

Dancing alone or waltzing together? On different party switching strategies in Western Europe

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Abstract

By switching party, politicians pose a threat to party unity and endanger representation. Despite increasing attention devoted to the topic, previous literature did not address the question of "how" politicians switch party, that is, whether they switch alone or in a group. In this paper I analyse under what conditions political parties are more likely to witness individual or collective defections. The central argument is that each type of defection is associated to different costs and benefits, which are mostly determined by contextual factors. Relying on a unique database of all the inter-party movements that occurred in fourteen Western European countries from 1945 to 2015, my results indicate that defection strategies are indeed explained by different contextual variables. For example, governing parties are more likely to witness individual defections the smaller the share of their majority. This paper sheds light on the dynamics of party unity and helps to explain why previous research produced inconsistent findings.

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Introduction

Political parties, like couples, sometimes break up. In certain cases, just one member abandons the group, while in other cases, the political divorce involves entire factions of party members. In both instances, the consequences of the simple act of leaving a party can be very serious. For instance, on September 3rd 2019, the Conservative Member of Parliament (MP) Phillip Lee, crossed the floor of the British House of Commons, and joined the Liberal Democrats, leaving the Tory government without a majority (Witte 2019). Switchers were also able, in extreme cases, to turn down cabinets, like in 2005, when Ariel Sharon - back then Israeli Prime Minister, left (together with other legislators) the *Likud* to establish his new party *Kadima* and set in motion the events that led to early elections in March 2006 (Shamir et al. 2006).

These two examples suggest that switching can be extremely damaging for representative democracy. In particular, this behaviour challenges the idea that political parties are unitary actors and they should "exhibit a team-like behaviour" (Katz 1987, p.8). This is one of the core assumptions which our dominant understanding of contemporary democracy, that is, the responsible party government (Katz and Mair 2006) hinges upon. Indeed, party unity is vital both for policy implementation and to ensure legislators' accountability. If parties are not cohesive, it becomes more difficult for voters to grasp who should be considered responsible for certain results and, as a consequence, citizens cannot fully sanction those who are in power at the following elections (Carey 2007). Ultimately, if parties do not act like teams then the transmission belt linking them to voters jams. It is probably for this reason that White (1992) concludes that "if the parties were in trouble, so too was democracy."

The two episodes cited above are examples of one of the most troublesome manifestations of a lack of party unity. The act of leaving a party is known with the expression *legislative party switching*¹ and it takes place when an elected official changes his/her party affiliation within a legislative term. This behaviour might have consequences for various aspects of the responsible party government model and particularly for legislators' accountability and cabinet stability. Indeed, the link between citizens and politicians is undermined if a legislator takes up a new party label without consulting his/her constituents (especially if voters select legislators solely or primarily based

¹I will also use the term "defection" to refer to this behaviour.

on their party affiliation). Not by chance, according to Desposato (2006), switching represents "a threat to the very core of democratic representation" (p.77)².

Given the potential consequences that parliamentary defections have for democratic representation, it is not surprising that this topic has received in recent years increasing attention in the literature (for a summary, see Mershon 2014). Still, so far the literature has rarely acknowledged that potential switchers can choose between different defection strategies. Going back to the two episodes of switching mentioned earlier, while the British MP Lee changed party completely alone, Sharon left *Likud* together with other fellows. Lee and Sharon are both switchers, but their actions took very different modalities. It is precisely the *modality* of the defection that very often has not been taken into account by previous works on the topic. Kreuzer and Pettai (2009) classify switching based on 1) whether it is coordinated or uncoordinated (that is, if it occurs in a group³ or individually) and 2) its impact on the number of parliamentary parties. Yet, other studies on switching have rarely followed up on this classification. Building up on the works by Mershon and Shvetsova (2013), Kemahlioglu and Sayari (2017) and Hix and Noury (2018) (for switching in the European Parliament), I develop a theoretical explanation for why politicians would opt for one strategy or the other. I argue that these types of switching have a different underlying logic and, therefore, they are affected by diverse factors, which is why this distinction is theoretically and empirically relevant.

Previous research on switching has also produced inconsistent findings. For instance, not all the pieces of research confirm the hypothesis that politicians switch to large and governing parties (in support, see, among others, Desposato 2006; for opposite findings instead see, for example, O'Brien and Shomer 2013). The same goes for electoral incentives: while Desposato and Scheiner (2008) find that legislators in Brazil and Japan switch to parties that enhance their electoral prospects, this is not confirmed in the American context analysed by Castle and Fett (2000), while Klein (2018) shows how electoral payoffs are conditional on the kind of electoral system in place. Similarly, inconsistent findings do not allow us to corroborate the argument that ideological un-

²Other scholars, like for example Klein (2018), argue that switching might actually enhance representation, particularly when politicians think to their constituents as main principal and change group because they want to be more faithful to the will of their voters.

³Party mergers and splits are instances of group switching. On the topic see, among others, Mair (1990), Ibenskas (2016), and Ceron (2015).

fitness between parties and legislators leads the latter to change party (McElroy 2009; Heller and Mershon 2008). I posit that this lack of consistent findings might be due to the fact that scholars most often treat all forms of switching as equal. To put it differently, scholars may have obtained inconsistent results because the variables of interest might not exert the same influence over the diverse types of defections.

This paper adopts a different approach as I take into account the modality of defections and I generate different sets of expectations that are tested empirically. Hence, this paper does not address the question of "why" politicians switch party, but "how" they do that (when they have already decided to change affiliation). In particular, I present a theoretical model explaining under what conditions *political parties* are more likely to witness individual or collective defections⁴. This theory spells out the political opportunity structure for different switching strategies. The central argument is that each modality of defection is associated to different costs and benefits, which are mostly determined by contextual/institutional factors. Parties are therefore more or less exposed to one form of switching than the other based on these macro-level factors. As a consequence, legislators will select the modality of the defection after having evaluated these costs and benefits, adopting the most convenient strategy in each situation. I test this framework in two specific situations, characterised by different cost and benefit levels. Namely, I will look at 1) the joint impact of parties' governing status and the scope of the parliamentary majority as well as 2) the effect of party size and ideology. I hypothesise that individual switching is more likely to affect governing parties when they are supported by a narrow majority, and opposition parties when the scope of the majority is wide. Similarly, individual changes are more likely to occur from large and moderate parties, rather than from extreme and small groups.

In order to verify my hypotheses and my model, I rely on a unique data set of all the inter-party movements that took place in fourteen Western European democracies from 1945 to 2015. By using this new data set, this paper represents the most extensive comparative study on the topic. The results of my analysis indicate that the two forms of switching are theoretically different and explained by different variables. For example, governing parties are more likely to witness collective defections the larger the

⁴This is an important caveat, as my goal is not to explain switching at the legislator level, but at the party level. Hence, my theory looks at what makes parties more likely to witness one form of switching rather than the other.

share of their majority. Hence, when we study legislative party switching we should not only look at its presence or its scope, but also and foremost at the *nature* of the changes.

More specifically, individual and collective switching represent two different kinds of instability. Collective switching is a proxy of party or even party system transformation. The presence of collective switching - also in the polities where the overall phenomenon is limited - signals that a party (or more than one) underwent a processes of change or strain. Individual switching, instead is due to a "mismatch" between MPs' personal goals and their party. A low number of individual switchers should not trouble a political system and even in very stable democracies, we find that a small number of solo defections regularly take place. However, if the scope of individual switching becomes larger, it might be due to a transformation of the relationship between MPs and their parties. High levels of individual switching actually also increase voter information costs (Desposato 2006), as it is much more difficult for voters to keep track of who changed party and who did not and to attribute responsibility (Marinova 2016). Taking into account the nature of these different types of switching, therefore, allows us to get a deeper understanding of the political transformations occurring in a country and assessing how healthy the responsible party government is.

By separating the analysis of the different defection strategies, we not only get a better insight about the dynamics of party dis-unity, but we can potentially design more effective policies to reduce these episodes. Indeed, if legislators strategically select their switching modality based on contextual factors, we should expect that they also react differently when stricter regulations about defections are implemented. Finally, by splitting the analysis of different forms of switching, this work contributes to explain why previous works on the topic have obtained inconsistent findings.

Theory

A model of collective and individual exit

Most of the research on party switching has tried to uncover the individual incentives for defecting. Scholars assume that legislators are motivated by 1) policy, 2) career or 3) re-election concerns (Strøm 1997; Müller and Strøm 1999) and that they exploit their

party affiliation in order to serve these goals. This stream of literature goes back to the formal models developed by Aldrich and Bianco (1992), Laver and Kato (2001) and Laver and Benoit (2003). In particular the work by Laver and Kato suggests that every party is potentially subject to defections, assuming that legislators are motivated by career concerns and that their party membership is a strategic choice. This approach to the study of switching has probably been the most popular, as it addresses the puzzle of why legislators would give up the party affiliation that allowed them to be elected (Rahat and Kenig 2018). Among the several works done on switchers and their motivations, there are, for example, Heller and Mershon (2005, 2008), Desposato (2006), O'Brien and Shomer (2013). All these studies use different kinds of proxies in order to test whether switchers are mostly motivated by one of the three aforementioned goals. Usually scholars infer legislators' motivations from characteristics of out-switching parties: for instance, if defectors are interested in obtaining career advancement, then they should leave opposition parties that offer them fewer opportunities for professional advancement.

For the purpose of this work I also start from the assumption that politicians exploit their party affiliation in order to achieve policy, office or votes. However, I link these objectives to potential costs, that is, the consequences or the obstacles that switchers face when they decide to take up a new party label. This perspective is not often adopted in the literature: according to Yoshinaka (2015), the idea that defecting includes costs is neglected by the research on the topic. As a result, usually costs are only briefly mentioned and rarely do scholars try to evaluate them and their implications⁵. Additionally, Yoshinaka underlines how often the literature has focused exclusively on *electoral* costs⁶. However, not all costs related to defections are electoral, and they may also be related to party organisations and their leaders or other institutional configurations.

The analytical framework used for this paper attempts to gauge both the costs and the benefits imposed on potential switchers and how the balance between these costs and benefits affects the de-affiliation strategy chosen by MPs. The model, therefore, studies the political opportunity structure for different switching strategies. The fact

⁵For a recent work that represents an exception, see Klein (2019).

⁶Not by chance, the nature of the electoral system is the institution that has received the greatest attention when explaining defections (see, for instance, Thames 2007; or Klein 2018).

that legislators in different contexts face diverse costs helps to explain why the pervasiveness of switching varies across countries, parties and time. In other words, I suggest that both costs and payoffs are context dependent, that is, they are conditional on the specific institutional and political environment legislators are embedded in. In a few words, benefits and losses are not fixed as they vary based on the context, which – in turn – favours a certain defection strategy.

An important caveat applies: the theoretical argument that I develop starts necessarily from individual legislators, but it aims to define the conditions that make parties more likely to witness individual or collective switching. Hence, my theory refers and applies to sending parties, that are – in fact – the actors that will be analysed empirically. This is a fundamental point as the theoretical framework should not be seen as explaining switching at the legislator level, but exclusively at the party level. This is crucial because while MPs always have to choose between one of the two strategies, political parties will be subject to both. Yet, I argue that the circumstances will affect the balance between one form or the other, that is, one type of defection will be more prevalent than the other. In other words, while a switch can only be either individual or collective (that is, the two options are mutually exclusive), by looking at parties the argument necessarily refers to the prevalence of individual versus collective defections. This is to say that the two modalities are not necessarily negatively correlated, but they appear with different probability that is defined by the context.

I posit that if two legislators are interested in changing party label, they will carefully weigh what they can achieve by switching party and – at the same time – the risks associated with it. The two legislators, however, will not switch if the benefits are lower than the costs. Therefore the first condition for a party to witness a defection is that that switching payoffs exceed switching costs.

When this first condition is met, under what specific circumstances will parties experience a collective or an individual switch? I assume that when MPs defect together, they will share the costs of their action and, hence, they will lower them. Differently said, by switching collectively, costs are reduced. Indeed, switchers face costs that are mainly related to their reputation and to the future of their political career. It is undeniable that defectors risk to be branded as "turncoat" or traitor from their former colleagues⁷ and that they will often be seen suspiciously by their new group. Addition-

⁷For instance, MP Lee was accused, together with other 21 rebel MPs, of being a "traitor". See the

ally, switchers might appear as only pursuing their own interest, an argument that can be particularly damaging for re-election⁸. However, when legislators coordinate and switch in a group, they might appear less opportunistic both to their colleagues and to the electorate. Additionally, behavioural psychologists and economists have proven that individuals are more likely to contravene rules when they do so in a group rather than individually (see, among others, Kocher, Schudy, and Spantig 2018). Indeed, according to the so-called process of "self-serving altruism", people use moral flexibility to justify their self-interested actions when such actions benefit others in addition to the self (Gino, Ayal, and Ariely 2013). It is generally harder to punish a faction rather than individual MPs, hence, it is easier to bear social pressure in the party when legislators have allies (Besch and López-Ortega 2021). In other words, by switching together with others, legislators have better resources to justify their decision and can, hence, improve their image.

Nonetheless, switching collectively is not only beneficial. Indeed, a defecting group has to share also the benefits of their action. This means that the utility function of legislators switching collectively will be lower than the utility of those who change party individually. Therefore, I expect that by switching in a group, MPs will not only share the burden of their decision, but also their potential gains. In a few words, I argue that the payoffs of switching individually are larger than the payoffs of switching collectively. At the same time, individual costs are larger than collective costs.

In light of this and considering that costs must in any case be inferior to payoffs, I expect a party to suffer from a collective switch only when 1) individual exit costs will be too high, and 2) when the benefit cut of switching in a group will not make this option too costly. We can therefore expect that collective defections will take place only when the expected payoffs are since the beginning sufficiently high so that by sharing them legislators will still have a personal gain which is higher than their costs. Under these two specific circumstances (high individual costs and low benefit cut), parties will be more subject to collective switching. When these conditions are not met, there will be no switching at all. On the contrary, individual switching will

article by Proctor, Walker, and Stewart (2019) for more details.

⁸Unless defectors are able to claim that they changed party in order to better reflect the willingness of their supporters. However, this possibility is heavily dependent on the context and in particular on the electoral institutions. In fact, explaining the choice to switch will be easier for legislators elected with highly-personalised electoral formulas.

take place when costs are already low since the beginning.

Table 1 summarises my theoretical argument which predicts under what conditions switching in its different forms takes place. Assuming that costs are inferior to payoffs (otherwise no switching would occur), we can see that there is only one situation in which collective switching is more likely to occur, that is, when both benefits and risks are high. Individual switching has generally more chances to happen, as it is the most profitable option when both costs and payoffs are low, but also when costs are high and gains are small. Finally, the two forms of defection have an equal chance to be chosen when the price to defect is low, but the gains associated with it are high.

Table 1: The political opportunity structure for different switching strategies

	<i>Low cost</i>	<i>High cost</i>
<i>Low payoffs</i>	Individual	Individual
<i>High payoffs</i>	Both	Collective

Note: I assume that payoffs are always larger than costs. When this is not the case, there will be no switching.

Hypotheses

The implications of this model can be tested empirically in specific circumstances in which the balance between the cost and the incentives of leaving varies. I will therefore consider different situations with varying exit costs and payoffs in order to determine when a group defection is more likely to occur. For the purpose of this work, I focus on four variables that have been extensively studied by the literature on switching, but that have returned inconsistent findings.

Governing status and majority size

The first potential factor that might alter the costs and benefits associated with switching is the size of the ruling majority, interacted with parties' governing position. When a cabinet is supported by a narrow majority (that is, it is supported by a minimum-winning coalition, Riker 1962), this executive is not in a very safe position, and even

few defections can seriously compromise its permanence in office. Moreover, a cabinet turnover might jeopardise the stability of the legislature and, as a consequence, MPs' career, because the crisis might lead to early elections.

From the perspective of parties supporting the government, therefore, the pressure to keep their ranks together is extremely high, as the cost of switching is substantive and the expected benefits very small. Indeed, we can assume that legislators belonging to the majority have little to gain from a switch. On the contrary, they have a lot to lose, as they might already be in charge of very important offices in the cabinet itself or within the parliament (committee, assembly speaker/presidency). To put it differently, I posit that legislators belonging to the majority are – in most of the cases – in a better position to fulfil their goals, either in terms of career and/or of policy. Governing parties have more prestigious posts to distribute among their legislators and offer greater chances to pass laws (O'Brien and Shomer 2013). A switch from governing parties when the majority is narrow can jeopardize these opportunities. Ceron (2015) makes a very similar argument: he argues that the likelihood of a factional breakaway becomes larger as the parliamentary margin between ruling and opposition parties widens. According to the author, the cost of internal divisions is greater for governing parties than for opposition groups, therefore ruling parties will try to foster unity as much as they can. It is for this reason that a defection in this situation is both costly and little beneficial. My expectation, therefore, is that when a cabinet has little support, legislators from governing parties should mostly switch individually.

For legislators belonging to opposition parties, instead, a narrow majority represents a very profitable situation with little costs, especially if they are interested in joining the majority. Indeed, governing parties might be willing to offer significant payoffs to recruit opposition members in order to increase the size of their majority. Secondly, the cost of switching in this particular situation is not very high, as factions of opposition parties will gain a lot by joining the governing majority. This is an ideal situation for both types of defections and in particular for collective exits because group defectors have a great negotiable power and can therefore try to obtain noticeable benefits from their decision to change alliance⁹. In other words, I argue that for

⁹There have been instances of this behaviour in Italy, especially among former members of the old Italian Republican Party. In particular, the faction of so-called "Liberal Democrats" changed sides several times between 2007 and 2011. Elected for the first time as part of a centre-left coalition in 2006,

sending parties in opposition when the majority is narrow it will be extremely difficult to keep their rank united, increasing the chances of switching of both kind.

When the parliamentary majority is wide, instead, switching will be mostly individual as the price for defecting is not very high (neither for the government nor for the opposition) but the related benefits will be also scarce.

Table 2: Individual and collective switching for opposition and governing parties under different majority sizes

	<i>Governing party</i>	<i>Opposition party</i>
<i>Wide majority</i>	Low cost + low payoffs = Individual (HP 1A)	Low cost + low payoffs = Individual (HP 1B)
<i>Narrow majority</i>	High cost + low payoffs = Individual (HP 1A)	Low cost + high payoffs = Both (HP 1C)

Table 2 summarises my expectations: individual switching is generally the prevalent choice and collective switching will be mostly happening for opposition parties when the share of the governing majority is narrow. These arguments can be restated in the following set of hypotheses:

Hypothesis 1a *Governing parties are more likely to witness individual defections, ir-
respectively of the share of their majority.*

Hypothesis 1b *Opposition parties are more likely to witness individual defections the
larger the share of the governing majority.*

Hypothesis 1c *Opposition parties are more likely to witness both types of defections
the smaller the share of the governing majority.*

the faction run 2008 snap elections together with the newly established conservative party, "People of Freedom". Few month after 2008 elections, the "Liberal Democrats" turned their back the new conservative cabinet led by Silvio Berlusconi. The faction left the party and established their own parliamentary group. However, later in 2011, the "Liberal Democrats" returned to support the government, exactly at the time when Berlusconi was about to face a no-confidence vote from the Parliament. The faction was well rewarded for their renewed support, as one of the members (Daniela Melchiorre) was appointed as vice-secretary of Economic Development. To cut the story short, this example indicates how when the scope of the governing majority becomes smaller, cabinet parties have the incentive to recruit among opposition legislators by offering them substantive incentives to change side.

Ideological position and party size

One of the main questions in the literature about party switching is whether politicians switch for ideological reasons or to enhance their career prospects: in Hix and Noury's (2018) words, it is an ideology versus power dilemma. According to Riker's model of party switching (1959), legislators are mostly motivated by "power" concerns and they will change party if this choice can help them increase their position within the legislative assembly. As a consequence, Riker expects MPs to leave weak and small parties for groups that are larger and more influential. A similar argument is put forward by Laver and Benoit (2003) according to whom large (dominant) parties are the most attractive for potential switchers. Empirically, this argument finds support in the works by Heller and Mershon (2008) or Desposato (2006). As the results of these pieces of research indicate, legislators are less likely to abandon a large party and, at the same time, switchers usually select these large groups as their final destination.

The reason why larger parties should be less likely to experience out-switching is related to their more influential position. As Hix and Noury (2018) explain, bigger groups have generally a greater influence on several aspects of a legislature's life (from agenda setting to policy outcomes) because they enjoy a higher bargaining power before legislative votes and they usually control more key committee posts. In a few words, size is a fundamental component of power, since larger groups can guarantee to their members better payoffs. It is for this reason that switching from a bigger party is more costly than switching from a smaller one.

But size seems to capture only part of the argument. Indeed, works looking at the role of party size have implicitly linked it to ideological position. The assumption is that large parties are also moderate, that is, they are not at periphery of the ideological space. Differently put, scholars have assumed that size and ideological extremism are correlated. Ideology is one of the main drivers of switching and it explains defections both at the individual level¹⁰ and at the aggregate level (Volpi 2019; Yoshinaka 2015; Owens 2003). Ideology is a multi-faced concept that encompasses also the extremity of a party's position. Extreme parties might be more subject to switching in light of their greater pressure to stay loyal to their ideology (Rahat 2007) which, in turn, might

¹⁰The unfitness between a legislator's position and to one of his/her party increases the chances of a defection according to several authors, like for instance, Desposato (2006) or O'Brien and Shomer (2013).

lead to heated debates between different factions and, in case of unresolved conflicts, to a split. For example, many scholars have stressed the fissiparous nature of radical left parties (March and Mudde 2005) which is due to rifts over leadership, doctrine, and tactics (Harmel and Robertson 1985). For this reason, it can be argued that parties located at the extreme sides of the political space will suffer more collective splits rather than individual exits.

Table 3: Individual and collective switching for small/large parties with different ideological profiles

	<i>Small party</i>	<i>Large party</i>
<i>Extreme</i>	High cost + high payoffs = Collective (HP 2B)	Low cost + low payoffs = Individual (HP 2A)
<i>Centrist</i>	Low cost + high payoffs = Both (HP 2C)	High cost + low payoffs = Individual (HP 2A)

Putting together these two arguments, we can expect that small and extremist parties will be more subject to collective forms of defection, as the cost of an exit is substantial but the potential benefits are also high. On the contrary, large and moderate parties, will experience mostly individual switching, as the benefits of abandoning these parties will always be too low to be shared among a group of MPs. Empirically, research done on switching in the European Parliament suggests that this intuition is correct: for instance, Evans and Vink (2012) find that small groups on the fringes of the ideological space witness usually collective breakaways, while, on the contrary, for large and moderate parties individual changes outweigh group switching. I also expect that small and centrist parties will be the most subject to defections in general because the price of a change is not very high and the gain rather high. On the contrary for a large but extremist party costs and payoffs are both low, making this kind of parties more likely of experiencing individual switching. I summarise my argument in Table 3: individual switching occurs more frequently as is the modality witnessed by large parties irrespectively of the extremity of their position. Collective switching will be experienced mostly by extremist and small parties, while centrist small factions will be subject to both types of defections.

All these arguments can be summarized in the following set of hypotheses:

Hypothesis 2a *Larger parties will mostly witness individual defections, irrespectively of their location in the ideological space.*

Hypothesis 2b *Smaller and extremist parties will mostly witness collective defections.*

Hypothesis 2c *Smaller and centrist parties will witness both individual and collective defections.*

Data, Measurement and Methods

Dependent variable: A new measure of individual and collective switching

In order to test my hypotheses I rely on an unique data set of all the inter-party changes that took place in the lower Chambers of fourteen Western European countries¹¹ from 1945 to 2015. For collecting data on switching I relied foremost on information retrieved from the minutes of parliamentary sessions and/or legislative archives. Concretely, this means that the data set includes only changes registered in the parliamentary records. By applying this operationalisation, the results is that expulsions are also recorded as switching. Indeed, banishments are usually registered in parliamentary minutes as regular affiliation changes.

In other words, in most of the cases, only by reading the parliamentary records, it is almost impossible to tell whether a legislator spontaneously defected or whether s/he was expelled. Hence, for the sake of simplicity and accuracy, I did not make a distinction based on the degree of choice granted to switchers. This decision especially matters for Ireland and the United Kingdom where rebel MPs, i.e. those who do not vote according to the party line, are usually punished with the withdrawal of the so-called *party whip*¹². On the contrary, I did not consider as switching all those

¹¹The countries included in the data set are the following: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, The Netherlands, Norway, Spain, Switzerland and the United Kingdom. For more details about the country selection and the data collection, refer to the Appendix, Table A1.

¹²To account for the potential impact of expulsions, I re-run the analysis excluding Ireland and the United Kingdom and results do not substantially change (Appendix, Table A8).

Table 4: Operational definitions of collective switches

Authors	Temporal criterion	Numeric criterion	Qualitative criterion
Mershon & Shvetsova	1 month	20 switches	None
Kemahlioğlu & Sayarı	1 month	3 MPs	None
This paper	1 week	2 MPs	Coordination

movements that were rule-driven. In the countries in which a minimum and permanent number of MPs is necessary to form a parliamentary group, it might happen that, because of previous defections, a group no longer meets the numeric requirement and it is forced to dissolve.

Beside this first operational definition, another criterion was needed in order to differentiate between individual and collective switches. Until now there have been only two other studies trying to deal with the same issue, namely Mershon and Shvetsova (2013) and, more recently, Kemahlioğlu and Sayarı (2017). These two works use quite different operational definitions of what should be considered as collective switching, but they are both based on a temporal and numerical criteria. Table 4 summarises the two definitions applied by the two studies as well as the operationalisation used in this paper.

Mershon and Shvetsova (2013) look at "accumulated MP interparty mobility in a particular month" (p.135), that is whether in one month there have been more than 20 switches. For Kemahlioğlu and Sayarı (2017), instead, collective switching takes place if "three or more deputies collectively decide to leave their party to join others" (p. 193). None of the works takes into account the direction of the changes, or the real degree of *coordination* between switchers, that is whether they share the group of origin and the one of arrival. The assumption in both works is that when in a month there are many changes, they might all be linked to each others. When many fellow MPs switch group, this might represent an incentive for other legislators to imitate them. Said differently, both for Mershon and Shvetsova, and Kemahlioğlu & Sayarı, what matters for collective changes is above all the *volume* of switching.

An operationalisation that does not account also for the direction of the switches can be problematic because it might over-estimate the scope of collective defections.

This is particularly the case for Kemahloğlu & Sayarı who set a rather low numerical criterion, with the consequence that half of the switchers in their data set have exited *en masse*. As a result, by not controlling for the actual *coordination* between defections that occurred within a short time frame, the risk is that changes which were totally un-related to each other fall under the category of collective switching. To put it differently, only looking at the volume of changes does not allow us to distinguish between movements produced by party splits and mergers (that, hence, have an impact on the number of parties) and a high level of "parliamentary volatility", that is many MPs who are only changing label but do not share a common project with other colleagues. In short, both Mershon and Shvetsova, and Kemahloğlu & Sayarı, face the risk of collapsing two situations together that are potentially very different.

In order to capture changes that are truly coordinated and synchronised, I add a qualitative dimension to time and quantity. In particular, in my data set I classify as collective switching only those changes that 1) involved at least two legislators, 2) occur within a maximum of one week and 3) share the group of departure and arrival. More concretely, if in one country two MPs switch from a party A to party B on the same day, they are all classified as group changes. However, if two MPs switch on the same day from group A but one joins group B, and the other one joins group C, none of them falls under the category of collective defections. I believe that also looking at the actual path followed by switchers allows us to fully grasp the difference between uncoordinated and coordinated mobility¹³.

After having classified each inter-party movement, I then calculated the overall number of individual and collective defections per party in a given year, together with the overall number of changes. Still, the number of the two types of defections alone does not tell us whether one form is more prevalent than the other. In order to measure the prevalent form of switching for each party, I created a variable taking value 0 when no legislators changed affiliation, 1 if the share of individual switches is above 50% of the total number of defections, and 2 when the share of individual defections is below 50% (that is, collective changes are prevalent). The variable obtained is nominal, that is it has unordered categories and its distribution is displayed in Figure A1. Most of the observations see no switches at all, around 12.5% of cases are subject predominantly

¹³A very similar operational definition to the one used in this paper can be found in Evans and Vink (2012) who describe switching in the European Parliament.

to solo defections and only 2.5% to mostly collective. Even if the variable is skewed, it has the advantage of measuring quite precisely the predominant de-affiliation strategy adopted by defectors from a given party. This variable will be analysed with a multinomial model (Long and Freese 2006).

I use also a second operationalisation for my outcome variable, namely the share of individual changes over the total number of defections. This variable has a smaller number of observations, as they only take into account the parties that witnessed at least one switcher in a given year. This variable will be analysed through a linear regression specification. Since the variable is measured in relative terms, it allows us also to evaluate the effect that each predictor has also on the percentage of collective switching. In other words, if a variable has a negative impact on the percentage of individual switching, it means that it has a positive and equivalent effect on the collective breakaways.

Figure 1¹⁴ gives an overview of how the two forms of switching have evolved in each country over the years. Countries are ranked for increasing mean percentage of individual switching (see Table A3 for more details). The figure shows that, over time, the countries that have lower percentages of individual switching, were indeed mostly affected by collective switches, although to very different extents.

Independent variables

The independent variables of interest are four: 1) parties' governing status, 2) the size of the parliamentary majority supporting a cabinet, 3) the size of each party and 4) the extremity of their ideological position on the left-right continuum.

The first set of hypotheses looks at the interaction between parties' governing status and the size of the parliamentary majority. I used the ParlGov database to compute parties' governing positions. Parties are assigned value 1 when they are part of the governmental majority for a year (or part of it), and 0 when they are in the opposition (variable *Govt*). Finally, the size of the majority is measured as the share of seats held by governing parties. In order to calculate this share, I summed the number of seats belonging to the ruling coalition/party and I divided it by the total number of seats in the assembly. According to my hypotheses the probability of a collective defection

¹⁴All figures were created using the Stata package developed by Bischof (2017).

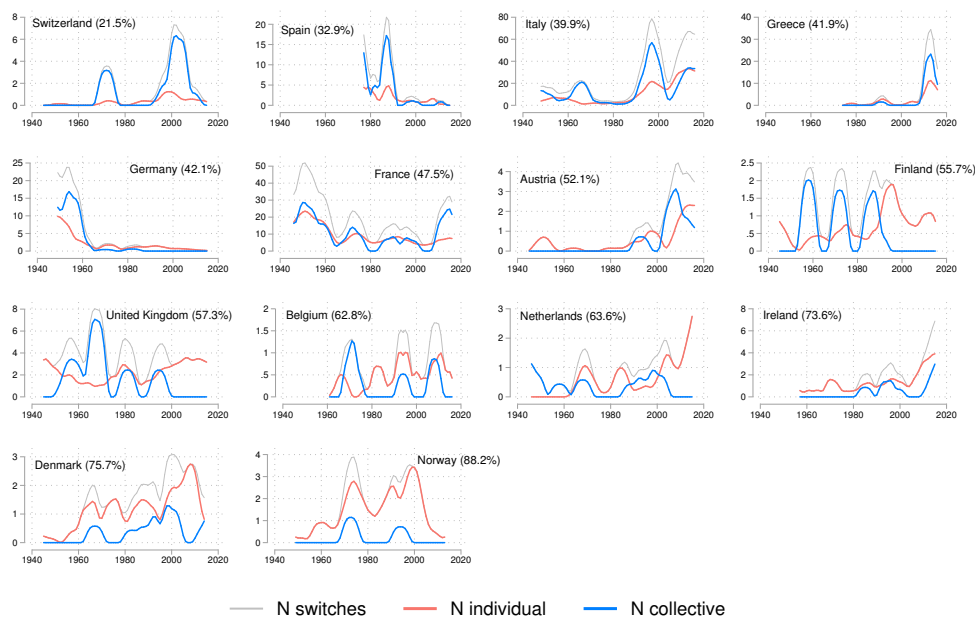


Figure 1: Individual and collective switches over time: smooth average number of switches in each country

increases for governing parties (opposition parties) when the government is supported by a larger majority (a smaller majority).

The second set of hypothesis, instead, studies the effect of party size and ideological extremism. Party size was retrieved from ParlGov as well and it corresponds to the share of seats each party obtained at the beginning of a new term, right after elections. Concerning ideological extremism, I calculated the absolute value of the difference between each party's position on the left-right scale (variable *Rile* from the Comparative Manifesto Project (CMP) (Volkens et al. 2016)) and the centre of the party system (that is the mean value of all parties' positions).

Control variables

I also control for a set of variables that can affect the scope of defections. Specifically, I use party age as a proxy for party institutionalisation. Kreuzer and Pettai (2009) suggest that indeed more institutionalised parties should be more immune to switching because of a lack routinisation of rules and value infusion (Ibenskas 2016). Measuring

party age is straightforward: for each party I retrieved the year in which it was established from the ParlGov database (Döring and Manow 2015). Then I calculated the difference between the founding year and the year of the observation. The variable obtained (*Age*) ranges from 0 to a maximum of 181, with an average of 45.6.

As already mentioned, ideology is one of the main driver of switching, hence in order to control for other aspects of this concept that are not captured by extremism, I add the *Rile* score.

I also include two systemic variables that are related to the scope of switching, that is, the size of the party system (measured as the absolute number of parties in parliament) and electoral volatility¹⁵. Finally, to control for any other potential difference between countries, I use fixed effects.

Analysis and Results

Tables A4 and A5 shows the result of the baseline regression models where I test the two hypotheses separately and without any control variables. For the multinomial models, the columns of interest are the second and the fourth ones, as they report the coefficients for the category of predominantly collective switches compared to predominantly individual. Turning to the first hypothesis, the interaction between governing status and majority size reaches statistical significance and is positive, suggesting that the likelihood of a collective breakaway increases for governing parties when the size of its parliamentary support gets larger. Similarly, by looking at the linear models that study the effect on the percentage of individual switching, we can see that the coefficient of the interaction term is negative and significant, indicating that the share of solo defections decreases for cabinet parties when the majority widens.

For the second hypothesis, instead, according to Table A5 the coefficient of the interaction between party size and ideological extremism is not statistically significant, and it is basically null both in the multinomial estimation and the linear model. What is interesting to notice is that party size seems to matter for switching, while extremism does not reach significance when considered in interaction, but it does when tested alone.

¹⁵Total net volatility, following Emanuele (2015).

Table 5: Multivariate models of different switching strategies

VARIABLES	Multinomial <i>No switching</i>	Multinomial <i>Collective</i>	Linear <i>Individual</i>
Government = 1	-0.192 (0.53)	-1.284 (1.03)	16.207 (10.77)
Majority share	0.636 (0.69)	-1.694+ (0.95)	24.852+ (12.85)
Government*Majority share	0.245 (0.94)	3.462* (1.76)	-44.131* (18.65)
Extreme	0.001 (0.01)	0.005 (0.01)	-0.181 (0.17)
Seat share	-0.034*** (0.01)	-0.044*** (0.01)	0.442*** (0.13)
Extreme*Seat share	0.000 (0.00)	0.001* (0.00)	-0.005 (0.01)
Age	0.004+ (0.00)	-0.022*** (0.00)	0.118** (0.04)
RILE	-0.008** (0.00)	-0.007 (0.00)	0.092 (0.06)
N parties	-0.118* (0.05)	-0.117 (0.09)	1.052 (0.96)
Volatility	-0.026** (0.01)	0.012 (0.01)	-0.239 (0.18)
Constant	3.406*** (0.68)	0.213 (0.90)	64.665*** (11.95)
Country FE	YES	YES	YES
Observations	5,235	5,235	746
R-squared			0.117

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 5 shows the results of the multivariate models where the two hypotheses are tested at the same time together with the control variables. Starting from the first set of hypotheses, the results from the bivariate models are confirmed. The interaction term between majority size and governing status is positive and significant. At the same time, the linear regression indicates that the share of individual switchers decreases under the same circumstances. In order to disentangle better the reciprocal effect of the two variables, I calculated how the probability of individual and collective switching change for opposition and governing parties at different levels of majority share. Figure 2 indicates the following:

- The probability of collective defections increases for governing parties, the larger the share of their majority. At the same time, the likelihood of individual defections decreases. Yet, overall individual switching remains more likely to occur. In any case these findings indicate that Hypothesis 1A can be partially accepted, as the likelihood of collective switching is at its minimum when the share of governing majority is small. Vice versa, individual switching from cabinet parties is most likely to occur the narrower the majority is.
- Hypothesis 1B finds partial support in the data, as the probability of individual defections decreases the larger the majority is, yet it remains larger than collective defections.
- Hypothesis 1C is confirmed as we can see that the maximum likelihood of both individual and collective defections for opposition parties is found when the majority is narrow.

These findings are consistent also when we look at the joint effect of the two variables on the share of individual switching: the coefficient of the interaction is negative and significant, indicating that the patterns of the two forms of switching change according to the size of the majority and the governing status of parties.

According to the second set of hypotheses, on the effect of party size and ideological extremism, I expected smaller and extreme parties to witness more collective break-aways than individual switching. According to the results of my multinomial analysis, the coefficient of the interaction term is positive and statistically significant, yet it is very small. The fact that the effect is substantively null can clearly be displayed in

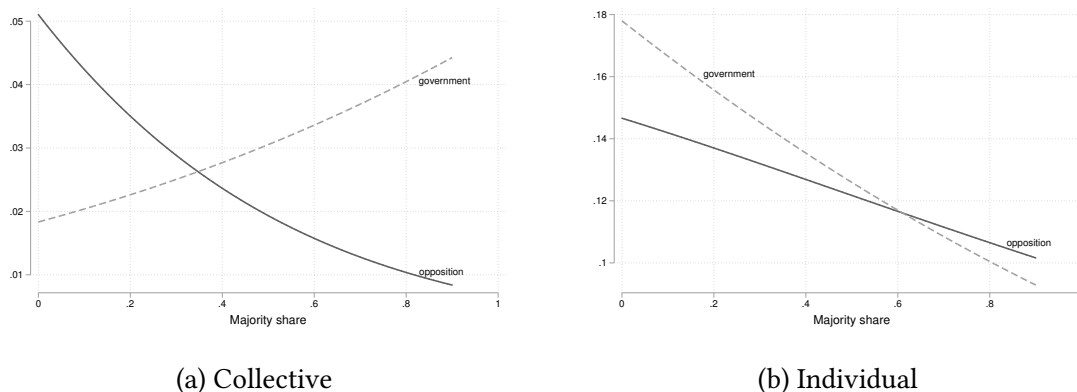


Figure 2: Changes in the probability of collective and individual defections for opposition and governing parties at different majority sizes (multinomial model)

Figure 3: the probability of a collective switch is the same for parties of different sizes, irrespectively of their ideological profile. The same – perhaps even more neatly – can be observed for individual changes, whose probability changes only based on party sizes. In particular, we can see that solo switches are more likely for larger parties, as predicted by Hypotheses 2A. In other words, the results of the analysis suggest that the effect of party size is not mediated by ideological extremism, but it is direct. The argument that finds support in my data is therefore the one about power (Hix and Noury 2018): smaller parties are more subject to collective breakaways while larger groups are witnessing mostly individual defections. This result suggests that while on average MPs in large parties are more satisfied, there will always be some MPs who would be unhappy; but probabilistically it is more likely that this would be an individual MP rather than a group of MPs.

To summarize, the empirical analysis overall supports my general argument that the patterns of switching change according to different situations. Firstly, individual switching is mostly affecting governing parties when the share of their majority is narrow (Hp 1A confirmed), while their likelihood diminishes the larger the majority becomes, with an increase in the probability of collective changes. On the contrary, opposition parties when the majority is small are subject to both individual and collective changes (HP 1C confirmed). With larger majorities, the probability of both forms of defections decreases, with individual changes remaining prevalent (HP 1B confirmed). Secondly, the effect of party size is not mediated by ideology: larger parties are more

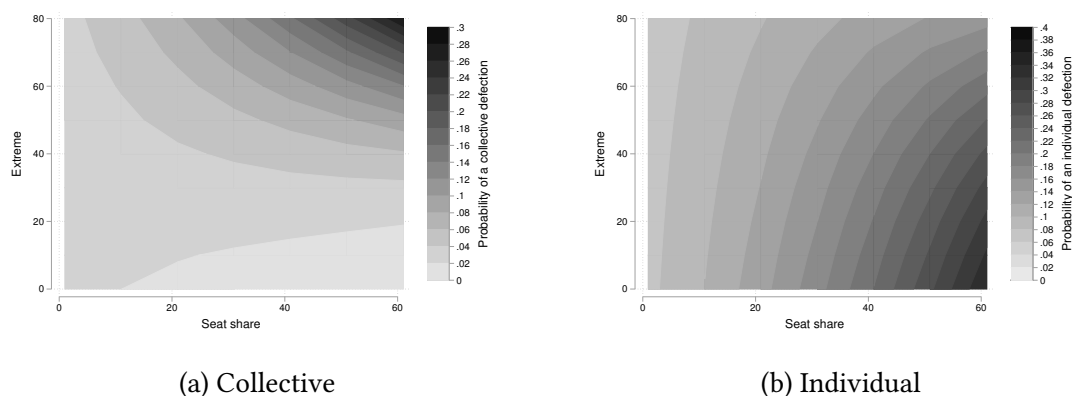


Figure 3: Changes in the percentage of individual and collective defections for opposition and governing parties at different majority sizes (multinomial model)

likely to witness individual switching (Hp 2A confirmed), while smaller parties witness both forms of defections (Hp 2B confirmed, while Hp 2C is rejected).

Table 6: Summary of findings

	<i>Governing party</i>	<i>Opposition party</i>
<i>Wide majority</i>	Both (HP 1A partially confirmed)	Individual (HP 1B confirmed)
<i>Narrow majority</i>	Individual (HP 1A confirmed)	Both (HP 1C confirmed)
	<i>Small party</i>	<i>Large party</i>
<i>Extreme</i>	Both (HP 2B rejected)	Individual (HP 2A confirmed)
<i>Centrist</i>	Both (HP 2C confirmed)	Individual (HP 2A confirmed)

Turning to control variables, starting with party age, according to the results of the two models, older parties are less subject to collective switching, while they witness more solo changes (similarly to what happens to larger parties). Ideological position does not reach statistical significance, like the size of the party system and electoral volatility.

Robustness checks

To test the robustness of my results, I replicate the analysis by substituting country fixed effects with several control variables measuring various aspect of the institutional configuration of a given country. Specifically, I control for the form of government, the electoral system, the type of parliamentary regulation. The rationale for including these variables and their operationalisation can be found in the Appendix. The results of the analysis with these additional control variables (Table A6) are in line with those from the main model. The coefficients of the explanatory variables of interest display the same sign and comparable statistical significance levels.

Additionally, I run the analysis in the individual countries, replicating the linear regression model. The results are presented in Figure A2. Overall, the patterns that emerged from the aggregated analysis are confirmed also by looking at the single countries. Obviously, because the number of observations is more limited, in most of the cases the coefficients are not significant, but their direction is coherent with what observed at the pooled level. In particular, I find a negative impact of governing position and share of the majority and a null effect for the interaction between ideological extremism and party size.

Finally, I replicate my analysis excluding, firstly, Ireland and Great Britain and, secondly, Italy. The reason to keep Ireland and Great Britain out is because in these two countries MPs voting against the party line are usually expelled for a few months, but on the parliamentary records it is not possible to tell the difference between voluntary switches and expulsions. For what concerns Italy, instead, the country has by far the highest incidence of switching ¹⁶. I want therefore to make sure that this outlier does not drive my results. As Table A8 shows, both when Ireland and the United Kingdom are left out and when Italy is excluded, the findings from the previous analysis do not substantially change.

Conclusion

While most of the literature on party switching has overlooked the potential differences between politicians changing party in a group or individually, this paper, by

¹⁶More details in Table A3.

separately analysing collective and individual switching strategies, indicates that these two forms of switching are not only theoretically different, but they are also affected by different sets of factors. In other words, the most important finding of this work is that we should study switching by keeping the two forms of defection separated.

The fact that the two de-affiliation strategies are correlated differently with the covariates of interest helps to explain why some results from the analysis performed in the previous works were not always consistent with each others. On the contrary, we have seen that the same factor can have a positive impact on the scope of collective switching, while reducing the probability of single defections. This is, for instance, of parties in government who are more likely to witness individual switching compared to their competitors in the opposition, especially when the share of their parliamentary support is smaller. In this situation, in fact, the opposition becomes particularly unstable experiencing both individual and collective defections. Similarly, we have seen that collective breakaways are more likely to occur from small parties, while, on the contrary, larger parties have a greater chance to witness individual defections.

Compared to the other few works distinguishing among different de-affiliation strategies, my analysis, even if conducted at a more aggregated level, seems to support the results by Kemahlıoğlu and Sayarı (2017). According to the two authors, individual switchers are mostly motivated by re-election, that is, their personal advantage, while collective defectors are driven usually by policy concern. For instance, it could be argued that collective breakaways from governing parties supported by strong majorities are mostly related to conflicts over policy that could not be solved. Similarly, extreme, small parties might have a level of ideological conflict that is so intense that might frequently lead to splits. In other words, the results of this paper, despite using parties and not single MPs as a unit of analysis, indicated that there is potentially a link between the two switching strategies and the goals that politicians try to attain. Future works, focusing on individual legislators, might help us to test the presence of this relationship between strategies and objectives.

The most crucial result of this work is that when we study switching we should not only look at its presence or its scope, but also and foremost, at the *nature* of the changes. By looking at the *quality* of switching, the results of my analysis suggest that legislators adapt their choices based on the circumstances they face. Hence, if other works do not find a significant effect of contextual variables, it might be due to the fact that

researchers have not distinguished between these two forms of switching. However, this paper indicates that parties and countries are affected by different types of defections, based on the different costs and benefits available in different situations. The fact that these conditions affect not only the quantity but also and especially the quality of inter-party movement, also has important implications also in terms of policy making. Indeed, a hypothetical regulation aimed at reducing the episodes of defections might produce results only for individual changes, but not on aggregate movements or vice versa¹⁷.

¹⁷On this see, for instance, the work done by Nikolenyi (2019) on the Israeli anti-defection law that has changed the modality of defections but not their presence.

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Appendix

Data collection

Table A1 shows the list of the 14 countries for which it was possible to collect data on legislative party switching. This sample of countries does not represent the entire universe of Western European democracies. In fact, there were at least four countries (namely Iceland, Luxembourg, Portugal and Sweden) clearly belonging to this geographical area that could not be included because the data collection turned out to be infeasible.

Table A1: List of countries and years covered by the data collection

<i>Country</i>	<i>Years</i>
Austria	1945-2015
Belgium	1961-2016
Denmark	1945-2014
Finland	1945-2015
France	1946-2016
Germany	1949-2015
Greece	1974-2016
Ireland	1958-2015
Italy	1948-2015
Netherlands	1946-2012
Norway	1945-2015
Spain	1977-2016
Switzerland	1943-2015
United Kingdom	1945-2015

In the case of Iceland the database of former legislators shows their party affiliation throughout their career, but in case a parliamentarian changed group there is no way to retrieve the date or even the legislative term when the switch took place. While probably it could have been possible to find the date by looking at the minutes of the parliamentary sessions, the fact that I have no knowledge of Icelandic, made it impossible to collect details on this country. Regarding Luxembourg, the problem was that there is neither a digital register of former MPs nor a digital archive of parliamentary minutes. After consulting with the Library service of the Luxembourgian Parliament and realising that the effort of collecting the data in person would have required several weeks of archival research, I decided to drop this case as well. For the Portuguese case, I tried several times to get in touch with the Archive of the Parliament, even with the help of a collaborator from the Social Democratic Party, but I have never received any answer. For Sweden, instead, according to the Parliamentary Library, the only way

to collect reliable data would have been to read the parliamentary minutes in Swedish, a language that I cannot read. I contacted several Swedish academics who study elites and no one could help me in finding alternative sources for my data collection. For these reasons I was forced to exclude these four countries from my analysis.

Finally, a note on Belgium and Ireland whose observations do not start from 1945, but after. In Belgium parliamentary groups were established only in 1961, for this reason it was not possible to retrieve information about legislators' party affiliation before that date. In the case of Ireland, instead, it was not possible to find reliable sources to collect data before 1968, therefore I decided to exclude the previous legislative terms. More specifically, data on Irish switchers in the Lower House (Dáil Éireann) comes from three different sources. The Library & Research Service of the Irish Parliament (Oireachtas) was able to provide me only with a list of legislators who changed affiliation during the year 2010-2013, that is the 31st Dáil. Data from previous parliamentary terms was not available on-line, therefore, I had to rely on two secondary sources. For the years 1993-2010, I used the list of changes of alliances collected by Gallagher (2010) and the dissertation by Martin (1997), instead, provides the full series of defections for the period 1968 to 1993, but not earlier.

Descriptive statistics

Table A2: Descriptive statistics of variables of interest

	N	mean	sd	min	max
Switch (categorical)	5235	.1661891	.4312531	0	2
Percent individual	746	84.27726	34.20124	0	100
Government	5235	.4122254	.4922824	0	1
Majority share	5235	.5813046	.1459938	0	1
Extreme	5235	15.31786	12.06617	.0229091	79.435
Seat share	5235	15.85268	15.11723	.1733102	63.58118
Age	5235	46.36657	36.86296	0	181
RILE	5235	-3.697284	21.99434	-68.1	78.846
N parties	5235	7.282713	2.324447	3	12
Volatility	5235	10.6716	6.489185	.45	48.5
Observations	5235				

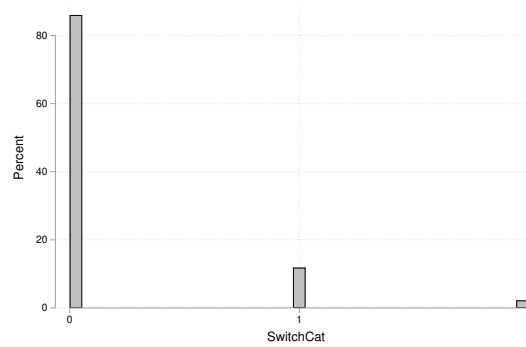


Figure A1: Percentage of observations experiencing 0= no switching; 1= prevalently individual; 2= prevalently collective

Table A3: Average percentage of switchers, number of individual and collective switches and average percentage of individual defectors by country

<i>Country</i>	<i>Years</i>	<i>Average % of switchers</i>	<i>Individual switches (absolute N)</i>	<i>Total switches (absolute N)</i>	<i>% indiv. over tot. N of switches</i>
Austria	1945-2015	1.04	38	73	52.1
Belgium	1961-2016	0.85	27	43	62.8
Denmark	1945-2014	1.26	81	107	75.7
Finland	1945-2015	0.77	664	1397	47.5
France	1946-2016	1.81	49	88	55.7
Germany	1949-2015	1.32	127	302	42.1
Greece	1974-2016	2.13	95	227	41.9
Ireland	1958-2015	1.24	78	106	73.6
Italy	1948-2015	3.09	737	1845	39.9
Netherlands	1946-2012	0.94	42	66	63.6
Norway	1945-2015	1.27	97	110	88.2
Spain	1977-2016	2.22	23	107	21.5
Switzerland	1943-2015	1.21	68	207	32.9
United Kingdom	1945-2015	0.30	157	274	57.3

Bivariate analysis

Table A4: Bivariate models testing Hypotheses 1 A-C

VARIABLES	HP 1	HP 1	HP 1	HP 1	HP 1	HP 1
	Multinomial <i>No switching</i>	Multinomial <i>Collective</i>	Multinomial <i>No switching</i>	Multinomial <i>Collective</i>	Linear	Linear
Government = 1	-0.511*** (0.09)	-0.034 (0.19)	-0.645+ (0.35)	-1.340+ (0.75)	-0.008 (2.51)	18.479+ (10.45)
Majority share	2.025*** (0.29)	-0.401 (0.65)	1.925*** (0.39)	-1.347 (0.82)	6.968 (8.79)	19.726+ (11.22)
Government*Majority share			0.240 (0.60)	2.335+ (1.29)		-32.791+ (17.99)
Constant	1.060*** (0.17)	-1.336*** (0.36)	1.112*** (0.21)	-0.855* (0.43)	80.103*** (4.88)	73.443*** (6.09)
Observations	5,695	5,695	5,695	5,695	798	798
R-squared					0.001	0.005

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table A5: Bivariate models testing Hypotheses 2 A-C

VARIABLES	HP 2	HP 2	HP 2	HP 2	HP 2	HP 2
	Multinomial <i>No switching</i>	Multinomial <i>Collective</i>	Multinomial <i>No switching</i>	Multinomial <i>Collective</i>	Linear	Linear
Extreme	-0.002 (0.00)	0.014* (0.01)	-0.009 (0.01)	0.003 (0.01)	-0.210* (0.10)	-0.128 (0.16)
Seat share	-0.030*** (0.00)	-0.028*** (0.01)	-0.035*** (0.00)	-0.038*** (0.01)	0.322*** (0.07)	0.384** (0.12)
Extreme*Seat share			0.000 (0.00)	0.001 (0.00)		-0.004 (0.01)
Constant	2.563*** (0.09)	-1.298*** (0.19)	2.671*** (0.11)	-1.114*** (0.23)	80.444*** (2.58)	79.108*** (3.28)
Observations	5,410	5,410	5,410	5,410	775	775
R-squared					0.033	0.033

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Robustness checks

Institutional control variables

As explained in the main text, as robustness test, I decided to substitute country fixed effects with specific measurements for different institutional variables. Specifically, I add controls measured either at the country level or at the party system level.

At the systemic level I include the number of parties represented in parliament (as a proxy for fragmentation) and electoral volatility. When the system is more fragmented, the opportunities to defect increase. This is due to the fact that when the party system is larger it is easier for MPs to find parties that are ideologically close to the original one. Regarding volatility, according to the research done by Mershon and Shvetsova (2013) and Klein (2019), in general there is a positive association between electoral dealignment and switching. Taking advantage of a comprehensive data set of electoral instability in Western Europe since 1945 (Emanuele 2015), I retrieved information about the various components of electoral volatility. For the purpose of this analysis I decided to take the index that measures total volatility, as the sum of what the author calls ‘regeneration volatility’ (caused by entry and exit of parties from a system), ‘alternation volatility’ (vote shifts by existing parties) and ‘other volatility’ (vote shifts between small parties, i.e. below 1% of the vote share).

At the institutional level, I control first of all from the type of electoral system used in the country. Electoral systems are probably the institutional factor that has received the greatest attention in the literature on switching, as the various formulas provide different incentives for party unity (Nikolenyi 2019). The central idea is that electoral systems might generate incentives for politicians to cultivate their personal reputation, rather than relying solely on their party label, (Carey and Shugart 1995), and this might then negatively affect party unity (Hix 2004). I classify electoral systems based on two distinct dimensions: 1) the ballot structure, and 2) the district magnitude. Ballot structure is important because it is related to the “openness” of an electoral system, that is the choice granted to voters (Farrell and Gallagher 1998). The greater the openness of an electoral system, the greater the competition for votes not only across parties, but also among candidates from the same list. In such circumstances, therefore, candidates have to develop personal electoral resources if they want to get elected. I assume that the level of openness increases when voters are given a greater choice among candidates, hence closed lists represent the minimum, while open lists and the single-transferable-vote system (STV)¹⁸ represent the maximum. I distinguish between countries using a closed list versus those using more open forms of ballot (that is flexible list, open/preferential list, panachage or STV). The variable *Ballot Type* takes therefore value 0 in presence of a closed list and 1 in any other case. The variable average district magnitude (*Average M*), records how many seats are assigned on av-

¹⁸STV, it is used in Ireland, for more details on how this system works, see Gallagher (2005).

erage in each electoral district of a given country. This second characteristic is equally important because it captures the proportionality of the electoral system. I retrieved the average district magnitude of each country-year from the data set developed by Pilet et al. (2016).

I control for the form of government in place in each country, given that it has been argued that legislators in parliamentary systems act in a more party-centred manner compared to MPs in presidential and semi-presidential contexts (O'Brien and Shomer 2013)¹⁹. According to this hypothesis, countries with a parliamentary form of government should not only have more united parties but also less switching (Mershon and Shvetsova 2013). Regimes were classified on a four-point scale based on the strength of the link between the legislative assembly and the executive power. The variable has therefore the following four categories:

1. *Semi-presidential, split majority* (0);
2. *Semi-presidential, unified majority* (1);
3. *Classic parliamentarism* (2);
4. *Rationalised parliamentarism* (3).

Subsequently, the fourteen countries were assigned to the different categories, based on the form of government in place in a given year. There is not a great variation in the types of government. Most of the cases are examples of parliamentary governments, and among them the extent of switching varies greatly. Moreover, there are only two cases of actual semi-presidential government, namely France and Finland²⁰.

¹⁹This hypothesis finds support in the work of - for example - Bowler, Farrell, and Katz (1999), Carey (2007) and Diermeier and Feddersen (1998).

²⁰Constitutionally, Austria and Ireland are also semi-presidential systems, since in both countries the president is directly elected by citizens. However, these two countries in practice function as parliamentary systems, as explained by Sartori (1997), Shugart and Carey (1992) and Duverger (1980), because based on contingent factors the president does not make use of his/her powers (Bartolini 1984). Therefore, I assign Austria and Ireland to the category of classic parliamentary regimes. Note that Switzerland represents a special case. According to Steiner (1974), Switzerland is neither a presidential system nor a classic parliamentary democracy. The seven Federal councillors (i.e., the members of the cabinet) are elected by the Parliament for a fixed term of four years and they cannot be dismissed by a no-confidence vote. If proposals from the executive are rejected by the Parliament, the councillors do not have to resign. According to Lijphart (2012), in Switzerland there is a formal separation of power between legislature and cabinet and the relationship between these two bodies is more balanced than in the classic parliamentary systems. Indeed, Lijphart classifies Switzerland as an hybrid case. In order to avoid to create a category only for Switzerland in the four-point scale described above, I assigned the Swiss case to the second category. I argue that the link between legislative power and executive power in Switzerland is less tight compared to pure parliamentary systems, because it is unlikely that defectors will be able to turn down the executive, similarly to what happens in semi-presidential regimes.

Finally, I control for the parliamentary regulation in place in each country. Regulations play a central role because they define whether and how MPs can defect from their original party. Specifically I retrieved information on the following aspects defined by the parliamentary procedures²¹:

1. *Limitation*: takes value 1 when there are formal limitations to defections, and 0 otherwise.
2. *Independent*: takes value 1 when MPs can only be independent, and 0 when instead there is a mixed group.
3. *New group*: takes value 1 when there are limitations to the establishment of a new group within a legislative term, and 0 otherwise.
4. *Numeric*: takes value 1 if in order to establish a group at least 2 MPs are necessary. When individual MPs can form their own group, the variable takes value 0.
5. *Political*: takes value 1 when MPs have to meet a political requirement in order to form a group, and 0 otherwise.

I then combined these five variables into a cumulative index that theoretically varies from 0 to 5, but in practice there is no country that scores the minimum or the maximum.

²¹See Table A7 for more details on the regulation.

Table A6: Multivariate regression models without country fixed effects

VARIABLES	Multinomial No switching	Multinomial Collective	Linear Individual
Government = 1	-0.513 (0.50)	-1.270 (0.87)	15.037 (10.49)
Majority share	0.506 (0.65)	-0.842 (0.94)	11.929 (12.04)
Government*Majority share	0.756 (0.90)	3.221* (1.52)	-38.725* (18.09)
Extreme	-0.001 (0.01)	-0.004 (0.01)	-0.072 (0.17)
Seat share	-0.034*** (0.01)	-0.040*** (0.01)	0.375** (0.13)
Extreme*Seat share	0.000 (0.00)	0.001* (0.00)	-0.007 (0.01)
Age	0.003 (0.00)	-0.022*** (0.00)	0.144*** (0.04)
RILE	-0.007* (0.00)	-0.009+ (0.00)	0.100+ (0.06)
N parties	0.039 (0.03)	-0.035 (0.05)	-0.119 (0.63)
Volatility	-0.024** (0.01)	0.011 (0.01)	-0.218 (0.18)
Form of government			
1	0.075 (0.38)	0.177 (1.01)	-1.595 (7.88)
2	-1.074* (0.46)	0.879 (1.00)	-9.981 (8.82)
3	-0.445 (0.55)	1.564 (1.00)	-11.572 (9.19)
Regulation			
2	0.298 (0.22)	-1.394*** (0.37)	11.118** (3.98)
3	-0.891** (0.30)	-0.398 (0.43)	5.247 (4.72)
4	0.770** (0.25)	-1.103** (0.40)	8.953+ (4.79)
District Magnitude	-0.034 (0.02)	-0.020 (0.02)	0.332 (0.27)
Ballot = 1	1.005*** (0.26)	-0.059 (0.34)	5.051 (4.45)
Ballot * District Magnitude	0.043* (0.02)	0.011 (0.02)	-0.234 (0.27)
Constant	2.033** (0.68)	-0.392 (1.16)	73.915*** (12.80)
Observations	5,220	5,220	746
R-squared			0.099

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table A7: Regulation of parliamentary party groups and defections in the fourteen countries considered

Country	Requirements for establishing groups	N and % MPs required	Political requirement	Limitations to defections	Independents
Austria	Numeric (permanent) & political	5 MPs, 2.7%	MPs have to belong to the same electoral list, otherwise it is necessary the approval of the chamber. Since 2013, new groups can also only be established not later than one month after the day of the first meeting of the National Council.	No	Yes
Belgium	Numeric (permanent)	5 MPs, 3.3%	N/A	No	Yes
Denmark	Numeric	1 MP, 0.55% in practice 4 MPs, 2.2%	N/A	No	Yes
Finland	Numeric	1 MP, 0.5%	N/A	No	Yes
France	Numeric & political	15 MPs, 2.6%	MPs have to sign a common political statement. However, MPs can also only be "attached" to a group, without fully belonging to it.	No	Yes
Germany	Numeric & political	5%	MPs shall belong to the same party or to parties which, on account of similar political aims, do not compete with each other in any state, otherwise it is necessary the approval of the chamber.	No	Yes
Greece	Numeric	10 or 5 MPs, 3.3 or 1.6%	N/A	No	Yes
Ireland	Numeric (permanent)	7 MPs, 4.4%	N/A	No	Yes
Italy	Numeric (permanent)	20 MPs, 3.2%	N/A	No	No, Mixed Group
Netherlands	Numeric	1 MP, 0.6%	N/A	No	Yes
Norway	Numeric & political	1 MP	MPs must represent a registered party which presented lists of candidates for election in at least one-third of the counties	No	Yes
Spain	Numeric & political	15 or 5 MPs, 4.2 or 1.4%	In no case may a separate parliamentary group be formed by members of the House belonging to the same party. Nor may a separate parliamentary group be formed by members who at the time of the elections belonged to political parties that did not oppose one another before the electorate.	Yes: within 5 days from the beginning of each session	No, Mixed Group
Switzerland	Numeric & political	5 MPs, 2.5%	Groups represent MPs of the same political party or same political orientation	No	Yes
UK	None	N/A	N/A	N/A	Yes

All the information to create this table were retrieved from the website of the parliament of each country and from Heidar and Koole (2000).

Analysis in the individual countries

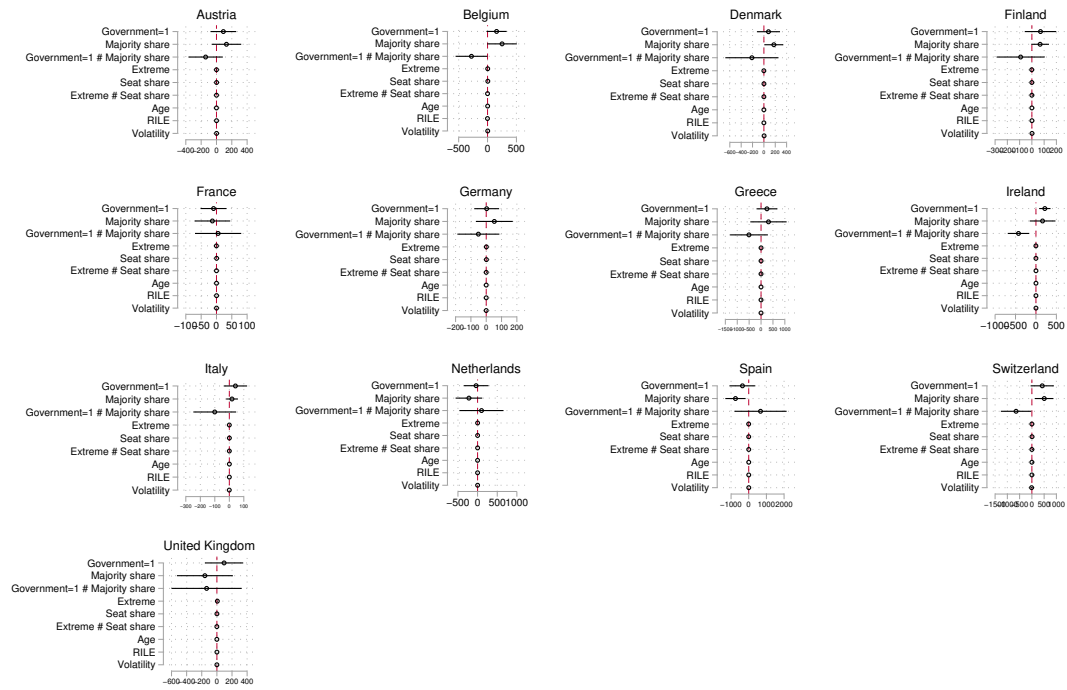


Figure A2: Results of linear regression model of individual switching in each country analysed

Analysis for more limited sets of countries

I present here the results of the analyses done excluding either Ireland and the United Kingdom or Italy, for the reasons explained in the main text.

Table A8: Multivariate regression models without Italy or Ireland and United Kingdom

VARIABLES	Multinomial No switching <i>No Italy</i>	Multinomial Collective <i>No Italy</i>	Linear Individual <i>No Italy</i>	Multinomial No switching <i>No Ireland & UK</i>	Multinomial Collective <i>No Ireland & UK</i>	Linear Individual <i>No Ireland & UK</i>
Government = 1	-0.540 (0.59)	-1.297 (1.21)	22.193+ (11.48)	-0.022 (0.54)	-0.957 (1.05)	12.165 (11.26)
Majority share	-0.330 (0.82)	-1.542 (1.62)	30.798+ (16.24)	0.826 (0.67)	-1.542+ (0.93)	23.567+ (13.32)
Govt * Majority share	0.778 (1.02)	3.582+ (1.95)	-52.361** (19.73)	0.049 (0.94)	2.974+ (1.79)	-38.025+ (19.37)
Extreme	0.003 (0.01)	0.008 (0.01)	-0.189 (0.19)	0.003 (0.01)	0.006 (0.01)	-0.172 (0.18)
Seat share	-0.038*** (0.01)	-0.052*** (0.01)	0.501*** (0.13)	-0.029*** (0.01)	-0.049*** (0.01)	0.527*** (0.15)
Extreme * Seat share	0.000 (0.00)	0.001+ (0.00)	-0.005 (0.01)	-0.000 (0.00)	0.001+ (0.00)	-0.008 (0.01)
Age	0.004 (0.00)	-0.021*** (0.01)	0.095* (0.04)	0.006* (0.00)	-0.021*** (0.01)	0.102* (0.05)
RILE	-0.007* (0.00)	-0.010+ (0.01)	0.090 (0.06)	-0.007* (0.00)	-0.006 (0.01)	0.075 (0.06)
N parties	-0.203** (0.07)	-0.063 (0.16)	0.303 (1.43)	-0.123* (0.05)	-0.142 (0.09)	1.549 (1.02)
Volatility	-0.019+ (0.01)	-0.010 (0.02)	0.104 (0.23)	-0.024** (0.01)	0.013 (0.01)	-0.267 (0.19)
Constant	4.394*** (0.74)	0.223 (1.60)	59.198*** (14.59)	3.096*** (0.69)	0.282 (0.88)	62.874*** (12.42)
Country FE	YES	YES	YES	YES	YES	YES
Observations	4,693	4,693	571	4,737	4,737	653
R-squared			0.104			0.118

Standard errors in parentheses *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

List of political parties analysed based on their party family

In order to assign parties to families, I followed the classification provided by the CMP. I decided to classify parties in eight ideological families (Green, Communist/Radical Left, Social-Democrats, Liberal, Christian-Democrats, Conservative, Radical Right, Regionalist) and I made few amendments to the classification of the CMP. First of all, I have discarded the "Agrarian" category because it would have been quite small and therefore too specific. In fact, only six parties in my database belonged to this family, with the risk that outliers would be given greater importance. Moreover, agrarian parties are often assimilated to liberal parties, given that these parties share what Gallagher, Laver, and Mair (1995) call "family resemblance". I therefore followed Ruostetsaari (2007) and placed agrarian parties into the Liberal family. Additionally, I do not use two other categories from the CMP, namely "Special issue" and "Electoral alliance", given that they were mainly residual categories. Concerning the allocation of parties into the eight families, I follow the allocation from the CMP, that I integrated with the one developed by Caramani (2015).

Table A9: Green Family

Abbreviation	Party	Country	Years	Notes
Grüne	Die Grüne Alternative (Green Alternative)	AU	1987-2015	
ECOLO	Écologistes Confédérés pour l'Organisation de Luttes Originales (Ecologists)	BE	1982-2014	
Groen (Agalev before)	Anders Gaan Leven (Live Differently) / Groen! (Green!)	BE	1982-2014	
GLP	Grünliberale Partei der Schweiz (Green Liberal Party)	CH	2008-2015	
GPS	Grüne Partei der Schweiz/Parti écologiste suisse (Green Party of Switzerland)	CH	1980-2015	
VL	Vihreä Liitto (Green Union)	FL	1983-2014	
V	Les Verts, Confédération Écologiste - Parti Écologiste (The Greens)	FR	1997-2015	
Grüne	Die Grünen (The Greens) / Grüne/Bündnis '90 (Greens/Alliance '90)	GE	1983-2015	
Greens	Green Party/Comhaontas Glas (Green Party)	IR	1989-2010	
VERDI	Federazione dei Verdi (Green Federation)	IT	1987-2007	
GL	GroenLinks (Green Left)	NL	1990-2015	

Table A10: Communist/Radical Left Family

Abbreviation	Party	Country	Years	Notes
PdA	Partei der Arbeit der Schweiz/Parti suisse du travail (Swiss Labour Party)	CH	1948-2011	
DKP	Danmarks Kommunistiske Parti (Danish Communist Party)	DK	1945-1979	
SKDL-VAS	Suomen Kansan Demokraattinen Liitto (Finnish People's Democratic Union)/Vasemmistoliitto (Left Wing Alliance)	FL	1945-2014	
PCF	Parti Communiste Français (French Communist Party)	FR	1946-2015	
KPD	Kommunistische Partei Deutschlands (Communist Party of Germany)	GE	1949-1953	
KKE	Kommunistiko Komma Elladas (Communist Party of Greece)	GR	1974-2015	
WP	Páirtí na nOibri (Workers' Party)	IR	1981-1992	
PCI	Partito Comunista Italiano (Italian Communist Party)	IT	1948-1991	
PSIUP-PDUP-DP	Partito di Unità Proletaria per il Comunismo (Il Manifesto + Partito di Unità Proletaria) (Proletarian Unity Party for Communism (The Manifesto + Proletarian Unity Party))	IT	1968-1991	
RC	Partito della Rifondazione Comunista (Communist Refoundation Party)	IT	1992-2007	
CI	Partito dei Comunisti Italiani (Party of Italian Communists)	IT	2001-2007	
CPN	Communistische Partij van Nederland (Communist Party of the Netherlands)	NL	1946-1985	
SF-SV	Sosialistisk Folkeparti (Socialist People's Party) / Socialistisk Venstreparti (Socialist Left Party)	NW	1962-2015	
NKP	Norges Kommunistiske Parti (Norwegian Communist Party)	NW	1945-1961	
PCE-IU	Partido Comunista de España (Communist Party of Spain) / Izquierda Unida (United Left)	SP	1977-2015	

EL	Enhedslisten - De Rød-Grønne (Red-Green Unity List)	DK	1995-2014
VS	Venstresocialisterne (Left Socialist Party)	DK	1968-1987
Die Linke (before PDS-LL)	Partei des Demokratischen Sozialismus (Party of Democratic Socialism) / Die Linke (The Left)	GE	1991-2015
SYN	Synaspismos tis Aristeras kai tis Proodou (Progressive Left Coalition)	GR	1989-2003
SYRIZA	Synaspismós Rizospastikís Aristerás (Coalition of the Radical Left)	GR	2004-2015
DL	Democratic Left Party	IR	1993-1999
SP	Páirtí Sóisialach (Socialist Party)	IR	1997-2015
SEL	Sinistra Ecologia Libertà (Left Ecology Freedom)	IT	2013-2015
SP	Socialistische Partij (Socialist Party)	NL	1994-2015
PPR	Politieke Partij Radicaal (Radical Political Party)	NL	1971-1989

Table A11: Social-Democratic Family

Abbreviation	Party	Country	Years	Notes
Spö	Sozialdemokratische Partei Österreichs (Austrian Social Democratic Party)	AU	1949-2014	
BPS	Belgische Socialistische Partij/Parti Socialiste Belge (Belgian Socialist Party)	BE	1961-1978	
PS	Parti Socialiste (Francophone Socialist Party)	BE	1979-2014	
SP/spa	Socialistische Partij (Flemish Socialist Party)/ Socialistische Partij Anders (Socialist Party Di)	BE	1979-2014	
SP	Sozialdemokratische Partei der Schweiz/Parti socialiste suisse (Social Democratic Party of Switzerland)	CH	1945-2015	
SD	Socialdemokratiet (Social Democratic Party)	DK	1945-2014	
SF	Socialistisk Folkeparti (Socialist People's Party)	DK	1961-2014	
SSDP	Suomen Sosialidemokraattinen Puolue (Finnish Social Democrats)	FL	1945-2014	
TPSL	Tyväväen ja Pienviljelijäin Sosialdemokraattinen Liitto (Social Democratic League of Workers and Smallholders)	FL	1959-1969	
DEVA	Demokraattinen Vaihtoehto (Democratic Alternative)	FL	1987-1990	
PS	Parti Socialiste (Socialist Party)	FR	1946-2015	
UDSR	Union démocratique et socialiste de la Résistance (Democratic and Socialist Union of the Resistance)	FR	1946-1955	
SPD	Sozialdemokratische Partei Deutschlands (Social Democratic Party of Germany)	GE	1949-2015	
PASOK	Panellinio Socialistiko Kinima (Panhellenic Socialist Movement)	GR	1974-2015	
Dikki	Dimokratiko Kinoniko Kinima (Democratic Social Movement)	GR	1997-1999	
Dimar	Dimokratiki Aristera (Democratic Left)	GR	2012-2014	
To Potami	To Potami (The River)	GR	2015	
Labour	Páirti Lucht Oibre (Labour Party)	IR	1954-2015	
PSI	Partito Socialista Italiano (Italian Socialist Party)	IT	1948-1995	
PSDI	Partito Socialista Democratico Italiano (Italian Democratic Socialist Party)	IT	1948-1993	

DS-PD	Partito Democratico della Sinistra (Democratic Party of the Left) / Partito Democratico (Democratic Party)	IT	1992-2015
RNP	Rosa nel Pugno (Rose in the Fist)	IT	2001-2007
PvdA	Partij van de Arbeid (Labour Party)	NL	1946-2015
DnA	Det norske Arbeiderparti (Norwegian Labour Party)	NW	1945-2015
PSOE	Partido Socialista Obrero Español (Spanish Socialist Workers' Party)	SP	1977-2015
Labour	Labour Party (Labour Party)	UK	1945-2015

Table A12: Liberal Family

Abbreviation	Party	Country	Years	Notes
LIF	Liberales Forum (Liberal Forum)	AU	1995-1999	
PVVV-VLD	Partij voor Vrijheid en Vooruitgang (Party of Liberty and Progress)/ Vlaamse Liberalen en Democraten (Flemish Liberals and Democrats)	BE	1972-2014	
PL	Libérale Partij/Parti Libéral (Liberal Party)	BE	1961-1971	
PLP-PRLW-PRL-MR	Parti de la Liberté et du Progrès (Party of Liberty and Progress)/Mouvement Réformateur (Reform Movement)	BE	1972-2014	
FDP	Freisinnig-Demokratische Partei der Schweiz/Parti radical-démocratique suisse (Radical Democratic Party)	CH	1945-2015	
LPS	Libérale Partei der Schweiz/Parti libéral suisse (Liberal Party of Switzerland)	CH	1945-2011	
LdU	Landesring der Unabhängigen/Alliance des Indépendants (Independents' Alliance)	CH	1945-2003	
RV	Det Radikale Venstre (Danish Social-Liberal Party)	DK	1945-2014	
V	Venstre (Liberals)	DK	1945-2014	
RF	Retsforbund (Justice Party)	DK	1945-1981	
CD	Centrum-Demokraterne (Centre Democrats)	DK	1974-1999	
NY	Ny Alliance (New Alliance)/ Liberal Alliance (Liberal Alliance)	DK	2008-2014	
LKP	Liberaalinen Kansanuolue (Liberal People's Party)	FL	1945-1982	
RRRS	Parti Républicain Radical et Radical-Socialiste (Radical Socialist Party)	FR	1946-1966	
UDF	Union pour la Démocratie Française (Union for French Democracy)	FR	1978-2015	
PRG	Parti Radical de Gauche (Left Radical Party)	FR	1973-2015	
FDP	Freie Demokratische Partei (Free Democratic Party)	GE	1949-2013	
PD	Progressive Democrats	IR	1987-2009	
PLI	Partito Liberale Italiano (Italian Liberal Party)	IT	1948-1993	
PRI	Partito Repubblicano Italiano (Italian Republican Party)	IT	1948-1993	
IDV	Lista di Pietro - Italia del Valori (List Di Pietro - Italy of Values)	IT	2006-2012	

LD-RI	Rinnovamento Italiano (Italian Renewal)	IT	1996-2000
Scelta Civica	Scelta Civica (Civic Choice)	IT	2013-2015
NPSI	Nuovo Partito Socialista Italiano (New Italian Socialist Party)	IT	2001-2007
RADICALI	Partito Radicale (Radical Party)	IT	
M5S	Movimento 5 Stelle (Five Star Movement)	IT	2013-2015
VVD	Volkspartij voor Vrijheid en Democratie (People's Party for Freedom and Democracy)	NL	1946-2015
D66	Democraten '66 (Democrats '66)	NL	1967-2015
V	Venstre (Liberal Party)	NW	1945-2015
CDS	Centro Democrático y Social (Centre Democrats)	SP	1983-1992
UCD	Unión de Centro Democrático (Union of the Democratic Centre/Centrist Bloc)	SP	1977-1985
PL	Partido Liberal (Liberal Party)	SP	1986-1989
UPyD	Unión, Progreso y Democracia (Union, Progress and Democracy)	SP	2012-2015
PDP	Partido Democrata Popular (Popular Democratic Party)	SP	1983-1989
BGB	Schweizerische Bauern-, Gewerbe- und Bürgerpartei/Parti suisse des paysans, artisans et bourgeois (Farmers', Traders' and Citizens' Party)	CH	1945-1971
KEESK-SK	Keskustapuolue (Centre Party)	FL	1945-2014
SMP	Soumen Maaseudun Puolue (Finnish Rural Party)	FL	1966-1998
CnT	Clann na Talmhan (Party of the Land)	IR	1954-1964
BP	Boerenpartij (Farmers' Party)	NL	1963-1976
SP	Senterpartiet (Centre Party)	NW	1945-2015
Liberal, then Lib Dem	Liberal Party (Liberal Party) / Liberal Democrats (Liberal Democrats)		
			Former Agrarian
			Former Agrarian
			Former Agrarian
			Former Agrarian
			Former Agrarian

Table A13: Christian-Democratic Family

Abbreviation	Party	Country	Years	Notes
Övp	Österreichische Volkspartei (Austrian People's Party)	AU	1949-2015	
PSC/CVP	Parti Social Chrétien/Christelijke Volkspartij (Franco-phone Christian Social Party and Flemish/Christian People's Party)	BE	1961-1967	
PSC	Parti Social Chrétien (Christian Social Party)	BE	1968-2014	
CVP-CD&V	Christelijke Volkspartij (Christian People's Party)/Christen-Democratisch en Vlaams (Christian Democratic and Flemish)	BE	1968-2014	
CVP	Christlichdemokratische Volkspartei der Schweiz/Parti démocrate-chrétien suisse (Christian Democratic People's)	CH	1945-2015	
EVP	Evangelische Volkspartei der Schweiz/Parti Evangélique Suisse (Protestant People's Party of Switzerland)	CH	1945-2015	
KrF	Party of Switzerland	DK	1974-2004	
SKL-KD	Suomen Kristillinen Liitto (Finnish Christian Union)/Suomen Kristillisdemokraati (Christian Democrats in Finland)	FL	1970-2014	
MRP	Mouvement Républicain Populaire (Popular Republican Movement)	FR	1946-1977	
CDP	Centre Démocratie et Progrés (Centre, Democracy and Progress)	FR	1973-1977	
CDU/CSU	Christlich-Demokratische Union/ Christlich-Soziale Union (Christian Democratic Union/Christian Social Union)	GE	1949-2015	
DZ	Deutsche Zentrumspartei (Centre Party)	GE	1949-1953	
EK-EDIK	Enosis Kentrou (Centre Union) /Enosi Dimokratikou Kentrou (Union of the Democratic Centre)	GR	1974-1981	
FG	Fine Gael (Family of the Irish)	IR	1954-2015	
DC	Democrazia Cristiana (Christian Democrats)	IT	1948-1993	

CCD-UDC	Centro Cristiano Democratico (Christian Democratic Centre)/Unione dei Democratici Cristiani e di Centro (Union for Christian and Center Democrats)	IT	1994-2012
PPI-MARG	Partito Popolare Italiano (Italian Popular Party)/ Margherita (Daisy)	IT	1994-2005
UDEUR	Popolari Unione Democratica per l'Europa (Popular Democratic Union for Europe)	IT	2006-2007
KVP	Katholieke Volkspartij (Catholic People's Party)	NL	1946-1976
CHU	Christelijk-Historische Unie (Christian Historical Union)	NL	1946-1976
ARP	Anti-Revolutionaire Partij (Anti-Revolutionary Party)	NL	1946-1976
CDA	Christen-Democratisch Appèl (Christian Democratic Appeal)	NL	1977-2015
RPF	Reformatorische Politieke Federatie (Reformatory Political Federation)	NL	1981-2001
GPV	Gereformeerd Politiek Verbond (Reformed Political League)	NL	1994-2001
KrF	Kristelig Folkeparti (Christian People's Party)	NW	1945-2015

Table A14: Conservative Family

Abbreviation	Party	Country	Years	Notes
BDP	Bürgerlich-Demokratische Partei Schweiz/Parti Bourgeois Démocratique Suisse (Conservative Democratic Party of Switzerland)	CH	2012-2015	
KF	Konservative Folkeparti (Conservative People's Party)	DK	1945-2014	
KK	Switzerland)	FL	1945-2014	
CNIP	Centre National de Independants et Paysans - Conservatives (National Centre of Independents and Peasants - Conservatives)	FR	1946-2015	
RPF-RPR-UMP	Rassemblement du Peuple français - Gaullists (Rally for the French People - Gaullists)/Rassemblement pour la République - Gaullists (Rally for the Republic - Gaullists)/Union pour un Mouvement Populaire (Union for a Popular Movement)	FR	1946-2015	
NC	Nouveau Centre (New Centre)	FR	2007-2015	
IR	Independants républicains (Independent Republicans)	FR	1963-1977	
DP	Deutsche Partei (German Party)	GE	1949-1961	
ND	Nea Dimokratia (New Democracy)	GR	1974-2015	
EP	Ethniki Parataxis (National Alignment)	GR	1978-1981	
Pola	Politiki Anixi (Political Spring)	GR	1994-1996	
FF	Fianna Fáil (Soldiers of Destiny)	IR	1954-2015	
FI-PDL	Forza Italia (Go Italy)/Popolo della Libertà (People of Freedom)	IT	1994-2015	
PNM-PDIUM	Partito Nazionale Monarchico (Monarchist National Party) / Partito Democratico Italiano di Unità Monarchica (Italian Democratic Party of Monarchist Unity)	IT	1948-1971	
PMP	Partito Popolare Monarchico (People's Monarchist Party)	IT	1958-1962	
AN	Alleanza Nazionale (National Alliance)	IT	1994-2007	
H	Høyre (Conservative Party)	NW	1945-2015	
AP-PP	Alianza Popular (Popular Alliance)/ Partido Popular (Popular Party)	SP	1977-2015	

Conservatives	Conservative Party (Conservative Party)	UK	1945-2015
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Table A15: Radical Right Family

Abbreviation	Party	Country	Years	Notes
Fpö (before VdU)	Freiheitliche Partei Österreichs (Austrian Freedom Party)	AU	1949-2015	
Stronach	Team Stronach	AU	2014-2015	
Bzö	Bündnis Zukunft Österreich (Alliance for the Future of Austria)	AU	2007-2013	
VB	Vlaams Blok (Flemish Bloc)/Vlaams Belang (Flemish Interest)	BE	1979-2014	
SVP	Schweizerische Volkspartei/Union démocratique du centre (Swiss People's Party)	CH	1972-2015	
SD	Schweizer Demokraten/Démocrates suisses (Swiss Democrats)	CH	1968-2007	
FPS	Freiheitspartei der Schweiz (Freedom Party of Switzerland)	CH	1988-1999	
NA	Nationale Aktion für Volk und Heimat/Action nationale pour le peuple et la patrie (National Action for People and Fatherland)	CH	1972-1987	
FP	Fremkridtspartiet (Progress Party)	DK	1974-2001	
DF	and Fatherland)	DK	1998-2014	
PS	Perussuomalaiset (True Finns)	FL	1999-2014	
FN	Front National (National Front)	FR	1986-2015	
UFF	Union et fraternité française (Union and French Fraternity)	FR	1956-1958	
WAV	Wirtschaftliche Aufbauvereinigung (Economic Reconstruction League)	GE	1949-1953	
DRP	Deutsche Reichspartei (German Reich Party)	GE	1949-1953	
GB/BHE	Gesamtdeutscher Block/Bund der Heimatvertriebenen und Entrechteten (Refugee Party)	GE	1954-1957	
LAOS	Laikós Orthódoxos Synagermós (Popular Orthodox Rally)	GR	2008-2011	
ANEL	Anexartitoi Ellines (Independent Greeks)	GR	2012-2015	
X.A	Chrysi Avgi (Golden Dawn)	GR	2012-2015	

CnP	Clann na Poblachta (Republican Party)	IR	1954-1968
SF	Sinn Féin (We Ourselves)	IR	1997-2015
MSI	Movimento Sociale Italiano (Italian Social Movement)	IT	1948-1993
FdI	Fratelli d'Italia - Centrodestra Nazionale (Brothers of Italy - National Centre-right)	IT	2013-2015
PVV	Partij voor de Vrijheid (Party of Freedom)	NL	2007-2015
CU	ChristenUnie (Christian Union)	NL	2002-2015
LPF	Lijst Pim Fortuyn (List Pim Fortuyn)	NL	2002-2006
FrP	Fremskrittspartiet (Progress Party)	NW	1982-2015

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