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More than post-election cabinets: Uncertainty and the "magnitude of change" during Italian government bargaining

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Abstract
The existence of political uncertainty has been identified in the literature as one of the main determinants of cabinet bargaining delays. Still, practically all studies on the topic expect uncertainty to play a relevant role only during the immediate post-election period, ignoring the variety of different government experiences, especially in countries characterized by a high cabinet turnover in the between-elections period, such as Italy. To overcome this shortcoming, we estimate the "magnitude of change" in the bargaining environment as a determinant of bargaining delays, taking into account partisan, ideological and institutional variations that can happen across two subsequent formation processes. Our results help to better explain the variance in the Italian government bargaining experience throughout almost 70 years of history. Moreover, once we control for the effect of such changing circumstances, the relevance of the timing of negotiations disappears.

Keywords
Cabinet bargaining delays, political uncertainty, Italian politics, cabinet crisis, survival models

Introduction

From 1946 to 2013, Italian party leaders spent more than 2,100 days bargaining over the composition and policy objectives of new governments, a figure that places Italy among countries that have totaled the most delays in Western Europe. One explanation for this finding is related to the relevant number of cabinet turnovers in inter-electoral periods, which in Italy is more than twice the regional average (Curini, 2011; Verzichelli and Cotta, 2000). Clearly, with such a large number, the same is likely for

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the overall number of days spent on cabinet bargaining. Still, this cannot explain the great variation in cabinet bargaining delays: excluding those governments formed as a result of a cabinet reshuffle in party composition without a formal resignation, bargaining delays range from the three days in the Berlusconi III government (April 2005) to 128 days in the Letta government (February 2013). The far from negligible variance in the duration of Italian government bargaining is therefore worthy of analysis. To understand this, however, we need to expand upon some points in the existing literature.

The issue of bargaining delays in government formation has been recognized as being particularly relevant by scholars for its possible consequences. The uncertainty over the identity of potential government parties and the content of policy compromises among them may in fact create ambiguity over the future direction of governments, affecting, on the one hand, the behavior of domestic and international political and economic actors, while also, on the other hand, (possibly) threatening the democratic process (Golder, 2010). Despite this relevance, the topic has scarcely been covered in the literature. Among the few exceptions are De Winter and Dumont, 2008; Diermeier and van Roozendaal, 1998; Golder, 2010; Golder et al., 2012; and Martin and Vanberg, 2003. All studies dealing with this subject agree on the importance of the fact that the temporal placement of government formation is a major determinant of bargaining delays. In particular, these studies conclude that governments forming immediately after a general election bargain longer than governments negotiated during the inter-electoral period. The reason is that, following an election, parties face on average *greater uncertainty* about their counterparts' policy preferences (Falcó-Gimeno and Indridason, 2013: 231).

However, assuming that the timing of coalition formation is the only source of uncertainty is an oversimplification that has theoretical and empirical implications. Theoretically, it denies the simple fact that uncertainty is an ever-present aspect of any political process, whose importance does not necessarily vanish in the inter-electoral phase (Mershon and Shvetsova, 2014). Empirically, looking only at the average figures ignores the variety of different government experiences, especially in those countries in which cabinet turnover in the between-elections period is a reasonable expectation, precisely as occurs in the Italian case. In other words, focusing exclusively on the timing of negotiations can obscure the variance in the duration of government bargaining.

To overcome this limitation, we let uncertainty vary for each government formation, rather than only in the post-electoral phase as is normally done, thereby introducing an element of dynamism in the analysis which allows us to extend our approach to consider the variance in both post- and inter-electoral stages. Our results show that the greater the magnitude of change in the bargaining environment between two subsequent government formation processes (where the "magnitude of change" is a composite index combining changes in the number of parties, in their policy preferences and in the "historical context" in which negotiations occurs), the longer the length of time needed to constitute a cabinet. Moreover, once we control for the effect of such changing circumstances, the "post-election cabinet" relevance discussed so extensively in the literature disappears.

Our argument proceeds as follows. In the next section, we discuss the role of changed circumstances in the bargaining environment as a source of uncertainty, and we derive from it our theoretical expectations. Then, we provide a brief illustration before discussing in the following section a way to track empirically the dynamic aspect of uncertainty as illustrated in the theoretical part. Finally, we present our model and discuss our results in the next two sections. A conclusion follows.

The role of uncertainty in the government formation process

The role played by bargaining duration was originally identified in the literature as a predictor for future government stability and survival (King et al., 1990; Warwick, 1994). However, only since the study by Diermeier and van Roozendaal (1998) have scholars shifted their focus from government termination to the government bargaining process as the dependent variable to be explained.

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The work of these two authors reflects an acknowledgment that, under an assumption of complete information, rational bargaining is incompatible with delays. This prediction sharply contrasts with real-life records, which show numerous inconclusive bargaining rounds and wide variation in the duration of the government formation processes.

Nevertheless, game theoretic models still constitute a useful tool for the study of government delays, if the assumption of complete and symmetric information is relaxed. In this respect, when speaking of incomplete information or uncertainty in the context of government formation, the literature usually refers to "not knowing the preferences over policy and office of all the political actors whose agreement might be necessary to form a government" (Golder, 2010: 9). In the absence of complete information, a *formateur* does not know what combination of government policies and ministerial portfolios would constitute a satisfactory offer to the other parties entering into the negotiations for the new government. Therefore, other things being equal, uncertainty presupposes a higher number of interactions in the form of offers and counter-offers to reveal parties' policy and office preferences. Government delays arise from the fact that, on the one hand, party leaders do not want to concede too much to their rivals, but on the other hand, they are all aware that patience (i.e. the ability to wait longer than others for a particular good) helps to send a credible signal of their preferences (Lupia and Strøm, 2008).[1]

To try to address such a situation, negotiators can rely on "clues" learned during past interactions in order to level information asymmetries between the actors engaged in government bargaining and obtain the information they are uncertain about. In fact, as suggested by Simon (1956), exploiting the pre-existing structure and regularities in the decision environment is a useful strategy to minimize uncertainty. It follows that all of the events that can *alter* the structure of the bargaining environment and *disturb* the regularities registered in previous government formation processes can become a source of uncertainty. The literature documents *elections* as the main event of this type. Typically, elections correspond to modification of the party composition in the legislature and development of new party policy platforms. In addition, this event usually triggers party leadership changes resulting in a renewal of party legislative ranks. Finally, elections modify the bargaining power of parties – especially in the case of unexpected electoral losses or gains. All together, these factors contribute to create greater uncertainty in the bargaining environment (Falcó-Gimeno and Indridason, 2013; Golder, 2010).[2]

However, as correctly noted by Mershon and Shvetsova (2014: 9), "elections set up but do not settle once and for all legislative party systems and decisive structures." Despite the importance of elections in transforming the bargaining environment, other events can in fact produce a similar change in what we consider the three most relevant parameters affecting the overall level of uncertainty: the changing number of parties, the modification of policy preferences and the historical context in which parties interact. *Splits and mergers* represent a first example, given that both events affect two key variables in the government formation process: the allocation of seats among parties and the distribution of parties' policy preferences on key issue dimensions (Laver and Shepsle, 1990).[3] *Policy shocks* also matter. Parties can be conceived as agents for constituencies in the broader polity; in this sense, their ideal points (partly) reflect preferences induced by this agency relationship. However, constituency preferences are subject to modification according to events influencing markets, foreign policy, and many other aspects of social, economic and political life (Lupia and Strøm, 1995). Policy shocks can therefore influence party positions on major policy dimensions, revising the distribution of policy preferences in the parliament and ideological divergences among the main actors in a legislature (Laver and Shepsle, 1998).

In addition to partisan- and preference-based determinants of uncertainty, the latter may also be affected by the *legacy* of the incumbent government, which shapes the "historical context" in which the current negotiations occur (Martin and Stevenson, 2010: 504). Thus, circumstances under which the most recent government came to an end modify the overall level of conflict and

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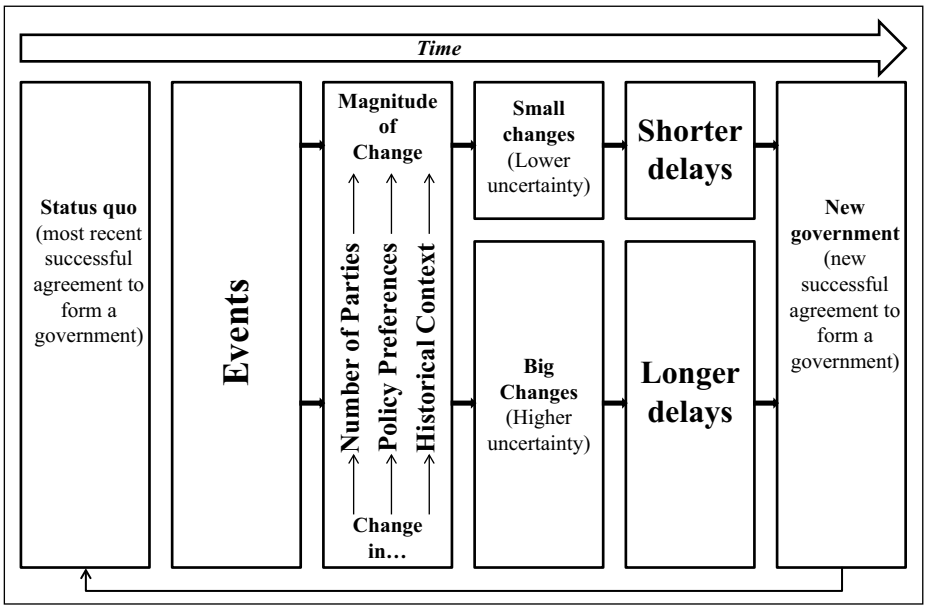

Figure 1. An explanatory model for uncertainty in government bargaining.

disagreement between parties in the legislature, thereby preventing negotiators from relying on regularities observed in the bargaining environment and contributing to placing them in unexpected bargaining situations. Relevant examples of this sort of event are the emerging of severe conflicts *between* negotiating parties or leadership battles *within* parties, parliamentary defeats, and premature terminations of legislatures. These factors are likely to contribute to a general and intense disagreement between the negotiating parties, blurring, on the one hand, policy preferences and giving rise, on the other hand, to mutual retaliations in future negotiations, making some coalitions infeasible (Martin and Stevenson, 2010; Tavits, 2008).

Figure 1 illustrates our explanatory model for uncertainty in government bargaining. The starting point is represented by the status quo, i.e. the most recent successful negotiations to form the incumbent government. The status quo defines the initial structure of the bargaining environment and sets the party composition in the legislature, the distribution of seats and parties' policy preferences, and the general level of conflict and disagreement between parties (i.e. the historical context in which parties interact). As time passes, the bargaining environment can incur modifications because of changed circumstances triggered by various events, not necessarily limited, as already discussed, to new elections. Then, the magnitude of change produced by those events (in terms of change in the number and the relative size of parties, in the matrix of policy distances and in the historical context in which parties negotiate) will positively affect uncertainty and, consequently, the length of negotiations to form the new government. After that, an agreement over a new government is reached and the process starts again until the formation of the next cabinet.[4]

According to this logic, the *magnitude of change* (MoC) in comparison to the status quo should be the real engine of uncertainty, while events are only an instrument of such change. Changes are capable of modifying, on the one hand, the pre-existing structure of the environment and of altering, on the other hand, regularities on which parties could rely to speed up government negotiations, contributing to create greater uncertainty. Anything that is therefore able to increase the magnitude of the change by itself will also increase the level of uncertainty and, through that, the duration of a bargaining process. In the following sections, we will empirically test this proposition.

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Table 1. The duration of government formation process in Italy (1946–2013).

	N	Mean (days)	SD
All governments	66	32.0	33.2
First republic	54	30.5	28.7
Second republic	12	38.6	49.8
Post-election	18	61.4	48.1
Inter-election	48	20.9	15.2

Wasted years? Bargaining delays in Italy between 1946 and 2013

Using as a counting rule the criteria identified by Woldendorp et al. (2000), we have identified the occurrence of 66 Italian governments between 1946 and 2013 (more than four per legislature from the De Gasperi cabinet in 1946 until the Letta in 2013).[5] The frequency of government turnover testifies to a volatile bargaining environment, only partially mitigated by the presence of considerable political inertia in terms of government formulas (see Curini and Pinto, 2013). With respect to government bargaining as documented in the Comparative Parliamentary Democracy Archive (CPDA) (Müller and Strøm, 2000; Strøm et al., 2003, 2008), we measure the length of time a government takes to form (i.e. the duration of the formation process) as the number of days between the end of the previous government – when the incumbent prime minister resigns – and the date on which the new government is officially inaugurated. In Italy, this usually coincides with a swearing-in ceremony in front of the President of the Republic.[6] Using these operationalization rules, we calculate a total of 2,110 days of bargaining between 1946 and 2013. As Table 1 shows, the average bargaining duration is about one month (32 days), but the data present considerable variation, as the high value of the standard deviation testifies (33.2).

Interestingly, the difference in average bargaining duration between the two main post-World War II political phases that have characterized Italy – that is, the so-called First Republic (1946–1993) and the Second Republic (1994–now) – is not significant, despite relevant changes in the meantime (i.e. a massive reconfiguration of the party system, new electoral rules, and frequent alternation in power; see Curini and Zucchini, 2012; Giannetti and Laver, 2001). The average length of the government formation process seems, however, to vary noticeably according to whether bargaining occurs immediately after election or in an inter-electoral period. Bargaining delays in post-election formation processes are three times longer than in inter-electoral ones, although both figures present considerable variation that, within the limitations of previous analyses, remain a puzzle to explain. Finally, a mean-comparison test shows that we can reject the null hypothesis that the average duration is equal in the two contexts ($t = -5.2$, d.f. 64, $p < .01$). At this point in the analysis, however, we do not know if the post-election effect persists once the relevant factors pertaining to changed circumstances in the bargaining environment are included. Therefore, the next step is to directly control our theoretical expectations related to uncertainty.

Estimating the magnitude of change in the bargaining environment

According to our previous discussion, it is possible to identify at least three components of change in the bargaining environment with respect to uncertainty: a change in the number of parties and their relative legislative strength, a modification in the distribution of parties' policy preferences in the parliament and the historical context in which government bargaining occurs. Each of these factors, moreover, is free to vary through the different formation processes that

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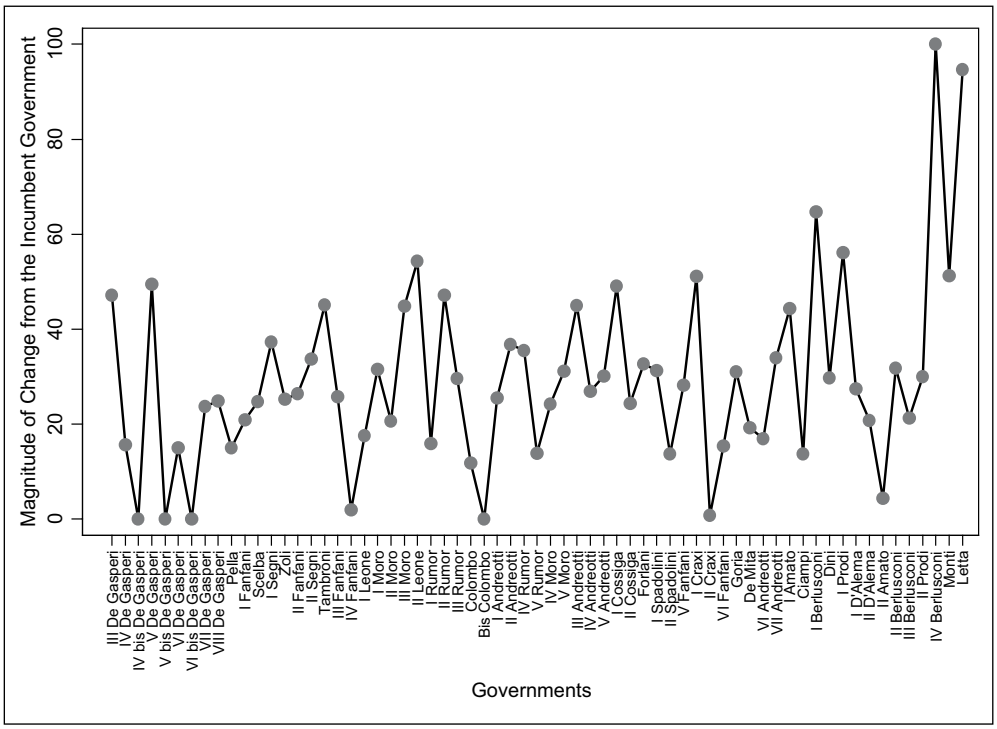

Figure 2. Magnitude of change in the bargaining environment for each Italian government (1946–2013).

occur within a legislature. To estimate the overall magnitude of change in a bargaining environment, we proceed as follows.

First, with respect to changes in the number of parties and their relative legislative strength, we take the absolute difference between the effective number of parliamentary parties (ENPP) (Laasko and Taagepera, 1979) during the current formation processes (at time *t*) and the previous formation processes (at time *t*–1, i.e. what we refer to as the status quo). We followed a similar approach to capture the variations in the distribution of parties' policy preferences across formation processes. In this latter case, in particular, we employed the Italian Legislative Speech Dataset (ILSD).[7] An advantage of this dataset is that it provides policy positions of parties for each single investiture debate over eight broad policy domains, i.e. foreign, social, economic and environmental policy, centralization of decision making, democracy, institutions and justice (Curini, 2011).[8] To estimate the policy preferences' distribution in the parliament in each investiture debate (that we take as a proxy of a formation process), we first compute the ideological range (i.e. the difference between the rightmost and leftmost party) along each such policy dimension; we then take the overall mean (for a similar procedure see Tsebelis and Chang, 2004). Computing the absolute difference between the ideological range so derived across formation processes at time *t* and time *t*–1 allows identifying a measure of the ideological change that occurred in the parliament.[9]

Finally, to capture how the legacy of the former government shapes the historical context in which negotiations occur, and the general level of conflict and disagreement between parties in the legislature, we examine how the incumbent cabinet ended. Diermeier and van Roozendaal (1998) identified as the only source of non-preference-based uncertainty a previous government defeat in parliament; however, according to CPDA, there are three more possible causes of termination other

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than regular elections: early elections, inter-party conflicts and intra-party conflicts. Because the categories are not mutually exclusive, we simply build an additive index ranging from zero – in the case of technical termination – to four – when all the events have been recorded at the same time by CPDA country experts.[10] In this way, for example, the bargaining over the first Cossiga government (4 August 1979 to 19 March 1980) receives a score of three. In fact, the termination context of the previous government led by Giulio Andreotti (20 March 1979 to 31 March 1979) shows intra-party conflicts within one of the coalition partners; moreover, the government failed a confidence vote in the Senate, triggering early elections.

Having estimated the effective change in each of the three aforementioned components of uncertainty, we use principal components analysis to compute the overall magnitude of change from the incumbent government. Principal components analysis is a statistical "data reduction" technique that allows us to describe variability among a set of observed variables in terms of a few unobserved underlying or latent factors (Sharma, 1996). Each of the extracted factors can then be substantively interpreted by looking at the original variables that correlate (or "load") onto each factor estimated. As Table A1 (available at http://ips.sagepub.com/) shows, results of the principal component analysis indicate that only one factor has an eigenvalue greater than one. This means that the set of our three indicators related to changed circumstances in the bargaining environment can be reduced to only one primary latent factor, which is positively correlated to all the covariates capturing changes and accounts for 41% of the total variance of our three original variables.

Finally, we estimated the MoC variable with respect to the status quo using predicted regression scores from previous analysis, successively rescaled to generate a continuous variable ranging between 0 and 100. Figure 2 plots the MoC variable thus derived in the bargaining environment for each Italian government between 1946 and 2013. As we can see, inter-electoral periods are not immune to changes; given the possibility of cabinet turnover in the between-elections period, these changes increase their importance.

Methods and data

We test our hypothesis using Cox's partial likelihood survival model. The central concept in survival analysis is the hazard rate $h(t)$, which is the probability that an event occurs at a particular point in time, conditional on the fact that it has not yet occurred. The hazard rate has two components. The first is the set of covariates that are hypothesized systematically to affect the timing of an event. The second is the baseline hazard rate $h_0(t)$, which indicates the underlying probability of the event occurring over time when the vector of all covariates is zero, which is not of particular interest for the purpose of this paper (Box-Steffensmeier and Jones, 2004). The dependent variable measures the days that are needed for a government to be formed.

To assess the impact of changed circumstances in the bargaining environment on formation duration – our main independent variable – we use the above-discussed index of change that we labeled MoC. Following the literature, we considered two clusters of covariates as control variables. The first (*post-election uncertainty*) contains the traditional covariate employed in the literature to capture the impact of uncertainty, that is, *post-election*, which is a dichotomous variable equal to one (more uncertainty) if a government forms immediately after an election and zero (less uncertainty) if it forms in the inter-electoral phase. In our data, approximately 27% of governments qualify as post-election cabinets.

The second control variable refers to *bargaining complexity*. The "electoral connection," in fact, requires parties to consider the implications of their present actions in light of the next general election (Lupia and Strøm, 2008: 62). Even assuming complete information and no uncertainty, this task is a difficult one that becomes even more computationally challenging as the complexity

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of the bargaining environment increases (De Winter and Dumont, 2008; Golder, 2010). Martin and Vanberg (2003) identify two main sources of complexity in the current negotiations: the number of parties involved in the bargaining and their ideological distances. To measure the former, we use the *ENPP* registered in the investiture debate for the current government (see above). This variable ranges from 2.8 to 6.8. As a proxy for *ideological divergences*, on the other hand, we employ the average ideological range (see above) registered in the investiture debate for the incumbent government (at time *t*–1).[11] The overall ideological divergences range from 12.9 to 45.2.

As further control variables, we also include in the analysis two more covariates: *potential maximum cabinet duration* and *single-party majority*. The former measures the natural log (ln) of the remaining days until the scheduled end of the legislature (i.e. five years) when the formation process starts. According to Lupia and Strøm (2008: 66), the advantages of being part of the government decay as "the parliamentary term passes and the next election approaches." Consequently, government negotiations should conclude more quickly as the end of the legislature approaches.[12] *Single-party majority*, on the other hand, is a dichotomous variable that equals one when one party holds an absolute majority of seats in the parliament, and zero otherwise. In this sense, the majority party does not have to negotiate with anyone in order to form a government; consequently, the formation process should be shorter (Golder, 2010). In our data, 8% of governments were formed under this condition.

Empirical results

In Table 2, we report the results of the two models we have estimated. In all of them, the coefficients are expressed as proportional hazard estimates with positive and negative values indicating, respectively, an increased or decreased risk of reaching an agreement between negotiators to form a government. Consequently, a positive coefficient reduces the duration of the bargaining, while a negative one delays the formation of a government. Coefficients' exponential function can be interpreted as hazard ratios. The analysis is performed on all the Italian governments between 1946 and 2013, with the exclusion of the two nonpartisan governments (for a similar choice, see Golder, 2010) and the De Gasperi II cabinet (1946–1947, Constitutional Assembly) because the operationalization of MoC forces us to drop the first observation in our dataset. This gives us 63 government formation processes.

Cox regression analysis conventionally presupposes what is called the proportional hazards assumption (PHA). Violation of the PHA can lead to false inferences about variables' substantive and statistical significance. In our case, a covariate-specific test of scaled Schoenfeld residuals shows evidence (i.e. p-value<.05) that the PHA is violated in both of our models for the ENPP. The standard solution to accommodate non-proportional hazard (NPH) consists in interacting this variable with some function of time, most commonly the natural log (ln) (Box-Steffensmeier and Zorn, 2001; Box-Steffensmeier et al., 2003; Cleves et al., 2004; Licht, 2011).

Model 1 summarizes the typical specification found in the literature, in which the effect of uncertainty is captured only by the dichotomous variable *post-election*. Model 2, on the other hand, explores the impact of MoC.[13] Model 1 contains as the lone source of uncertainty the condition that a government forms immediately after an election or in an inter-electoral period. As it is easy to see, increasing uncertainty – switching from an inter-election phase to a post-election one – significantly extends the length of time a government needs to form. In particular, a government forming after an election faces a hazard rate of reaching an agreement 74% lower (95% c.i.: 30%–90%) than in an inter-electoral period. However, the *post-election* variable ceases to be significant when MoC is introduced (see Model 2). This result confirms how the *post-election* variable usually employed in the literature is just a limited attempt to capture the impact of

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Table 2. The effect of the magnitude of change on government formation duration.

	(1)	(2)
Post-election uncertainty		
Post-election government	–1.339	–0.797
	(0.505)***	(0.539)
Changed circumstances in bargaining environment		
MoC		–0.023
		(0.011)**
Bargaining complexity		
ENPP	0.940	0.903
	(0.276) ***	(0.267)***
ENPP * ln(time)	–0.228	–0.208
	(0.093)**	(0.097)**
Ideological divergences	–0.021	–0.016
	(0.014)	(0.016)
Controls		
Potential maximum cabinet duration (ln)	–0.589	–0.502
	(0.311)*	(0.297)*
Single-party majority	2.621	2.449
	(0.588)***	(0.621)***
Log likelihood	–180.717	–177.629
AIC (Akaike Information Criterion)	373.434	369.258
BIC (Bayesian Information Criterion)	386.293	384.260
N	63	63

The Efron method is employed for handling ties. Data are based on 63 government formations in Italy between 1946 and 2013. Robust standard errors are reported in parenthesis.
Significance: * $p<0.1$; ** $p<0.05$; *** $p<0.01$.
MoC: magnitude of change.

uncertainty on the bargaining delays, given that its explanatory power is largely absorbed (and explained) by what is, in our framework, the real engine of uncertainty.

On the other hand, by looking at Model 2, we can see that our expectations find empirical corroboration in the data. As can be observed by the negative and significant coefficient of MoC, an increase in the magnitude of the change – which identifies higher uncertainty – results in an increased bargaining duration. According to Model 2, a hypothetical one-point increase of MoC (over a range of 0 to 100 as already noted) reduces the hazard rate to form a government by 2% (95% c.i.: 1%–4%). Note, moreover, that the inclusion of MoC in our analysis is also supported by statistical tests: a likelihood-ratio test of a nested model prefers Model 2 versus Model 1 (chi-square 6.18, d.f. 1, $p<.05$). Furthermore, a quick look at the values of the Akaike and Bayesian Information Criteria (AIC and BIC) suggests that Model 2 fits our dataset far better than did the first model.

With respect to variables related to bargaining complexity, only ENPP is significant in all of our models. However, its effect changes over time to accommodate NPH. Following Licht (2011), we present substantive interpretations of NPH in a graphical way. Figure 3 charts the first difference of a one-unit change in ENPP, while holding the other variables to their mean. The solid black line represents the average percentage change in the hazard of finding an agreement to form the government. The dashed lines are 95% confidence intervals. When confidence intervals are below (above) the zero line, this suggests that our covariate negatively (positively) affects bargaining delays.

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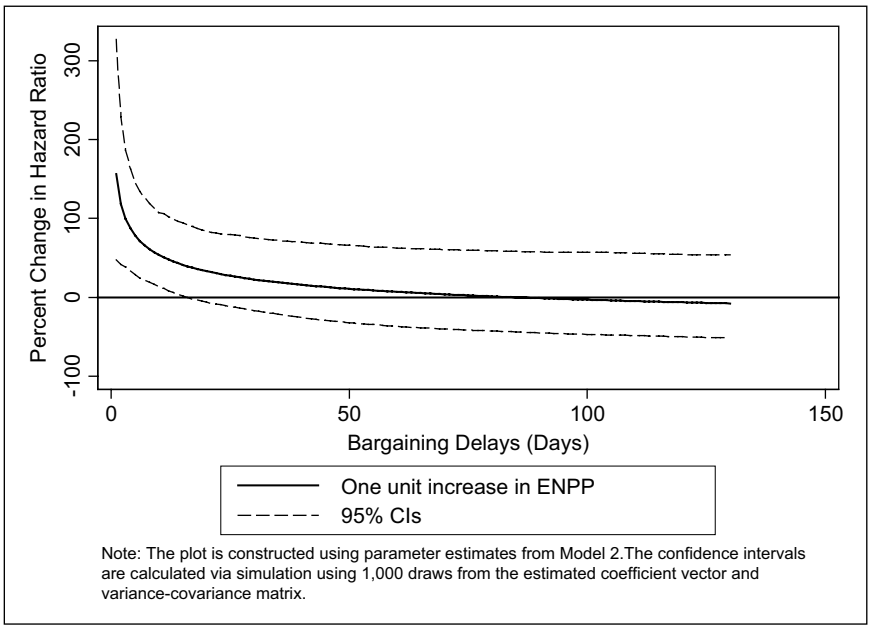

Figure 3. Effect of the effective number of parliamentary parties (ENPP) on bargaining delays.

According to Figure 3, after three days of negotiations, one more effective party increases the chance of reaching an agreement to form a government by approximately 100% (95% c.i.: 36%–181%). This difference declines rapidly as the length of negotiations increases, becoming no longer statistically significant beginning at day 18. This finding partially contradicts the effect predicted by the literature for the ENPP. Our interpretation is that the greater the number of parties in the parliament, the higher the chances for the *formateur* to find partners for a coalition government. However, after a few days, the number of parties ceases to be significant for the length of government negotiations, supporting the original argument of Diermeier and van Roozendaal (1998), who identify in uncertainty, rather than in complexity, the main driver of bargaining delays in government formation.

Examining the other control variables, we find a significant effect for both *single-party majority* and the natural log (ln) of *potential maximum cabinet duration*. According to Model 2, the presence of a party holding an absolute majority in the parliament significantly reduces the length of time a government needs to form. Specifically, the shift from a majority situation to a minority one will increase bargaining delays by a factor of approximately 11. On the other hand, an increase in the potential maximum cabinet duration causes longer formation processes.

Conclusions

Several informed observers describe political competitions as "endogenously evolving dynamic systems" in perpetual motion (Laver, 2005: 264). This also implies that political changes – which we recognize as the real engine of uncertainty – are an enduring aspect over the life of the legislature. The number of parties, their identity and weight can vary; the matrix of distances between parties can be altered; or a government can end for (very) different reasons, and so on. The existing literature over-simplifies the operationalization of the concept of uncertainty; it simply assumes

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that it will be higher in the post-electoral phase (when all the main variables in government bargaining are likely to have changed), and lower in the inter-electoral phase (when actors can count on the information acquired during the previous part of the legislature), while assuming that no relevant changes in the environment occur in the meantime. Making that assumption, however, fails to properly detect what indeed is a dynamic phenomenon, especially for countries like Italy, which are characterized by frequent cabinet turnover in inter-electoral periods and large variation between different government experiences.

Building on these insights, we have argued that a more valid measure of uncertainty is represented by the magnitude of change in the bargaining environment. As we have illustrated, our empirical results strongly confirm our expectations, highlighting the importance of the role played by changed circumstances as a source of uncertainty to explain bargaining delays. Moreover, once we controlled for the effect of such changed circumstances, the impact of the post-election period ceases to be significant and the overall explanatory power of our model increases. Our results, therefore, constitute an improvement over the current literature and contribute to solving the apparent Italian paradox: compared to other European countries, a huge number of formation processes whose differences in terms of bargaining duration cannot be constrained by simply differentiating between post- and inter-election governments. In this sense, our analysis does not average out the Italian peculiarities, and contributes to a better understanding of the within-country variation in bargaining delays.

A single-country study such as the present work permits the design and use of measurements that are sensitive to domestic legal and political contexts. At the same time, however, we believe that the validity of our approach could easily be extended to a broader set of cases. After all, our argument employs the same logic that previous studies on government delays have used to justify the use of post-election bargaining as a source of uncertainty. Our approach simply makes explicit the role of the magnitude of change, extending its effect to the whole life of a legislature. Given that a relatively large number of cabinets in Europe were negotiated during an inter-electoral period (approximately 45%: see Golder, 2010, Table 1), this type of argument seems, at least prima facie, far from being irrelevant.

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Notes

1. Diermeier and van Roozendaal (1998) focus on uncertainty in order to explain government delays. Martin and Vanberg (2003) partially contest this notion, introducing complexity among the factors that cause longer negotiations. On this point, see also De Winter and Dumont (2008) and Golder (2010).
2. Diermeier and van Roozendaal (1998) and Golder (2010) argue that any factor about which there is complete information, such as the number of parties, should not be considered as a source of uncertainty. However, when defining empirical uncertainty and justifying the use of the post-election dummy, Golder (2010: 13) notes that "following an election, the party composition in the legislature is different, parties may have new platforms, and there may be membership turnover within the parties," supporting, in our view, a relationship between number of parties and their ideological distance with uncertainty. Our theoretical approach solves this apparent contradiction by stressing the role of *change* in key bargaining parameters, such as the number of parties and the matrix of ideological distances.
3. Mergers and splits are not a meaningless risk in the Italian context (see Curini, 2011; Di Virgilio et al., 2012; Giannetti and Laver, 2001). In 48 government formation processes in the inter-electoral phase, nine (19%) involved a change in the absolute number of parties due to mergers or splits in comparison with the previous bargaining environment.

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4. It is worth noting that our perspective, with its focus on changes in the bargaining environment, employs the same logic that previous studies on government delays have used to justify the use of timing of government formation as a source of uncertainty. However, in our case, the emphasis is placed on the amount of the change, rather than on a single event (i.e. elections) which is supposed to bring change in several elements of the bargaining environment. This allows us to extend our approach to consider the variance in both post- and inter-electoral stages.
5. Woldendorp et al. (2000) define a government as any administration that is formed after an election and continues in the absence of: a change of prime minister, a change in the party composition of the cabinet, or a formal resignation in an inter-election period, even if the new government has the same prime minister and party composition. We also consider in our analysis caretaker cabinets and cabinets that failed investiture votes. We agree with King et al. (1990), who consider these governments legal entities, whose formation is no more and no less interesting than any other.
6. CPDA covers 17 West European countries between 1944 and 1998. As Golder (2010: 28, note 7) points out, "the dataset uses the day of the incumbent government resignation as the end date of the incumbent government," registering bargaining days from this event. In comparison with CPDA, for the case of Italy we have extended the dataset to 2013 while adding a few cases in accordance with our counting rule, which also takes into consideration the changes in the party composition of the government as an ending event. It should be noted that in Italy the resignation of the incumbent prime minister is usually postponed for a few weeks after elections, while the swearing-in ceremony in front of the President of the Republic anticipates the investiture vote by several days. This choice lowers the risk that the length of cabinet negotiations could be artificially inflated according to country rules and procedures for government formation, such as, for example, the time needed to constitute the new parliament after elections or to organize the confidence vote.
7. The ILSD is based upon a content analysis of all the investiture debates during the vote of confidence in the Italian Chamber of Deputies from 1946 to 2013. The coding scheme of the dataset follows the same method employed by the Comparative Manifesto Project (CMP). Specifically, for each legislative speech during a vote of investiture (one for each party), a number of quasi-sentences is identified and assigned to a number of pre-established categories that form the classification scheme. In particular, the original 56 categories of the CMP (Budge et al., 2001; Klingemann et al., 2006) dataset have been extended to 68, to take into account the Italian political context (such as positive or negative references made by parties to the Catholic Church). For further details on ILSD: www.socpol.unimi.it/docenti/curini/iLSD.htm.
8. Graphical inspections of party policy preferences on key issue dimensions reveal that government and opposition parties are usually dispersed in the estimated policy spaces and not clustered according to their government or opposition status (see Curini, 2011). Moreover, ILSD measurements correlate very highly with the ones obtained using CMP data (>.90). This evidence, together with the weak cohesion of Italian coalitions throughout its history (Bartolini et al., 2004; Verzichelli and Cotta, 2000), clearly contradicts the idea that parties strategically manipulate their true policy preferences during investiture debates to avoid exacerbating either intra-coalition conflicts or government–opposition divisions (i.e. the risk of endogeneity).
9. Martin and Vanberg (2003) include in their analysis variables pertaining to parties that ultimately form the cabinet resulting from the negotiations. Such measures should not, however, be used, because in many cases the full formation process is characterized by numerous bargaining rounds that include a variety of alternative potential coalitions. For this reason, following Golder (2010), we use variables referring to the whole formation process.
10. We limit our account of parliamentary defeat only to the cases of failed confidence votes.
11. We use ideological divergences registered in the investiture debate for the incumbent government because, when negotiating for the current cabinet, parties do not yet know the new policy preferences of their counterparts, which will be fully revealed only in the investiture debate following negotiations. This is also a way to reduce the risk of endogeneity.
12. The log functional form enables less variability in the higher values of our variable; there should not be a great difference in the speed of negotiations where there are four or five years to the end of the legislature.

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13. Golder (2010) argues that both uncertainty and bargaining complexity matter in the government formation process, but in a conditional way: while uncertainty always produces delays, complexity seems to especially matter when uncertainty is sufficiently high. We do not test the argument of Golder (2010) about the conditional impact of bargaining complexity. The inclusion of an interaction, in fact, is consistent with the idea that uncertainty is present exclusively during a post-election stage. However, our theoretical framework explicitly contests this notion.

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