NOTES

Notes to Chapter 1

1. I use the terms ‘electoral’ or ‘pre-electoral’ interchangeably to characterize coalitions that form prior to elections.

2. Electoral coalitions can also play a role in determining the identity of the government in countries with more proportional electoral rules. For example, the presence of an electoral coalition can affect the choice of government formateur or allow a small party that is a potential government member to surpass an electoral threshold. By affecting the identity of the government, electoral coalitions ultimately influence the types of policy that get implemented. This is the case whether the electoral system is disproportional, as in the stylized example above, or not.

3. Some of these studies do take account of the pre-election environment by incorporating voter choice and candidate entry (Shepsle 1991). For instance, Austen-Smith and Banks (1988) analyze the strategic behavior of voters in their model of government coalition formation. Other more recent work combines voter behavior with post-election elite bargaining (Glasgow & Alvarez 2005; Quinn & Martin 2002). However, none of these analyses ever explicitly allows for pre-electoral coalition formation.

4. I know of only one major cross-national statistical analysis that takes account of pre-electoral coalitions (Martin & Stevenson 2001). However, just as in the rest of the literature, the goal of this study is to better understand government coalitions, not electoral coalitions. Extremely recently, several papers have appeared examining electoral coalitions between particular parties in France (Blais and Indriðason 2004; Spoon 2004; Fauvelle-Aymar & Lewis-Beck 2005).

5. Kaminski (2001) uses a cooperative game-theoretic model to examine pre-electoral coalitions and party mergers in Poland in the 1990s. However, his analysis has not been extended to other cases and does not take account of bargaining or policy issues.

6. I do not claim that pre-electoral coalitions will automatically be electorally advantageous. After all, it may be the case that a coalition is composed of parties that are so ideologically incompatible that their respective electorates refuse to vote for the coalition.

7. Note that this does not have to be the case for a coalition to be advantageous. A coalition that attracts more votes than either party could win on its own, but fewer than the total number of votes they would win running independently, may still be useful if it increases the probability that this coalition enters government or becomes the formateur.

Notes to Chapter 2

1. Powell (2000) has collected data on government majorities that were identifiable
prior to elections. Although he includes some pre-electoral coalitions in his analysis, they are certainly not the main focus of his book. Martin and Stevenson (2001) include a pre-electoral coalition variable in their analysis of government coalitions. However, as I note in chapter seven, they significantly underestimate the presence of electoral coalitions in their sample.

2. Convergencia i Unió is an electoral coalition between the Democratic Convergence of Catalonia and the Democratic Union of Catalonia. Unidade Galega, known as the Socialist Galega Block in 1982 and the Socialist Galega-Left Galega in 1986, is composed of several small Galician parties. The Galician National Popular Block is another Galician electoral coalition in which the Marxist União do Pobo Galego is the dominant party. The Basque Left is an electoral coalition of left-wing Basque parties, while Herri Batasuna is an electoral coalition of more extreme left-wing parties in the Basque region.

3. These two electoral coalitions formed in the 1993 legislative elections (Kohno 1997, 139–41, 149). One electoral coalition comprised the Clean Government Party, the Democratic Socialist Party, the Socialist Democratic Federation, the Japan Renewal Party (Shinsei-to) and the Japan Socialist Party. The other comprised the New Party (Sakigake) and the Japan New Party. Both electoral coalitions entered government in 1993.

4. There was a coalition between the Center Party and the Christian League of Finland in 1970 (Arter 1999, 110), a coalition between the Liberals and the Center Party in 1983 (Esaiasson & Heidar 2000, 447–48), and the Purple Coalition in 1999 (personal correspondence with Mark Hallerberg). For more on electoral coalitions in Finland, see Sundberg (2002) and Kuitunen (2002).

5. I do not include Switzerland in this book because my statistical analyses focus on parliamentary, rather than presidential, systems. Were I to do so, though, it would present other ambiguous cases. Parties in Switzerland often form electoral coalitions in particular cantons; however, they are not nation-wide coalitions. The ‘magic formula’ used after 1959 to determine coalition government composition means that everyone knows in advance which parties will end up in government (Kerr 1987) and that “elections do not have a direct impact on the government composition” (Caramani 1996). I do not consider this agreement over government composition to constitute a pre-electoral coalition, since the parties in question do not coordinate their electoral strategies. Moreover, members of the executive council are elected individually by the parliament and are not “constrained by interparty policy deals” (Church 2004, 20, 117–18). Thus, although Switzerland has pre-electoral coalitions at the local level and the ‘magic formula’ at the national level, I would code Switzerland as having no national-level pre-electoral coalitions.

6. Prior to the 1960s, the Liberal Party also formed several local electoral coalitions with the Conservative Party. These coalitions took the form of nomination agreements, in which the Liberals agreed “not to contest a particular seat if the Conservatives refrained from offering a candidate in another seat” (Rasmussen 1991, 167).

7. Identifying electoral coalitions in Israel is further complicated by the fact that some parties that form an electoral alliance for certain elections later merge into a single party, where the original constituent parties exist as separate factions. This was the case with Mapai and its electoral alliance partners when they merged to form the Labor Party in 1968. Fortunately the act of officially forming a party does tend to be mentioned in the lit-
erature on elections and parties in Israel.
8. For a more detailed discussion of electoral coordination in mixed and multi-tier electoral systems with dual ballots, see Ferrara & Herron (2005).
9. Because the National and Liberal parties have such a long-standing electoral agreement, most of their pre-electoral bargaining is not actually over the flow of preferences, but rather over the number of districts in which both should compete and the extent to which their policy platforms differ (Sharman, Sayers, & Miragliotta 2002).

Notes to Chapter 3

1. Note that this is equivalent to saying that an increase in the number of parties will only raise the likelihood of pre-electoral coalitions when the electoral system is sufficiently disproportional.
2. However, some commentators analyzing Dutch politics have suggested that electoral coalitions have not been very effective in giving Dutch voters more say over the composition of their governments. For example, De Jong and Pijnenburg (1986, 148) state that “the making of a [government] coalition remains the crucial moment despite the efforts . . . towards more ‘political clarity’ and pre-electoral agreements . . . Dutch voters will never decide on the composition of their government.”
3. A slightly different scenario took place in Italy in 1996, when a number of center-left parties running under the heading of Olive Tree agreed to go into government together if they were successful at the polls. While the Communist Refoundation (RC) was not part of this coalition and had no intention of going into government with the Olive Tree, it did reach nomination agreements with the member parties of the Olive Tree to avoid splitting the left-wing vote in a number of constituencies (Daniels 1999, 85–86). Following the election, the Olive Tree coalition entered government, and the RC simply supported it from the legislature (Newell 2000, 38). In this case, I do consider that the government was based on an electoral coalition.
4. For another analysis of how electoral system disproportionality and party system size affect the probability of electoral coalition formation, see S. Golder (2005).
5. The effective threshold is the mean of the thresholds of representation and exclusion. It is calculated as

\[
\frac{50\%}{M+1} \frac{50\%}{2M}
\]

where \(M\) is the district magnitude. If there are legal thresholds and/or upper-tier seats, the calculation is slightly more complicated (Lijphart 1994, 25–30). For more information on electoral thresholds, see Taagepera (1998a, 1998b).

Notes to Chapter 4

1. However, it is important to recognize that actual election results may rule out certain combinations, so that a party may reconsider its alliance strategy afterwards. It may
also be the case that voters do not clearly show their support for a particular electoral coalition. In these circumstances, party leaders can more easily justify not honoring the terms of the electoral coalition. After all, agreements over the division of government spoils do not necessarily specify appropriate behavior if the coalition loses. It is, perhaps, interesting to note that some pre-electoral agreements are sufficiently detailed that they take these possibilities into account and prescribe particular actions. This is an indication that party leaders are clearly aware of the commitment problems associated with electoral coalitions.

2. If the main issue for voters in a particular election was incumbent corruption, then parties at opposing extremes could potentially form an anti-incumbent, anti-corruption electoral coalition that could generate a significant amount of voter support. In fact, this is the story often told of the defeat of the Congress Party in India in 1989 (Andersen 1990).

3. Note that the fact that a coalition may be sub-additive does not necessarily mean that it offers no significant electoral gains. It is possible for a coalition to be sub-additive and yet still be sufficiently large to represent the largest 'party,' thereby winning itself the role of government formateur.

4. This does not rule out the possibility that politicians will overestimate the support they would receive from running separately or from forming an electoral coalition. Estimates of party or coalition support are likely to be uncertain in volatile or new party systems. Although the extent to which these estimates are inaccurate can obviously affect the range in which coalition bargains are feasible, I have not explicitly modeled this source of uncertainty.

5. The core of any bargaining game is that two players are bargaining over a 'pie.' The size of this pie is typically normalized to 1. An agreement is a pair \((x_1, x_2)\), in which \(x_1\) is Player A's share of the pie and \(x_2\) Player B's share. The set of possible agreements is: \(X = \{(x_1, x_2) \in \mathbb{R}^2 : x_1 + x_2 = 1 \text{ and } x_i \geq 0 \text{ for } i = 1, 2\}\).

6. As long as party leaders have single-peaked preferences over the policy space, then the use of a quadratic loss function does not affect any of the model’s implications.

7. It is not difficult to see that this feature of presidential elections would make it rather difficult to find a coalition bargain acceptable to both sides. The problems caused by non-divisible presidential offices will be illustrated in the next chapter.

8. Although there are three possible sub-game perfect Nash equilibria, there is always a unique sub-game perfect Nash equilibrium for any given set of values for the model’s parameters.

9. However, this assumption is not entirely innocuous, since it does affect the number of possible sub-game perfect Nash equilibria. It turns out that if I allow the players to remain indifferent between making and not making an offer, there would be an additional equilibrium in which Party A makes an offer, B rejects this offer, and B makes no counter-offer. The outcome would be that no electoral coalition forms.

10. If this assumption is not made and the players are allowed to remain indifferent, then there is a fourth sub-game perfect Nash equilibrium. The outcome is that Player A makes an initial offer, which is rejected. The game enters a second period, but Player B does not make a counter offer. The end result is that no electoral coalition forms.
Notes to Chapter 5

1. Le Pen received 16.86% of the vote in the 2002 presidential election compared to 15% in 1995. A rival far-right candidate, Bruno Mégret, won another 2.34% of the vote in 2002. These figures come from the *Election Politique* website at http://www.election-politique.com.

2. The electoral system used for the 1986 elections was different. In an attempt to prevent an expected right-wing legislative majority, President Mitterrand introduced a proportional representation system similar to that used in the Fourth Republic. He hoped that this system would encourage voters to support the extremist National Front and siphon off votes from the moderate right-wing parties. Although a large number of voters did support the National Front, the leader of the moderate right, Jacques Chirac, still managed to become prime minister, albeit with a legislative majority of just two. Chirac immediately restored the traditional two-round electoral system.

3. The early 5% threshold was based on the actual number of votes cast. When the threshold was raised to 10% in 1966, the percentage of votes a party now needed to advance to the second round was 10% of the registered voters. This method remained in place when the threshold was raised to 12.5% (Duhamel 1999, 138–39). Given turnout levels, a party often needs around 17% of the actual vote to qualify for the second round.

4. A small number of moderate right-wing deputies regularly call for an electoral coalition with the National Front in certain districts. However, they tend to be isolated very quickly by the party elites (Hecht & Mandonnet 1998). For example, when several mainstream right politicians were elected with the help of the National Front in the cantonal and regional elections of 1998, President Chirac immediately went on national television to denounce all alliances between the moderate and the extreme right. The politicians were then kicked out of their parties (Martin 1999).

5. Cohabitation refers to a time when the presidential and prime ministerial positions are held by people from opposing parties.

6. The origins of this federation can be found in a series of discussions that took place around the presidential candidate of a mysterious ‘Monsieur X.’ It was only once the idea of a candidate of the center-Left had been ‘tested’ in the weekly magazine, *L’Express*, that Gaston Deferre came out and announced that he was actually Monsieur X (Chagnollaud & Quermonne 1996).

7. The PCF were opposed to the alliance, because they did not want to be sidelined as they had been in the Fourth Republic. Since the Gaullists opposed the alliance and wanted the centrist voters for themselves, they constantly raised the religious issue to drive a wedge between the Socialists and the MRP.

8. Parties of the right during the Third and Fourth Republics had always suffered from elite fragmentation and the poor organization of their mass electoral following. However, the Gaullists were able to gain control of the local ‘notables’ and achieve a high degree of parliamentary discipline, centralization, and nationalization (Schain 1991).

9. The other three cases include one with multiple left-wing candidates, and two with multiple right-wing candidates. In the fourth district in the Maine-et-Loire department, the left-wing candidate managed to win with only 36.57% of the vote, because two mainstream-Right candidates split the right-wing vote between them.
10. In the proportional representation elections of 1986, the UDF and the Gaullists ran joint lists in 61 of the 96 electoral districts. They ran separate lists in the remaining 35.

11. Along with a small band of followers, the UDF leader François Bayrou was one of the few who refused to join the new ‘Union for a Presidential Majority.’ He was worried that the Gaullists would dominate the new coalition and control the bulk of the campaign funding from the government.

12. Socialist voters were much less likely to vote for a Communist candidate in the second round than Communist voters were to support a Socialist candidate. The vast majority of centrist voters simply refused to vote for an electoral union of the Left led by the PCF (Hanley 2002; Bell & Criddle 1984; Johnson 1981; Alexandre 1977).

13. Rivalry among the various leaders of the moderate Left was intense; anecdotes of the personal nature of this rivalry are rife in the descriptive literature (Du Roy & Schneider 1982; Alexandre 1977). It is important to note that this rivalry did not prevent the merger. As a result, one should be wary of the ‘personal animosity’ story as an explanation for coordination failure.

14. It is important to remember that the 1986 election was held under a proportional representation system. It is worth stating, though, that there is some doubt as to how many of the French voters actually realized this prior to the election. The simulation would certainly be more useful had the poll been taken during an election held under the usual two-round system.

15. Analysts of French politics often refer to the parties on the right using a typology developed by René Rémond (1982), according to which the Right has been divided since Napoleon into Orleanist, Bonapartist, and Monarchist wings. In recent years, references to this typology have diminished. For a further discussion, see Golder (2000).

16. There were seven candidates representing the Right. See http://www.election-politique.com for a complete listing of candidates and results.

17. So far, the National Front has not managed to win seats in the legislature, with the exception of 35 seats in the 1986 proportional representation elections.

18. As one might expect, these electoral agreements are often a source of conflict between the party elites and the local candidates.

19. Both Kim Young Sam and Kim Dae Jung were confident of at least receiving the votes from their own native region (Im 2000; Nam 1989, 196; Dong 1988, 181–82).

20. Although the Korean system is often treated as presidential (Przeworski et al. 2000), it does have a prime minister subject to the approval of parliament. The president is not responsible to parliament and does not have the ability to dissolve it. The government of the prime minister can be brought down, though, by a vote of no confidence. In many ways, this system is similar to that used in France. The main difference is that the South Korean president does not have the power to dissolve the parliament, as the French president does.

21. In the absence of ideological conflict, regional distinctions have become central to much of Korean politics. Regional antagonisms were encouraged during Park Chung Hee's reign (Nam 1989, 279, 316–17). This applies particularly to the split between the Cholla region and the rest of the country. Morriss (1996) argues that regional voting did not develop before the 1970s but has grown rapidly since then. He emphasizes that this pattern is a political construct, since there are no intrinsic regional differences, and that in "the absence
of other socio-economic cleavages, regional attachments provide a way for leaders to differ-
entiate themselves, and a basis on which to appeal to their supporters."

22. Kim Dae Jung also promised to change the institutional setup and create more of
a parliamentary regime in which the president would have no more than a ceremonial role
(Diamond & Shin 2000; Kim 2000b). Since parliament was controlled by Kim Young
Sam’s party at the time, it would obviously be difficult to get such a measure passed. As a
result, this second promise was never entirely credible.

23. Kim Young Sam’s long-term rival, Kim Dae Jung, came second with 33.8% of the
vote, while Chung Ju Yung came third with 16.3%.

24. Shortly before the election, though, Chung abruptly ended his alliance with Roh.
Despite this change, Roh still won the election.

Notes to Chapter 6

1. Kaminski (2001) has used a similar survey approach to the one suggested here to
analyze coalition stability in Poland.

2. Dyadic data is also the format of choice in the international relations literature
addressing coalition or alliance behavior.

3. ‘Government potential’ refers to a party that is a former, actual, or (realistically)
possible member of government. ‘Blackmail potential’ refers to a party that is able to affect
the tactics of party competition among government-oriented parties (Budge et al. 2001,
216). The Budge et al. criteria are themselves drawn from Sartori (1976).

4. Random effects are similar to fixed effects in that they are both used to model
unobserved heterogeneity. However, they measure unobserved heterogeneity in different
ways. The fixed effects model introduces dummy variables, essentially modeling unob-
erved heterogeneity as an intercept shift. In contrast, a random effects estimation models
unobserved heterogeneity with an additional disturbance term that is drawn from a normal
distribution with mean zero. There are at least two reasons why random effects are prefer-
able here. Theoretically, a random-effects specification is more appropriate when inferences
are being made about a population on the basis of a sample as is the case here (Greene
2003; Hsiao 2003). More practically, running a fixed-effects model by election would
mean that all elections in which no pre-electoral coalition formed would be dropped.
Doing so would leave me with only 37% of the observations and potentially introduces
selection bias.

5. The log-likelihood from the model with random effects is −625.79, while the log-
likelihood from the model without them is −681.29. This gives a \( \chi^2 \) statistic of 111.0, i.e.,
\[ 2(-625.79 + 681.29) = 111.0. \] The \( p \)-value of obtaining a \( \chi^2 \) statistic of this magnitude or
larger if the random effects are not required is less than .0001, with one degree of freedom.
This result strongly suggests that random effects should be retained.

6. Confidence intervals are based on simulations using 10,000 draws from the esti-
mated coefficient vector and variance-covariance matrix.

7. One might also wonder about the predictive power of my analysis. As with all rare
event data, the predicted probability of a pre-electoral coalition forming is quite low (King
& Zeng 2001). However, the results from my analysis show that the mean predicted prob-
ability of an electoral coalition forming for those dyads that actually did form an electoral coalition (.10) is twice as large as the mean predicted probability for those dyads that did not form a coalition (.05). The fact that simulations show that we can be highly confident (greater than 99%) that these mean predicted probabilities are different provides support for the predictive power of my analysis.

8. I show the effect of a change in Polarization by one standard deviation from its mean both when Effective Threshold is at its minimum value and when it is at its maximum value. This result shows the effect of a reasonable change in Polarization over the whole range of values of Effective Threshold in the sample. I do this for the other interacted variables as well.

Notes to Chapter 7

1. See Martin & Stevenson (2001, 38) for a discussion of the reasons why more traditional regression methods are unsuitable for analyzing which parties enter government.

2. Martin & Stevenson do, in fact, code some potential government coalitions as being based on pre-electoral agreements during inter-election periods. They do not discuss the justification for coding these observations in this way.

3. The test essentially involves comparing the estimated parameters produced by a fully specified model (all potential choices are included) with the estimated parameters from a model where the set of choices is restricted (some choices have been dropped). If IIA holds and the dropped choices are irrelevant, then the estimates of the model parameters will be the same. While Martin & Stevenson conducted their test by randomly dropping 20% of the potential government coalitions, I employed a more stringent test and randomly dropped 50% of the potential governments. I then repeated this procedure 50 times to make sure that the randomization procedure did not produce an unusual answer. If the p-value from the test is less than .05, then the null hypothesis of IIA is rejected. The average p-values from the 50 tests for the four models that I estimated in table 7.1 range from .69 to .89. I also conducted more stringent tests, where I dropped more than 50% of the potential government coalitions; I was still unable to reject the IIA assumption.

4. By the same logic, one might also worry about the omission of Investiture from the model, since this variable is interacted with Minority status. However, Investiture does not vary across the choices for a given formation opportunity, and including it along with its interaction with Minority status would lead to perfect multi-collinearity. Thus, omitting the constitutive term Investiture is appropriate and necessary in this particular case (Brambor, Clark, & Golder 2006).

5. Martin & Stevenson draw this same inference, but in slightly different terms. They state that “[v]ery strong parties do tend to get into government and, even more, to rule alone” (2001, 46).

6. The inclusion of the constitutive term Single Party also affects some of the other coefficients. For example, it increases the size of the coefficient on Minimal Winning Coalitions by 43% and reduces the size of the coefficient on Ideological Divisions by 26%. This is just further evidence of the bias arising from the omission of Single Party in Model 1.

7. These two claims cannot be verified by simply looking at the results in Model 3.
and comparing them to those in Model 2. However, the results from a model in which I interact all of the variables in table 7.1 with a Post-Election dummy variable do support these claims—the coefficients on the interaction terms Minimal Winning Coalition × Post-Election and Pre-Electoral Pact × Post-Election are both positive and significant in this model. These results are not shown.

8. The odds that a potential coalition becomes the government if it is based on a pre-electoral coalition compared to the exact same potential coalition that is not based on an electoral pact is calculated as \( e^{\beta_{PEC}} \) where \( \beta_{PEC} \) is the coefficient on the Pre-Electoral Coalition variable in table 7.1 (Long 1997, 168–70).

9. In addition, non-political factors such as holidays affect the length of time between the election and the date the new government takes office. For instance, forming the German government at the end of the year in 1990 took extra time because of the Christmas holidays (Saalfeld 2000, 48).

10. The data in table 7.2 refer only to governments that formed after an election. Governments also form in inter-election periods after a cabinet falls. The mean length of time that it takes to form a government in an inter-election period is only 13.5 days. A difference in means test indicates that we can be well over 99% confident that governments that form after an election take a much longer time to take office than those that form in an inter-election period.

11. The hazard rate has two components. The first is a set of covariates that are hypothesized to systematically affect the timing of an event. The second is the baseline hazard function that indicates the rate of event occurrence when all the covariates are zero, i.e., the baseline hazard reflects how the rate of event occurrence changes with time only (Martin & Vanberg 2003).

12. The results from a generalized gamma model, as well as an examination of the Cox-Snell residuals, indicate that the Weibull model is appropriate for examining the duration of government formation (Box-Steffensmeier & Jones 2004, 41–43, 124–25, 137–39). The fact that the results from a Cox proportional hazards model are qualitatively similar to those that I obtain from the Weibull model indicates that I can be particularly confident that my results are not dependent on my choice of the Weibull distribution to parameterize the baseline hazard function. This is because the Cox model does not have to specify a particular distribution of the hazard rate. The results from estimating the Cox model also indicate that the proportional hazards assumption underlying both the Weibull and Cox models is not violated—the p-value from the global test of the Schoenfeld residuals is .21 (Grambsch & Therneau 1994; Box-Steffensmeier & Jones 2004; Cleves, Gould, & Gutierrez 2004, 178–80).


14. Figure 7.1 illustrates the change in expected duration as the Pre-Electoral Coalition variable goes from 0 to 1 across the range of observed values for Government Parties. The change in expected duration in the Weibull model for a given number of Government Parties is calculated as:

\[
E(T_{PEC=0}|Parties) - E(T_{PEC=1}|Parties) = \left[ \left( \frac{1}{\lambda_{PEC=0,Parties}} \right)^{\gamma} \Gamma \left( 1 + \frac{1}{\rho} \right) \right] - \left[ \left( \frac{1}{\lambda_{PEC=1,Parties}} \right)^{\gamma} \Gamma \left( 1 + \frac{1}{\rho} \right) \right]
\]

(7.2)
where $\lambda = e^{x\theta}$ is a scale parameter, $\beta$ is a shape parameter, and $\Gamma$ is the gamma function. Confidence intervals around this change in expected duration are based on simulations using 10,000 draws from the estimated coefficient vector and variance-covariance matrix. Change in expected duration and confidence intervals are then calculated for all of the observed values of Government Parties, and these values are then plotted in figure 7.1.

15. In addition to using the Ideological Range variable, I also examined whether the Ideological Spread and Ideological Connectedness of the incoming government affected the duration of the government formation process. I found no evidence that they did. These additional variables are described in some detail in the next section.

16. I should note, though, that the 1977 Spanish government was actually based on a 14-party pre-electoral coalition. The problem is that the ideological data from the Manifesto Research Group have this government coded as a single party even though the parties did not merge until 1978.

17. As Laver (2003, 30) notes in a recent review article on government duration and termination, scholars have “tended to assemble a portfolio of independent variables gleaned from previous published work and the author’s own ideas, each given a brief ad hoc ‘theoretical’ justification in its own terms. But the set of independent variables taken as a whole does not amount to the empirical elaboration of a coherent model of government termination.”

18. In some cases, both sets of scholars will find a model and sample that support their ‘contradictory’ theoretical claims. For example, Strøm (1985) argues and finds that the number of days of ‘crisis’ before a government forms increases cabinet duration, while King et al. (1990) argue and find that the same variable actually decreases cabinet duration.

19. For example, much of the debate over questions of government duration has centered on the advantages of survival analysis as compared to ordinary least squares regression (King et al. 1990), whether the hazard rate is rising or falling and how it should be interpreted (Alt & King 1994; Warwick 1992, 1994; Beck 1998), and whether analysts should be employing a competing risks model or not (Diermeier & Stevenson 1999).

20. While Warwick (1994, 42) seems aware of some these problems, this does not change the fact that this type of procedure is problematic in the presence of multi-collinearity and leads to confidence intervals that are too small and $p$-values that cannot be interpreted in the usual way (Altman & Andersen 1989). Another problem is that this elimination procedure cannot distinguish between predictors of direct substantive interest and those whose effects one wants to control for (Singer & Willett 2003). Moreover, the end result is a model that tends to be sample specific. This last point may help to explain why the results from government duration models are not always robust across different samples.

21. Warwick does provide measures for different definitions of the government; he just prefers the more inclusive definition stated above.

22. The principal reason for employing the Weibull model earlier was that it made it easier to evaluate the conditional effect of pre-electoral coalitions on government bargaining delays in figure 7.1.

23. Censoring issues occur when the analyst does not observe the end of a duration period (right-censoring), while truncation issues occur when the analyst does not observe the duration of an observation that occurs prior to the start point of the data (left-truncation).
24. Although Warwick’s data actually start in 1945, I only have data on pre-electoral coalitions from 1946.

25. Another source of data commonly used in the government duration literature is King et al. (1990). These data measure government duration in months, whereas the two data sources that I employed measure it in days. Since the data provided by King et al. are less accurate, I did not use them in my analysis.

26. Competing risks (or multiple destination) models take account of the fact that observations can terminate in different ways (Box-Steffensmeier & Jones 2004). I employ a latent survivor time approach to the competing risks problem where there are two specific destination states (dissolution or replacement), each of which has a latent failure time associated with it for each observation (Diermeier & Stevenson 1999).

27. I have already shown in previous sections that pre-electoral coalitions increase the ideological compatibility of governments and shorten the length of time that it takes to form a government. As a result, one might reasonably wonder if the effect of pre-electoral coalitions on government survival is being muted by the fact that I include Ideological Range and Formation Attempts as independent variables in table 7.5. However, analyses where I drop Ideological Range and Formation Attempts do not change my inferences.

28. The ‘––––’ symbol for the risk of dissolution indicates that the coefficient on Caretaker Government tends toward infinity, because there are no cases (Warwick data) or only one case (PDDA data) of a caretaker government that forms after an election ending in dissolution (Box-Steffensmeier & Jones 2004, 171). The one case of a caretaker government ending in dissolution in the PDDA data occurs in Iceland in 1959. Since the categorization of this particular government is open to interpretation, I should note that my results do not change if this government is not classified as a caretaker government (Indriðason 2004).

29. A cursory glance at the data reveals that Warwick and PDDA often measure the number of foiled formation attempts for the same governments differently. In fact, the correlation between the Warwick and PDDA variables is only 0.54.

Notes to Chapter 8

1. There are a few exceptions, of course. For example, Powell (2000) makes a point of considering both single parties and pre-electoral coalitions in ‘majoritarian’ democracies. He does so because he is interested in the identifiability of government alternatives. However, a more typical example is Laver and Schofield (1998, 1). Although they include a nice discussion of pre-electoral coalitions in their book on multi-party government, they still state that the “[t]he special forms of bargaining and negotiation that characterize the politics of coalition can be found after nearly every election that does not produce an unsailable ‘winner’ in the shape of a single party that controls a majority of the seats in the legislature.” Emphasis added.

2. This suggests that a cooperative game-theoretic approach where coalitions automatically form whenever they are expected to be super-additive in seats or votes (Kaminski 2001) is less appropriate for modeling electoral coalition formation than the non-cooperative approach that I employ in this book.