
Figure 2: The Travel of Anna Sobecka

Figure 3: The Travel of Lech Zielonka

Note: Figure 2 and 3 show the ideological positions of Anna Sobecka and Lech Zielonka according to their parliamentary party membership. In each plot, the black dots represent the party switcher’s ideal points, one for each of the chronologically ordered party group affiliations (or independent status). The yellow circles show the location of the overall party ideal points and the blue dots the positions of the temporally restricted party ideal points.
Figure 4: The Travel of Stanislaw Glebocki

Figure 5: The Travel of Wojciech Mojzesowicz

Note: Figure 4 and 5 show the ideological positions of Stanislaw Glebocki and Wojciech Mojzesowicz according to their parliamentary party membership. In each plot, the black dots represent the party switcher’s ideal points, one for each of the chronologically ordered party group affiliations (or independent status). The yellow circles show the location of the overall party ideal points and the blue dots the positions of the temporally restricted party ideal points.
Figure 6: Overall positions of MPs: III, IV and V legislative period

While the distribution of ideal-points gives some credence to our empirical strategy, more interesting is obviously the effect of party switching as estimated in the hierarchical IRT-model. Figure 7 depicts graphically the estimated effects of party switching for the three legislative periods. In two of these periods (namely for the III and V Sejm (for the latter the values were adjusted to be comparable to those of the other legislative periods)) party switchers had systematically positions more to the left than the party “stayers”. Only in the fourth legislative period are their positions more to the right, though of a much more reduced
These results can be nicely put into perspective with McMenamin and Gwiazda’s (2011 forthcoming, 15, preprint) analysis of party switchers. More precisely, these authors find that party switching was less likely for MPs of left-wing governments during the second and fourth legislative period, but more likely during the right-wing government in the fifth legislative period. In the third legislative

\[\text{Figure 7: Effect of party switching on ideological position}\]

\footnote{Comparing these effects is fraught with some difficulties, as the scales of ideal-points are not directly comparable. Especially considering the different distributions of ideal-points depicted in figure 6 suggests that the fourth legislative period has to be interpreted with care.}
period, also with a right-wing government, they find no government (or ideologi-
cal for that matter) effect. Consequently, our results seem to suggest that under
right-wing governments, switches lead to more left-wing positions of MPs, while,
tentatively, the opposite is the case under left-wing governments.

The analysis presented above has relied on the assumption that the change
in ideological positions is the same for all party switchers in a legislative period.
As McMenamin and Gwiazda (2011 (forthcoming)) find considerable differences
depending on the ideological orientation of a government, this assumption is not
too far-fetched, but a more detailed analysis focusing on the “receiving” parties
appears necessary.

Consequently we estimated a second set of hierarchical IRT-models for each
legislative period in which the second level models the effect of an interaction be-
tween the party switching dummy and the (categorical) “receiving” party. Again,
in figure 8 we present the distribution of estimated ideal-points with their credible
intervals for each of the three legislative periods under consideration. Again the
estimated distributions are quite intuitive and reflect largely the picture appear-
ing in figure 6. Consequently, we immediately proceed to assessing how party
switching to a particular “receiving” party affects an MP’s ideal-point.
Figure 8: Overall positions per party: III, IV and V legislative period
Figure 9 depicts these effects for the third legislative period. Overall, fifteen parties have received party switchers (counting also the group of independents ("niez")). While most of the estimated effects are negative (as the results discussed above would suggest), we find that these effects are estimated with considerable uncertainty. For only one “receiving” party do we find an effect whose credible interval does not include the value of zero, namely for the SLD party. Interesting to note is that in this legislative period a center-right coalition between the UW and AWS party was in power. Consequently, our results suggest that party switchers joining one of the opposition party (i.e. the SLD) had positions significantly to the right compared to the MPs welcoming the newcomers. At the same time MPs switching to the two governing parties were on average more to the left, even though the credible intervals include the value of zero.

In figure 10 we depict the same estimated effects for the fourth legislative period. In this period a much larger number of parties received party switchers, but again, only for a few of these parties do we find significant effects. Interesting to note is that one of the significant effects appears again for the SLD, a left-wing party whose party switchers are more to the right. A similar shift to the right we also find for party switchers moving to the centre-right party PO (Civic Platform). As noted above, however, these estimated effects need to be taken with a large grain of salt, given the estimation problems mentioned above.
Figure 9: Effect of party switching on ideological positions: III Sejm
Finally, when we turn to the fifth legislative period we find in figure 11 a larger number of significant effects, which suggest that party switchers were often to the left of the MPs of their “receiving” party. The strongest significant effect appears for the MPs switching to the right-wing PiS, who interestingly enough are more to the left. Similar leftward shifts appear for the agrarian Samoobrona party and the National People’s movement (RLN). A slight leftward difference also appears for the party-switchers that become independents (niez). As during this period a left-wing government was in power and McMenamin and Gwiazda (2011 (forthcoming)) note that party-switching from government parties was reduced,
this suggests that party switching has moved several parties to the left and thus towards the positions of the government parties.

5th Sejm

![Graph showing party switching effects and 95% credible intervals for various parties.]

Figure 11: Effect of party switching on ideological positions: V Sejm

5 Conclusion

The ideological positions of party switchers have been studied mostly under two angles. First, to assess what motivates their decision to change party affiliation, and second, whether any changes in ideological positions might give us information on the effect of party discipline.
In the present paper we attempted to bring to bear both literatures in studying the ideological positions of party switchers in the Polish Sejm. At a purely descriptive level we find that when switching parties MPs also often change their ideological position as estimated on the basis of their roll call vote behavior. Given that we know that party switchers are motivated by a series of factors, these shifts can, however, not easily be attributed to party discipline alone.

In a further step we were able to demonstrate that newly arriving MPs in a party are often quite different from the average MP of a party that receives them. In two of the three legislative periods we consider, switching MPs are to the left of their receiving parties. When looking more closely at the different parties receiving party switchers we find considerable differences among them. These differences appear to be linked to the ideological complexion of the government, which is unsurprising as party switching appears often to be linked to who is in government (e.g. McMenamin and Gwiazda 2011 (forthcoming)).

Thus, our results suggest that party switching is not a random event and the party switchers are often systematically different from the remaining MPs. Consequently, to assess whether party switchers are subject to party discipline by their “receiving” party and thus to assess more closely the extent of party discipline, other methods need to be deployed. This is what we plan to do next in our research endeavor.
References


Poole, Keith T., Jeffrey Lewis, James Lo and Royce Carroll. 2010. *oc: OC Roll Call Analysis Software*. R package version 0.08.

**URL**: [http://CRAN.R-project.org/package=oc](http://CRAN.R-project.org/package=oc)


Appendix A

A.1 Missing Data in the Roll Call Dataset

The dataset used for our analysis involves 24693 roll call votes. Of this total, 10488 votes have taken place in the III parliamentary term, 11471 in the IV term, and 2734 in the V Sejm. As is shown in Table 1, for most of the votes in each Cadence, we have information on the voting behavior of 460 legislators – i.e. we know whether an MP voted yea or nay, if she abstained or was not in the legislature while a vote was taken. For the other votes, however, we do not have data for the constitutionally fixed maximum number of MPs. At least in part, the incidence of missing data could be due to the fact that the Sejm’s seats might not have always been completely filled.

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<th>V Cadence</th>
</tr>
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Table 1: Missing Data in the Sample

A.2 The Frequency of Party Switching

Table 2 shows how many times the 293 party switchers changed their legislative party membership. Of these, 90 MPs switched their affiliation once; three legislators score a total of 11 changes to another party group or to independent status. Thus, 749 of the 1823 observations (approximately 40%) in the dataset do not represent MPs newly elected to Sejm but incumbents who changed party affiliation.
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Table 2: Occurrence of Party Switching in Sejm

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Table 3: Party Membership in Sejm
Appendix B

B.1 Convergence of the Simple Model

Figure 12: Legislators' Ideal Points and 95% Credible Intervals
Figure 13: Trace Plots of the MCMC Samples for Three Legislators

Note: Figure 13 shows the trace plots of the MCMC samples from the posterior density of three legislators’ ideal points. These are Jaroslaw Kaczynski (PiS), Bronislaw Komorowski (PO) and Donald Tusk (PO).