

## Party survival in parliament: Explaining party durability in lower-house parliaments

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**Abstract.** Approximately 70 per cent of the parties emerging in the post-Second World War era failed to keep their seats in parliament. Party survival is an important issue, especially in parliamentary democracies, where parties are the means through which voters' preferences are linked to government policy outputs. Using an event history modeling framework, and data from 37 democracies, covering 830 parties, this article analyses two questions regarding party durability. First, when do parties fail? Second, which parties survive longer? The article shows that most parties fail at the beginning of their lifespan, and disappear before the end of their fourth term in parliament. Moreover, it is found that moderate policy position, distinct ideology and participation in governing coalitions increase the duration of party survival, even when controlling for party size. This article contributes to the extensive literature about the electoral benefits of ideological moderation and distinct policy positions by showing the long-term benefits of these factors. Moreover, the long-term benefit of party participation in government in terms of survival overcomes the short-term cost of ruling.

**Keywords:** party survival; left-right position; duration models

### Introduction

Most post-Second World War parties failed to keep their representation in parliament. The data shown below suggests that nearly 70 per cent of the 830 parties disappeared at some point from parliament. Only 76 postwar parties have won seats continuously since the first democratic election in their country. Party survival is an important issue, especially in parliamentary democracies, where parties are the means through which voters' preferences are linked to government policy outputs. When a party disappears from parliament it may leave a group of voters unrepresented, or at least inadequately represented. While parties' failure can reduce party system fragmentation, it also reduces the supply of electoral alternatives. In some cases, it destroys the cue of party brands and in other cases it impedes accountability. Thus, the understanding of party systems cannot be complete without understanding the ability of parties to become recognisable electoral alternatives.

Despite the political importance of parties, the research on party survival in parliament mainly focuses on small parties (e.g., Dinas et al. 2015; Spoon 2011), causes of disappearing (e.g., Bolleyer et al. 2016; Mershon & Shvetsova 2013), or specific regions (e.g., Beyens et al. 2016; Bianco et al. 2014). Van de Wardt et al. (2017) find that electoral competition between similar parties increases the probability that a party will exit parliament. Yet, within this emerging literature, the *duration* of party survival has been largely ignored. To address these gaps in the literature, this article answers two questions. First, *when do parties fail?* Second, *which parties survive longer?*

With respect to the first question, building on the research about the long-term effects of party loyalty (e.g., Dalton & Weldon 2007; Dinas 2014), I argue that ties

between parties and voters are built over time. As a result, parties are likely to fail after they first enter parliament and this likelihood increases in the short run but decreases after a party survives several terms in parliament. Also, the risk of failure does not decrease monotonically over time. The findings of this study show that, in the first three elections, the hazard of disappearing from parliament progressively increases. After a party has completed four terms in parliament, the hazard of failure begins to decrease over time.

With respect to the second question; my theory of party duration unifies two aspects of party competition: competition over votes and competition over governmental resources. I demonstrate that ideologically distinct parties and parties in government survive longer than other parties, even when controlling for parties' size. These results contrast with the well documented 'cost of ruling', whereby incumbent governing parties tend to lose support at the following election (e.g., Fortunato 2017; Stevenson 2002; Strøm 1990). While parties in government tend to lose votes and seats in following elections, participation in government has a long-term positive influence on the duration of party survival in parliament. In addition, country-level variables, such as experience with democracy and electoral threshold, affect survival in parliament.

Using a comprehensive dataset collected by ParlGov (Döring & Manow 2016), which includes 830 distinct parties in 37 countries from 1945 to 2006, I test my theory of party survival. The findings that moderate and ideologically distinct parties survive longer contribute to the developed scholarly discussions about the consequences of party policy positions. This study shows the long-term benefits of ideological moderation or distinctive positions, in addition to well-known short-term electoral benefits (e.g., Adams et al. 2006; Ezrow 2005; Spoon 2011). Moreover, the long-term benefits of party participation in government in terms of survival overcome the short-term costs in terms of vote shares (e.g., Fortunato 2017; Klüver & Spoon 2016).

## **When do parties fail?**

Recently flourishing literature devotes attention to parties' ability to maintain their representation in national parliaments (e.g., Beyens et al. 2016; Bolleyer & Bytzeck 2013, 2017; Dinas et al. 2015; Van de Wardt et al. 2017) or as organisations (Bolleyer 2013; Bolleyer et al. 2018). Yet, little is known about the number of elections until parties disappear from parliament. Put differently, the literature explains which parties survive and which parties fail but does not explain when failure happens. To answer when failure happens, I argue that two opposing forces shape the timing of parties' disappearing from parliament. The first force is the loss of support of a crucial mass of voters at time  $t+1$  who voted for the party at time  $t$ . This force increases the hazard of disappearing from parliament. The second force decreases the hazard of failure and includes a mass of loyal voters in addition to first time voters. Because the second force tends to develop slowly, the hazard of failure increases before it decreases. A similar dynamic of increasing then decreasing hazard of failure has been well documented by researchers studying organisational ecology. The classic argument in this literature is that organisations suffer from 'liability of newness' (Hannan & Freeman 1989; Stinchcombe 1965). Organisations' ability to survive is contingent upon trust among members, knowledge about the organisational environment, and other factors that take time

to build. The hazard of failure increases until these factors are established, but declines once they are in place (Carroll & Hannan 2015).

Party identification is beneficial for longstanding parties as they enjoy a consistent base of support among citizens who identify as loyal voters of their party. The benefits of party identification increase over time as the affiliation between parties and voters strengthen. Also, partisanship is associated with the experience of voting for said party (e.g., Dalton & Weldon 2007; Dinas 2014) or the party's ability to win seats (Fowler & Hall 2017). Therefore, if a party was already winning seats for a sufficient number of elections, voters that identify with this party will continue to vote for it (Pierce 1998). Finally, partisanship is influenced by parental party affiliation (Dalton & Weldon 2007; Jennings & Markus 1984), which can only help parties that existed before one's adulthood. Thus, longstanding parties benefit from cultivating a loyal base of support given that their partisans transfer their partisan loyalties to their offspring. Partisanship, then, has a long-term effect on the rate of a party's survival, but less so in the short term.

In a stable party system, the survival of a new party is contingent on its ability to break the old alignment equilibrium and be a part of new realignment equilibrium (Dalton & Wattenberg 2002). Converse and Pierce (1986) demonstrate that even when voters temporarily desert their 'home' party, they are more likely to return home in the next election than to stick with their new choice. In new party systems, however, voters do not have a 'home' party to return to. The lack of stable partisanship ties makes all parties prone to disappearing. A disappointed voter might change to another party over the party she last voted for, especially where there are no strong mainstream parties (e.g., Dalton & Weldon 2007; Tavits 2006).<sup>1</sup> With respect to party survival, this literature implies that party identification has a long-term increasing effect on the odds of survival in parliament. Similarly, the long-term benefits of strong party-voter alignment and party identification increase party elites' incentives to keep the party running in its original form. When party elites can expect loyalty from voters, they are less motivated to disband the party, merge into a different party, or split.

Parties' reputation, like party identification, should decrease the hazard of failure, but only in the long-run. Dinas et al. (2015) show that representation in parliament increases small parties' vote share in the ensuing elections, which decreases the hazard of disappearing immediately. They argue that parliamentary presence provides parties with resources such as free media and financial support, while their ability to influence policy outcomes makes parties attractive to donors. At any election, the attractiveness of small (Dinas et al. 2015) and new parties (e.g., Beyens et al. 2016; Bolleyer & Bytzek 2013, 2017) can be washed out by the attractiveness of older and larger parties. In this regard, a surviving party is one that was able to convey an image that is attractive enough to gain sufficient number of votes, before a critical number of voters desert it.

As parties become more stable over time, they are given more chances to enter governing coalitions which, in turn, can assist with credit-claiming for policy outcomes. By being able to claim credit on potentially popular policies, being in government assists parties to survive longer electorally. Until a party builds its own loyal support base, a brand name and a clear ideological image, the risk of being deserted by a crucial mass of voters increases. After a party is perceived as a successful brand and voters know what the party stands for, the hazard decreases. These considerations suggest that parties are more likely to fail at the beginning

of the timespan. Thus, the first hypothesis of this article expects the hazard of failure to rise before it declines:

*H1:* The hazard of disappearing from parliament initially increases, then decreases.

### **Which parties survive longer?**

If parties are indeed more likely to fail at the beginning of the timespan, we should know which parties are able to survive through this period of elections. To address this question, I build on two aspects of party competition; the electoral competition over votes, and competition over governmental resources. It is well documented that the ideological positions of parties affect their vote-share, participation in government and aggregate policy outputs (e.g., Adams & Somer-Topcu 2009; Downs 1957; Ezrow 2005). I add to this literature by showing that parties' positions are also related to the duration of their survival in parliament. Participation in government is known to have a depressing effect on parties' vote share and popularity. I contrast this well-documented finding by showing that parties survive longer if they join the governing coalition.

#### *Spatial competition and party survival*

Since Downs (1957), multiparty competition is characterised by two opposing forces. Parties try to distinguish themselves from other parties, while at the same time they are motivated to move towards the centre, where a larger share of the electorate is located (e.g., Adams & Somer-Topcu 2009; Downs 1957; Spoon 2011). As a result, parties must find the tipping point where their position is attractive to enough voters at the centre of the left-right continuum, without alienating their (typically) non-moderate core supporters. At the same time, parties must make sure that their position is sufficiently distinct from the positions of larger and more visible competitors (Spoon 2011). Thus, parties can gain more votes if their position is distinct from their competitors. As this distance increases, parties survive longer. Put differently, even the closest party to the median voter can be squeezed by the parties on its left and right, while the most extreme parties can find a committed niche of extreme voters. Recent empirical evidence shows that parties are more likely to exit parliament when the number of parties competing for the same niche of voters increases (Van de Wardt et al. 2017). These findings emphasise the importance of distinguished ideological positions both for electoral success and other forms of survival in parliament. Distinctive ideology marks party elites as uniquely representing a segment of the electorate. Leaders of such parties are less likely to find a party to merge with, or the motivation to dissolve the party, which prolongs survival.

While ideological distinctiveness appears to be a straightforward argument for a decreased hazard of failure, the electoral benefit of ideological moderation is debatable. Adams and Somer-Topcu (2009) find weak and inconsistent evidence for such benefits. Ezrow (2005) finds that ideological moderation increases parties' vote shares, unless they are niche parties. Adams et al. (2006) find that ideological moderation is costly for niche parties (in terms of vote shares), but not for mainstream parties.<sup>2</sup> Although these researchers argue that some parties (predominantly niche) do not gain votes for moderating their positions,

most parties are rewarded for their moderate positions (Adams & Somer-Topcu 2009). The centripetal force of the normally distributed voter preferences on the left-right dimension should decrease the hazard of failure for moderate parties, either because there are more votes to win in the centre or because party elites expect electoral punishments for diverging away from these votes. Leaders of an extreme party might find it not worthwhile competing for their small niche of voters once they see unfavorable polls, thus choosing to either dissolve the party or merge with a different one. Put simply, moderate parties should survive longer than extreme parties. From this literature two hypotheses follow:

*H2: A distinctive left-right position increases parties' durability.*

*H3: A moderate left-right position increases parties' durability.*

### *Government participation and party survival*

Participation in government should enhance party survival and can take two forms in multiparty democracies. One form is being the prime ministerial party which is usually the largest party, well-known and disproportionately influential to government policy outputs. The second form is being a junior coalition partner. Previous research has shown that junior partners have difficulty differentiating their ideological image from the image of the prime minister's party (e.g., Fortunato & Stevenson 2013; Fortunato & Adams 2015; Spoon & Klüver 2017). In addition, parties in coalition government pay a 'cost of ruling' in that their vote-share decreases in the ensuing elections (e.g., Stevenson 2002; Fortunato 2017). Moreover, junior coalition partners suffer larger electoral losses relative to all other parties, including opposition parties (Klüver & Spoon 2016). As a result, junior coalition partners might be 'eaten alive' by their larger, stronger, prime ministerial counterparts. If both the prime minister's party and the junior coalition partner are punished for their performance in government to a similar extent, the consequences of the same punishment are different. A small party that loses half of its vote share might drop below the legal threshold and disappear from parliament. However, when a large prime ministerial party suffers the same loss, it will stay in parliament.

Conversely, getting into government helps small parties to receive media attention and resources that they would not have received otherwise. Moreover, assuming the junior coalition members are relatively small parties, their position in government allows them to affect policy output. This in turn makes additional resources available. Even if these resources are much scarcer than those of larger coalition partners, they still exceed the resources small opposition parties have. Being in government provides party elites with personal resources as well. The spoils of the office should motivate leaders to compete in the next election. Spoils can also serve as a unifying mechanism, which decreases the likelihood of splits or dissolution. In opposition, where such spoils are (mostly) unavailable, leaders might be motivated to give up on the party all together and dissolve it. Hence, being a governmental party should significantly enhance party durability for prime ministerial parties, and when controlling for size and ideological space, junior coalition partners should survive longer than opposition parties.

*H4: Being the prime ministerial party increases the party's duration.*

H5: Being a junior coalition partner increases the party's duration.

### **The temporal dimension of party survival**

To test my empirical expectations, I rely on a comprehensive dataset encompassing the individual party, election and government datasets collected by ParlGov (Döring & Manow 2016). These datasets contain all parties that received at least one seat at least one time in 37 democracies in the period 1945–2016.<sup>3</sup> To eliminate potential biases in model estimation, and consistent with previous work on party survival (Van de Wardt et al. 2017), ‘party failure’ is defined as disappearing from parliament. Parties may disappear from parliament for various reasons, including merging with another party, splitting into two or more parties or simply lacking the votes in the next election to win seats in parliament. While mergers and splits can be a strategic choice by a party elite (Bolloyer 2013; Bolloyer et al. 2016, 2018; Ibenskas 2016), I do not limit the analysis to a specific reason for party failure. Modelling party survival in this simple and straightforward way allows for a broad understanding of parties’ ability to survive as independent institutions within the lower house legislature. Nonetheless, the last part of the analysis takes a competing risks approach to test whether qualitatively different outcomes are also quantitatively different. The qualitative differences between party mergers, electoral loss, dissolution or other events of interest are highly endogenous. In the context of this study, party elites’ decisions are, first and foremost, motivated by their estimation of future electoral support. For example, the event of party dissolution at time  $t$  depends on the party elites’ estimation of their ability to return to parliament at time  $t+1$ . Because duration in this study is modelled in terms of discrete time (election cycles) and not clock time (days, months, etc.) the differences between the qualitative events should not be translated into quantitative outcomes.

#### *Dependent variable*

The dependent variable is the *duration* of survival in parliament, defined as the number of consecutive elections in which a party wins at least one seat in parliament. Duration of survival begins in the election prior to the first election in which the party enters the parliament. To keep the time-of-origin consistent with the rest of the failure time process, time-of-origin is defined in terms of one whole election cycle.<sup>4</sup> Parties ‘survive’ as long as they keep winning seats. During this time, parties are defined as being ‘at risk’ of failure (Box-Steffensmeier & Jones 2004). Parties that have not survived until the most recent election in their country are defined as failing at the last election they received seats. For example, the Irish Republican Party emerged before the 1948 elections, gained ten seats in 1948, then gained one, two or three seats in 1951, 1954, 1957, 1961 and 1965, then it was dissolved before the 1969 elections. In this example, the party survived for six elections, thus both duration of survival and time at risk equal 6.<sup>5</sup> To clarify, if the Irish Republican Party was competing in the 1969 election and lost, it would have contributed the exact same information to the analysis as it did by being dissolved before this election. It should be noted that 31 per cent of the parties are defined as right-censored as they have never failed.

Figure 1 summarises the distribution of the phenomenon in question. The bold line represents the Kaplan-Meier survival estimate – a non-parametric statistic of survival rates.

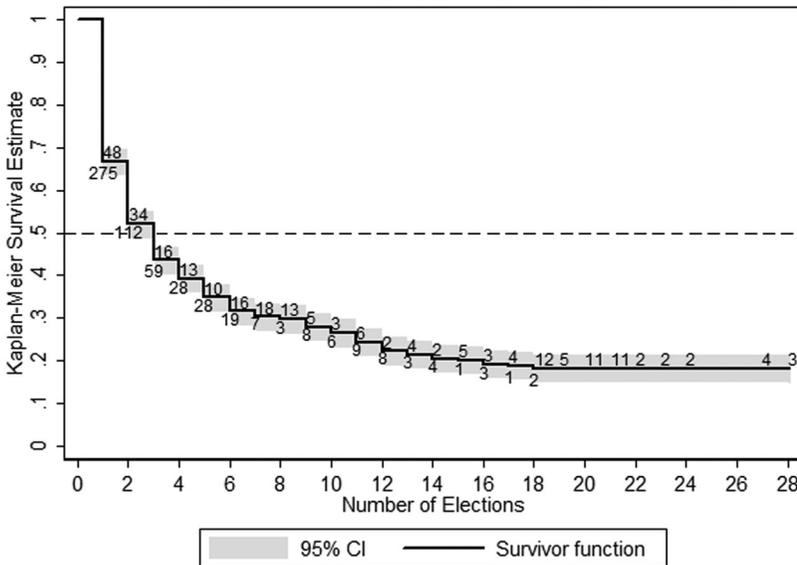


Figure 1. Kaplan-Meier estimation of survival in parliament.

Note: The bold line represents the Kaplan-Meier survival estimate, and the dashed line represents the median survival time (three elections). The number above the line represents the number of surviving parties, and the number below the line represents the number of failing parties in the focal election.

Each step of the function represents the percentage of parties in the data surviving the focal number of elections.<sup>6</sup> For example, roughly 68 per cent of the parties survive more than one election. The median number of elections parties survive is three (shown in the dashed line), which implies that a majority of the parties disappear from parliament before they reach a fourth term. Each election in Figure 1 is also represented by two numbers; the number of parties that survive (above the line), and those who fail (below the line). To articulate this point, one can assess the first step of the function. The number above the function (48) represents the number of parties that competed in one election and won at least one seat, but not enough time has passed until the next election in their country. The number below the function (275) represents the number of parties that failed after completing only one term in parliament.

Figure 1 provides three key insights. First, it shows that only a small minority of parties survives many elections, the mean survival time is 5.45 elections, but the median survival time is only three elections. Second, the number of failing parties is more than double the number of surviving parties. And third, there are no parties that fail after surviving more than 18 consecutive elections, but 40 parties survived more than 18 elections. This descriptive representation of the data implies that most parties disappear from parliament early in their lifespan. Also, most parties that survive the first four elections rarely fail.

### Independent variables

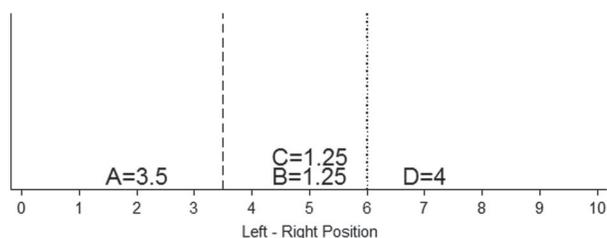
To test the independent effects of ideology and electoral competition on survival, I compute two variables. The first variable, *Left-right moderation*, measures the distance of a party's

position from the extremes of the 0–10 left-right scale.<sup>7</sup> A party that is located right at the centre is coded as 5, a party that is located at the lower end of the left-right continuum (0 or 10) is coded as 0, and a party that is located anywhere in between is coded as the absolute value of the difference between 5 and its position.<sup>8</sup>

Based on the same party's placements, I computed the *ideological space* between each two parties to measure distinctiveness. The coding of ideological space is based on the basic Downsian argument that each party will gain the votes of the closest voters to its position, and a voter that is equally distanced between two parties will be indifferent. Thus, 'ideological space' is defined as the distance between the indifference point to the left and to the right of each party. The most extreme party controls the space from the end of the scale to the first indifference point. When two parties are located at the same position, each of them is credited with half the space associated with its position. Figure 2 illustrates the coding of the ideological space variable.<sup>9</sup> Where in scenario 1 party A is located at 2, it gains all the space from the left end of the scale to the first indifference point (dashed line). The right-wing party, D, gains all the space to the right of the indifference point between its positions and the positions of B and C. The two parties in the centre equally share the space between the two lines. If space affects voting, the party on the right should survive for the longest time and the party on the left should live longer than the two parties in the centre.

Space changes with the entrance or exit of new parties. In scenario 2, party C failed, and there are only three parties competing. Party B now gains half (instead of a quarter) the space between 2 (party A) and 7 (party D), which increases its space value to 2.5. When one of the parties in the centre disappears, the other centrist party's space is doubled. I expect a statistically significant duration increase as ideological space increases. Consequently, the centrist party in the second scenario should survive longer than the same party in the first.

Scenario 1: Four party competition



Scenario 2: Three party competition

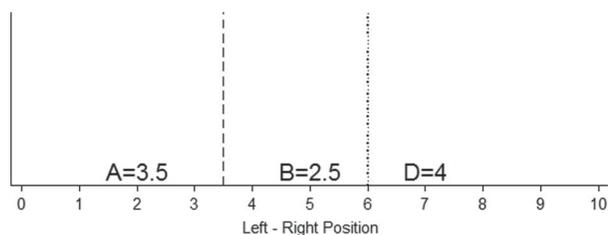


Figure 2. Illustration of coding for the *space* variable.

Competition over governmental resources is captured by two dummy variables; *Prime-minister* and *Junior coalition partner*. The former variable is coded 1 if the party holds the prime minister's office, and 0 otherwise. All other coalition partners are coded as 1 in the junior partner variable and 0 otherwise. Government participation and elections are not always on the same timeline, as cabinets might be reshuffled, and prime ministers' parties might be replaced between elections. To keep the two dummy variables consistent with the election timeline, a party is coded as prime minister if it was the prime ministerial party between elections at time  $t$  and  $t+1$ . The same is true for the junior partner variable. Party size provides resources that enhance party survival, both in the electorate and in the heads of party elites. As the party controls more seats, it is less likely to lose all of them in one election. Similarly, if a party is large, the elite should be less motivated to disband, split, or merge it with other parties. For example, Ibenskas (2016) shows that party mergers are explained by small parties trying to overcome electoral thresholds or to get into a governing coalition, but not by large parties trying to gain a majority. The variable *Lagged seat share* is the percentage of seats a party holds in the beginning of the term.

### *Controlling for the electoral context*

Thus far, this article has focused on the (party-level) structure of the electoral competition, but the (country-level) context in which parties compete is important as well (e.g., Moser & Scheiner 2012). First and foremost, experience with democracy should increase the duration of party survival. For many parties, democratic experience serves as a proxy for party age. For others, it defines the electoral context at the time they first enter the parliament. For all parties, we should expect that increase of democratic experience would be associated with longer survival. *Age of democracy* is a count variable for the number of years the country is coded as democratic (six and above in Polity IV).

Based on the common knowledge from the electoral systems literature concerning the number of parties, political context can be modeled as a combination of several variables. First, most researchers agree that electoral system permissiveness increases the number of parties in a parliament. Permissiveness is a function of the number of seats in each district, the number of districts, the number of seats in parliament and, in some cases, the legal threshold of representation (Taagepera 2007). While the literature expects a larger number of parties in more permissive countries (i.e., more and larger districts, larger parliaments and lower threshold countries), it is not straightforward how permissiveness affects the duration of survival in parliament independently from the party-level competition. Unlike the expectations for the (effective) number of parties, we should not expect parties in a permissive electoral system like the Netherlands to survive in parliament longer (or shorter) than parties in the less permissive system of Luxembourg. This lack of straightforward expectation is true both for parties that do not receive enough votes to stay in parliament and those that merge, split or dissolve. Take party mergers, for example, on the one hand, a permissive electoral system allows for smaller parties to survive, thus decreasing elites' motivation to merge. However, restrictive systems can also decrease parties' motivation to merge. In a single-member district system (which decreases the permissiveness of the system) parties need to hold only a single seat to survive, so are thus unmotivated to merge.

The *electoral permissiveness* of the electoral system is coded based on Taagepera's (2007) seat product model (SPM). For simple electoral systems, SPM is the sixth root of the assembly size times the average district magnitude ( $N_s = (MS)^{1/6}$ ). This model is the state-of-the-art measure for electoral fragmentation, as it is a simple quantity that considers both the number of available seats in each district and the total number of seats in the legislature. Thus, it is preferable to other measures of electoral fragmentation such as log-district magnitude or the effective number of parties. It is also less endogenous than the effective number of parties to voting behaviour (Shugart & Taagepera 2017). To make sure this measure does capture permissiveness without changing the results, I replicate all analyses using alternative measures of permissiveness (in the Online Appendix; [www.roizur.com/uploads/7/4/8/1/74815729/party\\_survival\\_in\\_parliament\\_online\\_appendix.pdf](http://www.roizur.com/uploads/7/4/8/1/74815729/party_survival_in_parliament_online_appendix.pdf)). These measures include the level of federalism, a dummy variable for bicameralism, a dummy variable for multi-tier electoral systems, logged district magnitude, average district magnitude and number of seats in parliament, a dummy variable for SMDP systems, as well as a dummy variable for elected (non-ceremonial) president. All these different measures produce the same substantive result with respect to the dynamics of party survival presented below.

One exception, however, is the legal threshold of the electoral system. The legal threshold forces parties to attract some percentage of the votes before they receive any representation in parliament. When parties are small, their elites are motivated to merge in order to keep their jobs, or dissolve when they predict no chance to clear the threshold. Dinas et al. (2015) show that clearing the electoral threshold affects small parties' successes in the future. Bolleyer et al. (2016) find that electoral threshold is not associated with a longer duration of the termination of a party merger. Thus, we should expect that high legal threshold will be negatively associated with duration of party survival in parliament. I code the variable *Legal threshold* as a continuous variable equal to the legal requirement to gain representation (e.g., 3.25 in Israel) or the minimum vote share required to gain the first seat if such legal requirement does not exist (see Taagepera (2007) for elaboration on threshold of representation).

While electoral system permissiveness is almost consistent across time, changing the permissiveness of the system might have an instantaneous effect on party survival. When a country goes through an electoral reform, the strategic incentives and the electoral linkages are being reshuffled. Many of these reforms are specifically designed to eliminate small parties, but other reforms are designed to increase the proportionality and representativeness of the system. Thus, I do not expect a substantive effect from electoral reforms. *Electoral reform* is coded as a dummy variable where 1 indicates a change in the electoral system. As other (unobserved) county-specific attributes could affect party survival, I use country fixed-effects as controls.

## When do parties fail? Empirical evidence

As the descriptive statistics above show, most parties fail to regain seats in parliament before they complete four terms. This section provides statistical evidence for two questions: When do parties fail, and which parties survive longer? The empirical evidence supports two conclusions. First, parties are more likely to disappear from parliament before the third

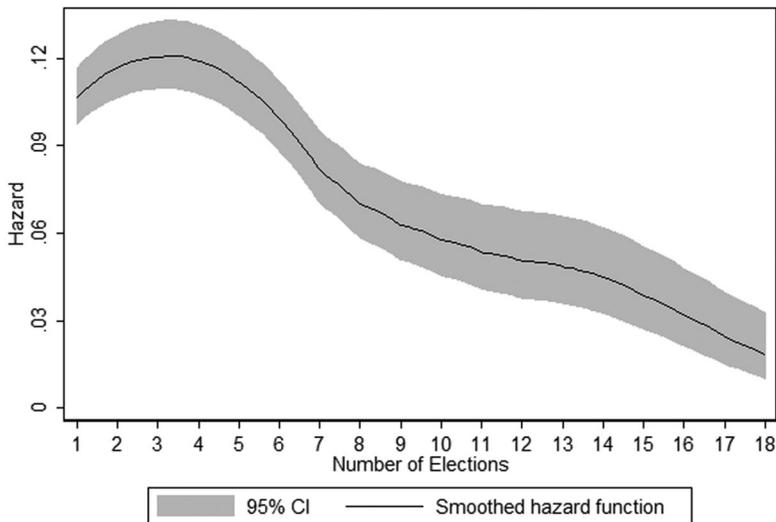


Figure 3. Hazard distribution of disappearing from parliament.  
 Note: Hazard function for 567 failing parties in 37 democracies.

time they compete for re-election. A party that survives more than four terms in parliament is unlikely to fail in any consecutive election. Thus, the answer to the first question is that parties mostly fail at the beginning of the timespan and failure becomes less likely as time progresses. Second, parties that take a distinct position are less likely to fail than parties that are squeezed between two competitors. Also, parties in government are less likely to fail than opposition parties, and large parties are less likely to fail than small parties.

The answer to the first question is evident in Figure 3, where a weighted Kernel density distribution of the smoothed hazard is shown. Figure 3 is a descriptive and non-parametric statistic, and it does not consider any characteristics of the parties. Differently from Figure 1, which describes the survival rate of all parties, Figure 3 displays the hazard function of parties that disappeared from parliament at some point. In Figure 3, the function represents the additional hazard of failure (on the y-axis) at each focal election (i.e., at election  $t$  on the x-axis), given that a party survived until the said election (i.e., election  $t-1$ ). As seen in the figure, the shape of the hazard is consistent with the first hypothesis. The hazard increases in the first three elections, then decreases after the fourth. The function decreases from 0.12 at its peak to as low as 0.02 at the last observed failure. Figure 3 implies that the hazard of failure increases by 12 per cent at the fourth election, if the party survived for three consecutive elections. However, the 18<sup>th</sup> election adds only 2 per cent to the hazard of failure if the party has won seats 17 times consecutively. Note, that the hazard is cumulative; the odds of surviving two reelection bids are low to begin with. The odds of surviving 17 election cycles are slim to none.<sup>10</sup> Similar findings are shown in the Online Appendix ([www.roizur.com/uploads/7/4/8/1/74815729/party\\_survival\\_in\\_parliament\\_online\\_appendix.pdf](http://www.roizur.com/uploads/7/4/8/1/74815729/party_survival_in_parliament_online_appendix.pdf)) for parties that lost representation, merged, split or dissolved.

*HI* is also supported by parametric duration models. The advantage of comparing different parametric models is that they allow for the modeling of the time process exhibited

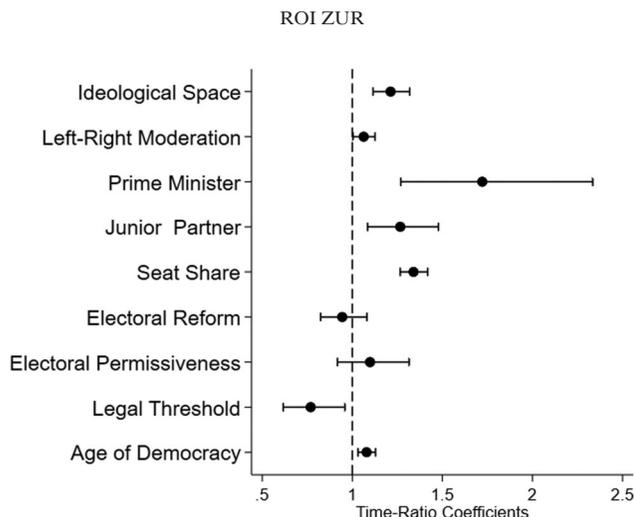


Figure 4. Party durability as a function of ideology and government participation.

Notes: Nodes represent coefficients of a log-normal duration model where positive coefficients imply longer survival time. Bars show 95 per cent confidence intervals. Country fixed-effects are not shown. N (Time at Risk) = 3,372; AIC = 1622.8; Log Pseudolikelihood = -7674.

in the data (Box-Steffensmeier & Jones 2004). Recall that the theory presented above predicts increasing hazard at the beginning of the timespan, and then decreasing hazard over time. Such a time process is consistent with the log-normal and the log-logistic distributions. Thus, when comparing different duration models, both parametric and the Cox proportional hazard models, the log-normal model should fit the data best. Such a comparison can be done by assessments of model-fit criteria, such as the log-likelihood (LL), the Akaike information criterion (AIC), and the Bayesian information criterion (BIC).

The parsimonious model shown in Figure 4 includes only the covariates of interest, necessary controls and country fixed-effects. The model is evaluated using a log-normal duration model because this estimation strategy produces the best model-fit; both among different model specifications and among estimation methods (see further discussion in the Online Appendix; [www.roizur.com/uploads/7/4/8/1/74815729/party\\_survival\\_in\\_parliament\\_online\\_appendix.pdf](http://www.roizur.com/uploads/7/4/8/1/74815729/party_survival_in_parliament_online_appendix.pdf)). The substantive implication of the log-normal estimation is that the hazard of failure increases before it begins to decline. Thus, both the non-parametric and the parametric estimations support the first hypothesis: *The hazard function of party survival initially increases, then decreases.*

### Which parties survive longer? Empirical evidence

The second question this study addresses is which parties survive longer. Recall that *H2* and *H3* argue that parties with distinctive and moderate left-right positions survive longer than parties that take extreme and indistinct positions. Also recall that *H4* and *H5* expect greater durability as a function of government participation. Figure 4 reports the results of a log-normal regression testing these hypotheses.<sup>11</sup> The log-normal regression estimates the changes in time ratios as a function of the covariates – that is, a positive coefficient implies surviving a larger number of elections, and a negative coefficient implies

shorter duration. The magnitude of log-normal time-ratio coefficients has no straightforward interpretation. Therefore, the section below illustrates the magnitude of the effects using estimated covariate profiles.

The results displayed in Figure 4 support the theory presented above. The coefficient on ideological space (i.e., the distinctiveness of party's left-right position) is positive and statistically significant ( $\beta = 1.21, p = 0.00$ ), indicating that as the distance between a focal party and its competitors increases, the party survives more elections. This result implies that parties that want to maximise their duration of survival should take a left-right position that differs from their competitors' position, all else equal.

The coefficient on left-right moderation is also positive as expected ( $\beta = 1.06, p = 0.04$ ), meaning that the lifespan of moderate parties is longer than extreme parties. However, the coefficient for moderation is smaller than the coefficient for space. When parties cannot take a left-right position that is both distinctive and moderate, they are better off taking an extreme and distinctive position. Thus, the results shown here confirm the first hypothesis and generalise Spoon's (2011) argument: parties that take distinctive positions survive longer.

Governing parties survive longer than opposition parties. Both being a prime ministerial party and a junior coalition partner are associated with surviving more elections than being an opposition party, all else equal. The lifespan of the prime minister's party ( $\beta = 1.72, p = 0.00$ ) is 72 per cent longer than the lifespan of an opposition party, controlling for the size of the party and the institutional configuration. Similarly, controlling for all other covariates, the lifespan of a junior coalition partner ( $\beta = 1.27, p = 0.00$ ) is 27 per cent longer than that of an opposition party, but shorter than its prime ministerial counterpart. These results confirm both *H4* and *H5*. While junior coalition partners might pay the 'cost of ruling' that modestly depresses their electoral support in the next election, the long-term benefits of free media and democratic legitimacy seem to overcome this cost in terms of parliamentary survival.

Party size, not surprisingly, increases the duration of party survival. While electoral system reform and the permissiveness of the electoral system are insignificant, electoral threshold and democratic experience affect the duration of party survival in parliament. In countries where the electoral threshold is lower, the median party survives longer than in countries where the electoral threshold is high. Finally, democratic experience is associated with longer party duration. That is, as the number of years from the first free and fair election increases, the average party survives longer.

To further articulate the advantage in longevity that parties receive from entering governing coalitions and taking moderate left-right positions, I compare the survival rate of four hypothetical parties: Party 1 is a moderate junior coalition partner, and party 2 is a moderate opposition party. Parties 3 (junior coalition partner) and 4 (opposition party) take more extreme and distinctive positions than Parties 1 and 2. To isolate the relationship between government participation and survival rates, these parties are equal in size (10 per cent of the votes), and all other covariates are held at their mean. Figure 5 illustrates the survival rates for these four parties' profiles. The x-axis represents the number of elections and the y-axis represents the percentage of parties that survive at each election. The horizontal dashed line represents the median survival rate.

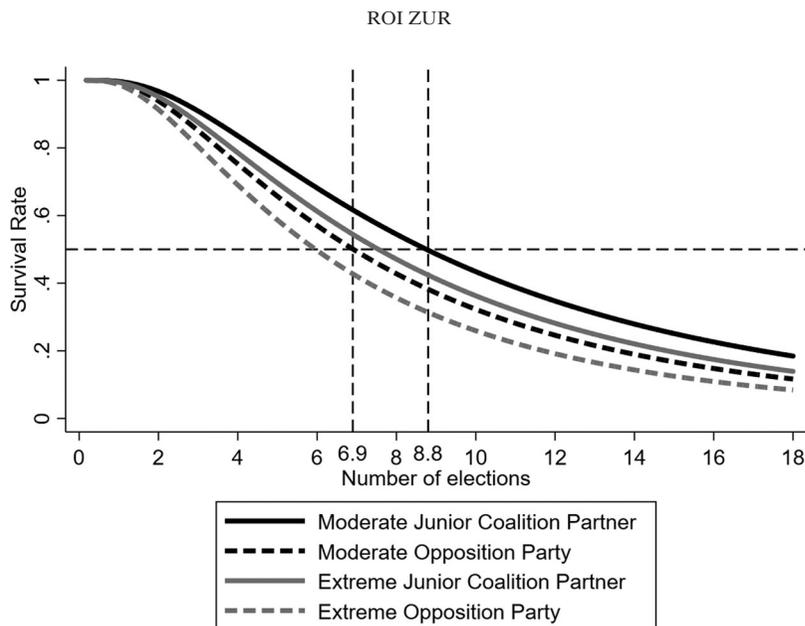


Figure 5. Four parties' survival rates.

The two coalition partners (black curves) are expected to survive at higher rates than the respective two opposition parties (gray curves). The moderate junior coalition partner's median survival time is 8.8 elections, while the median survival time for the moderate opposition party is 6.9 elections. This result indicates that when a moderate party faces the decision of joining a coalition government, it should do so as it increases its duration of survival by almost two election cycles. The same is true for extreme parties, where joining a coalition increases the median duration from 5.9 to 7.5 election cycles. This hypothetical scenario could have served many small parties around the world such as the Israeli Independent Liberals (survived four terms) or the Danish Solidarity (survived six terms). If these parties were able to make their way into the governing coalition, they could have survived at least another election cycle.

To capture the relationship between divergence from the centre of the left-right scale and survival duration, compare the junior coalition partners (solid curves) to the opposition parties (dashed curves). When the junior coalition partner is extreme but ideologically distinct, its median survival rate decreases from 8.8 to 7.5, relative to a similar party in the centre of the left-right spectrum. For an opposition party, the median survival rate decreases by a whole election cycle. From a survival perspective, divergence is costly only when it is not associated with increase in the distinctiveness of the party. In the Online Appendix ([www.roizur.com/uploads/7/4/8/1/74815729/party\\_survival\\_in\\_parliament\\_online\\_appendix.pdf](http://www.roizur.com/uploads/7/4/8/1/74815729/party_survival_in_parliament_online_appendix.pdf)) I elaborate on this point and show how the centrifugal force of ideological distinctiveness increases parties' duration of survival. Many parties face similar choices in both Western and Eastern democracies. For example, if the Liberal-Democracy Party of Slovenia was able to differentiate itself from the prime minister's party (Social Democrats) during the 2008–2011 term, its odds of surviving the 2011 election were higher.

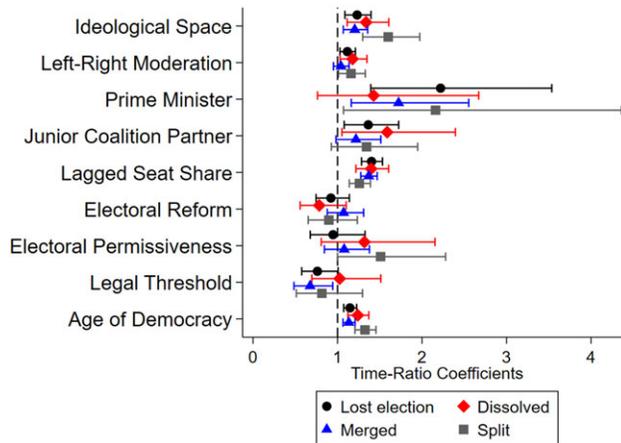


Figure 6. Separate outcomes of disappearing from parliament. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

Notes: Nodes represent coefficients of log-normal duration models where positive coefficients imply longer survival time. Bars show 95 per cent confidence intervals. Country fixed-effects are not shown. N (Time at Risk) = 2,612 (Lost election); 2,255 (Dissolved); 2,683 (Merged); 2,272 (Split).

### Separating the outcomes of party survival

Figure 4 includes parties that disappear from parliament for a variety of reasons. A total of 223 parties competed for votes but failed to receive the electoral support needed for gaining the first seat, while 196 parties disappeared through merging into a different party, 50 parties split and 41 parties were dissolved while still holding seats in parliament. These different outcomes are closely related both in theory and in practice. In some of these cases, parties split, then merge, and then dissolve, all in the same parliamentary term. In the analysis presented here, parties are coded to the first event. For example, if a party merged and then loses representation, it counts as a merging party. If a party merges immediately after an electoral defeat, it is coded as failure due to electoral loss. These outcomes do not count temporary electoral alliances. When parties create electoral alliances, each party is treated independently. For example, when the Israeli Likud and Israel Our Home parties ran under the same ticket in 2013, they are still treated as two parties receiving 20 and 11 seats, respectively.

Figure 6 presents a competing risks model where four different outcomes are compared. Each model in the figure includes the surviving parties and the parties that failed due to the event of interest, while all other outcomes are treated as right-censored. In a competing risks framework, if different outcomes are indeed distinct, one should expect substantively different coefficients with no overlap between their confidence intervals. It is visually clear that the qualitative differences are not quantitatively different when it comes to the duration of party survival in parliament. For all the covariates there is a substantial overlap between the confidence intervals. Moreover, most of the coefficients are in the same direction and significance level of the pooled model (Figure 4). The competing risks models imply the same substantive conclusion with respect to the effect of both spatial competition and

participation in government on the duration of party survival regardless of the qualitative outcome.

Looking at parties that merged, the lifespan of those who compete in a spacious environment is longer than those who are squeezed by other parties. The same is true for parties that competed in the ensuing election – those who are close to other parties can win seats in a greater number of consecutive elections. Also, parties merge after a larger number of elections if their ideological space is greater. Given that all four models produce positive and significant coefficients (and that their confidence intervals overlap), ideological space clearly prolongs parties' survival in their original form. The same substantive conclusion is true for the rest of the covariates in these models.

## **Discussion and conclusion**

Most parties that made it to the national legislature in the postwar period have not survived in parliament for a long time. Despite increasing interest in (new) party survival, the duration of party survival is often ignored in the comparative politics literature. This article has discussed the phenomenon of party survival in parliament with respect to two questions – when do parties disappear from parliament, and which parties survive longer? To address these questions, I tested five hypotheses. The first hypothesis argues that parties are most likely to fail at the first few elections (increasing hazard), and the hazard of failure decreases over time. This hypothesis was supported by both parametric and non-parametric duration analyses.

Consistent with the first hypothesis, I find that the hazard of disappearing from parliament increases in the first few re-election attempts and declines quickly afterwards. Thus, the answer to the first question is that parties fail at the beginning of the timespan. The majority of parties survive no more than four election cycles. Parties that survive their fourth term in parliament are very likely to keep winning seats. This result compliments the current knowledge about party survival (e.g., Beyens et al. 2016; Bolleyer & Bytzek 2013, 2017; Bolleyer et al. 2018; Dinas et al. 2015; Van de Wardt et al. 2017). Considering the other results of this study, the finding that most parties fail at the beginning of their timespan has important implications for the strategic decisions made by party elites. First, parties should strategically take policy positions that prolong their survival. These positions should be as moderate and distinctive as possible. Because such positions may not always be possible, parties should prefer a unique position over a moderate one. Moreover, when deciding whether to join a governing coalition, parties might pay some electoral cost in seats (e.g., Fortunato 2017; Stevenson 2002; Strøm 1990), but at the same time increase their odds of surviving the crucial first few election cycles.

The second question this article answers is which parties survive longer. Smaller parties fail at higher rates than large ones, but size is not the only factor that affects survival. Consistent with the second and third hypotheses, I find that distinct and moderate left-right positions increase the number of consecutive elections in which parties re-enter national legislatures. These findings contribute another aspect to the developed literature about the consequences of parties' policy positions, policy shifts and representation. It is well known that parties' positions affect their vote and seat share as well as their policy output. This research shows that parties' positions are also associated with the duration of their survival

in parliament. This finding means good news for democratic representation. Given that most voters in advanced industrialised democracies are moderate (Adams & Somer-Topcu 2009), it is important to know that the parties that represent moderate positions survive longer, even when their size, distinctiveness, and participation in government are controlled for.

Participating in government helps parties to survive longer. I find strong and clear support for the fourth hypothesis; prime ministerial parties survive longer than both junior coalition partners and opposition parties. The data also support the fifth hypothesis; junior coalition parties survive longer than opposition parties, all else being equal. Parties in government, both the prime minister's and the junior coalition partners receive free media and can claim credit for policy outcomes. Being the prime minister's party increases duration of survival, even when the size of the party is held constant. The same is true for junior coalition partners, but to a lesser degree. Even if junior coalition partners are punished in the election for being perceived as similar to the prime ministerial party (Spoon & Klüver 2017), parties that seek to maximise the duration of their survival are better off joining governing coalitions than staying in the opposition. Parties that join governing coalitions are better off not only in terms of surviving elections, but also surviving the hazard of splitting, dissolution or merging. The resources and spoils elites receive from joining a coalition serve as motivating factors in keeping the party running (together).

This study should provoke research regarding two main issues. First, a question of interest is how long it takes a party to return to parliament after disappearing for the first time (if the party ever re-enters parliament). Adding re-entering parties to the analysis above does not mediate the results, as these are rare events. Yet, they are worth researching as a separate phenomenon. Moreover, this study models survival as single-failure-per-subject, but parties may fail multiple times. For example, parties can merge, then split, and then merge again. Modelling party survival as a multi-state analysis using clock-time measure of survival would help us further understand the dynamics of democratic representation and party competition.

## Acknowledgements

An earlier version of this article was presented at the 2017 annual meeting of the Midwest Political Science Association. I thank James Adams, Carlos Algora, Josephine Andrews, Bradford Jones, Noam Gidron, Ireen Litvak-Zur, Marisella Rodriguez, Ethan Scheiner, Matthew Shugart and the anonymous reviewers of the *European Journal of Political Research* for their helpful comments. Any remaining errors are the author's sole responsibility. Data and Replication files are available online at: [www.roizur.com/data-and-replication-files.html](http://www.roizur.com/data-and-replication-files.html)

## Online Appendix

Additional supporting information may be found online in the Online Appendix at the end of the article:

**Figure A1: Kaplan-Meier Survival Estimation of Parties in New and Established Democracies**

**Figure A2: Hazard Function of Party Survival in New and Established Democracies**

**Figure A3: Party Survival in New and Established Democracies**

**Figure A4: Additional Robustness Checks**

**Table A1: Robustness Checks – Parametric Duration Models and Cox Proportional Hazard Model**

**Table A2: AIC and Log-Likelihoods for Party Survival**

**Table A3: Robustness Checks – Log-Normal estimation**

**Table 4: Robustness Checks – Cox Proportional Hazard Models**

**Table A5: Mainstream and Niche Parties**

**Table 6A: Additional model specifications – Pooled model**

**Table 7A: Additional model specifications – Dissolved Parties**

**Table 8A: Additional model specifications – Merges**

**Table 9A: Additional model specifications – Electoral Defeats**

**Table 10A: Additional model specifications – Splits**

## Notes

1. The differences between new and established democracies are discussed in the Online Appendix.
2. Both Adams et al.'s (2006) and Ezrow's (2005) researches imply different expectations and results for mainstream and niche parties. See the discussion in the Online Appendix.
3. The dataset includes parties from: Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
4. A party can emerge any time between the first time it receives seats and the prior elections. A party can even emerge years before that. Parties can win seats in subnational legislatures, upper houses or international legislatures, or it can compete in many elections before gaining its first seat, yet this article is studying the representation solely in lower houses. For example, many environmental parties started as social movements and developed into parties after several years. Such experience can provide parties with the organisational capacities that help their survival. However, these differences between time of emergence and seat-winning time are beyond the scope of this article. The time of origin is set up to be the first democratic elections after the end of the Second World War. This can cause two problems. First, some countries have more elections than others in the same timeframe, which implies that two similar parties that survive a similar number of elections survive a different number of years (i.e., different 'clock' times relative to 'analysis' time). This variation in 'clock' time is controlled for by country-fixed effects in the analysis shown below and by shared frailty in the Online Appendix (there are no statistical differences between the results of these different modelling strategies). The second problem arises from the differences between countries that had a new party system after the Second World War and those with a continuation of a stable party system (e.g., Australia or New Zealand). I do not find substantive empirical differences between the two subsets of countries, and thus pool the results together. Also, the models presented in this article include a count variable for the age of democracy, which partly controls for this issue.
5. This article takes the approach of a 'single-failure-per-subject' analysis, and all 'recurrent' events are excluded from the data (Lawless 1995). In other words, parties that enter parliament, disappear and then enter again are observed until their first disappearance. The excluded data contains 146 party-election observations (less than 4 per cent of the data). Counting failure at parties' last observed failure, instead of the first one, does not change the substantive conclusions presented below.
6. Note that each party contributes a number of observations that are equal to its duration – that is, a party that survived one election cycle is associated with one observation, while a party that survived

ten election cycles is contributing ten observations to the data. Therefore, the number of observations analysed is 3,773.

7. I use the left-right party positions coded by the ParlGov project. In their coding, parties are placed on a 0–10 scale of party expert survey information. Missing data are imputed by mean value for the respective party family.
8. Note that the coding of party placement, unlike the research on the electoral consequences of policy shifts, are not consistent over time. Although this might sound like a problem to some readers, based on the empirical evidence that parties rarely change their policy positions (e.g., Adams et al. 2014; Dalton & McAllister 2015), I believe that the advantage of comprehensive data collected by ParlGov overcomes the shortcoming of consistent party positions.
9. Scenario 1 represents a party competition between four parties, A–D, located at 2, 5, 5 and 7, respectively, space for each party is computed as follows: The first party, located at 2, gains all the space to its left (i.e., 2 units) plus half the space to its right (i.e., 3/2). Thus, its space value equals 3.5. Similarly, the right-wing party gains all the space to its right (3 units) plus half the space to its left (i.e., 2/2). Therefore, its space value is 4. The two parties in the centre equally share the space between 2 and 7 (i.e., 5/4), which gives each of the two parties a space value of 1.25. If space affects voting, all else equal, the party on the right should survive for the longest time and the party on the left should live longer than the two parties in the centre. Note, that the sum of spaces must be 10.
10. As mentioned in the theoretical section of this article, the mechanism that decreases the hazard of failure over time does not work as well in new democracies. In the Online Appendix I show that excluding new democracies from the data produces a very similar hazard function in established democracies. In new democracies (the 11 postcommunist democracies in the data) the shape of the hazard function is similar to established democracies, but the hazard itself is higher.
11. The log-normal regression is best suited to estimate party duration using the ParlGov data. See the Online Appendix for robustness checks and alternative model strategies.

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