

In Part I we described the background to the making and breaking of governments in parliamentary democracies. In Part II we developed and elaborated a theoretical model of this process. We move on in Part III to apply our model in a systematic way to the real world of government formation. In Chapters 7, 8, and 9 we describe an extensive empirical investigation of the model in a wide range of government formation situations in postwar Western Europe. Before we do this, however, in order to get a feel for what is going on and to understand what we need to do before we can apply the model to the real world, we look here at two particular cases from our dataset in some detail – Germany in 1987, and Ireland in 1992–1993. We make no claim that these examples are typical of government formation in parliamentary democracies. We have chosen them for purely didactic purposes: Each case allows us to elaborate a number of key features of our model in a relatively simple context. A more systematic empirical analysis of the universe of such cases appears in subsequent chapters.

#### GERMANY 1987

Our model of cabinet government uses information about a number of features of the party system to determine whether there are equilibrium allocations of cabinet portfolios between parties, and to identify these if they exist. The basic pieces of information that are needed are the number of legislative seats controlled by each party and the number of legislative votes needed to pass a motion of no confidence (between them these determine the decisive structure); the policy positions of each party on each salient dimension of policy; and the cabinet portfolio with jurisdiction over this policy dimension. Given this information, our model identifies potential equilibrium portfolio allocations.

Four parties were represented in the 497-seat West German national

parliament (the Bundestag) after the 1987 election, the results of which can be found in the top panel of Table 6.1. Largest were the Christian Democrats, an alliance of the Christian Democratic Union (CDU) and the Bavarian Christian Social Union (CSU) that we treat as a single party in this analysis, and refer to henceforth as CD. Then came the Social Democrats (SPD), the Free Democrats (FDP), and the Greens (G). A total of 249 votes was needed for an absolute majority in the legislature, meaning that no party could control the Bundestag on its own.<sup>1</sup> Any government facing a vote of no confidence would need the support of a *legislative* coalition of at least two parties to be able to stay in office.<sup>2</sup> The *executive* itself might be a single-party minority cabinet, but a majority legislative coalition would be needed to ensure that this could win potential confidence votes to remain in office.

Actually, it is not necessary to know the precise seat totals won by each party in this or any other government formation situation. What is important for the making and breaking of governments is the set of combinations of parties that are able to win majority votes in the Bundestag. The set of party combinations that could win majority votes after the 1987 Bundestag election is listed in the bottom panel of Table 6.1. The essential pattern is quite simple. The CD could form a legislative majority with any one of the other three parties. The same cannot be said for the next largest party, the SPD. This could form a majority legislative coalition with the CD; otherwise it needed both of the other two parties. Indeed, in this respect, the SPD is in precisely the same position as the FDP and the Greens. We can summarize the set of majority legislative coalitions quite

<sup>1</sup>The German constructive vote of no confidence unambiguously requires any motion of no confidence in the incumbent government to specify a successor, effectively collapsing confidence and investiture procedures. The 5 percent vote threshold for representation under German electoral law denies representation to minor parties and results in there being only a small number of parties in the legislature. Elsewhere, minor parties surprisingly often prove to be pivotal in government formation, yet it can be difficult to assemble information on their positions on all key policy dimensions.

<sup>2</sup>Note that abstentions in legislative votes are treated as votes for or against a proposal, depending on the strategic context. Thus, in the German case, if there were a minority CD government in office and the Greens proposed a motion of no confidence, an absolute majority of the Bundestag would be needed to defeat the government. If the FDP committed themselves to voting against the government, then an SPD abstention on this motion would be the strategic equivalent of a vote for the government. The government remains in office as a result of the SPD abstention, when a vote against by the SPD, in the knowledge that the other parties would vote against, would have brought the government down. In the wider political game – in terms of the story told to the public, for example – an abstention may have different implications from those of a vote for the government. But in terms of the government formation game both votes amount to the same thing. In the same way, if a new government is proposed and some party abstains on the investiture vote with the effect that the proposal fails when a vote in favor would have carried it, then the abstention is in effect a vote against the proposal.

Table 6.1. Decisive structure after the Bundestag election of 1987

		Seats
<i>Individual parties</i>		
Christian Democratic Union/ Christian Social Union (CDU)		223
Social Democratic Party (SPD)		186
Free Democrats (FDP)		46
Greens (G)		42
Total		497
Majority threshold		249
<i>Winning coalitions</i>		
CD + SPD		409
CD + FDP		269
CD + G		265
SPD + FDP + G		274
CD + SPD + FDP		455
CD + SPD + G		451
CD + G + FDP		311
CD + SPD + FDP + G		497

simply, therefore. It comprises coalitions of the CD with any other party, the coalition of the three other parties, and any superset of the aforementioned coalitions formed by adding some other party – the grand coalition of all parties, for example, or of all parties bar the Greens, the SPD, or the FDP.

This set of winning coalitions is the *decisive structure* of the legislature.<sup>3</sup> The key impact of election results on the making and breaking of governments is to determine the decisive structure of the new legislature, rather than to generate the precise distribution of seats between parties.

<sup>3</sup>In the terms of the previous chapter, the CD thus dominates this decisive structure.

Thus, if the SPD had lost 20 more seats to the Greens in 1987, for example, it would have made no difference to the decisive structure of the government formation process in Germany. It would still have been the case that the CD could have formed a majority coalition with any other party, but a combination of all other parties would have been needed to defeat the CD. If on the other hand the Greens had won 20 fewer seats and the SPD 20 more, then the Greens would have been an essential member of no winning coalition (they would have been a dummy party) and they would have been in a much weaker position in a quite different decisive structure. This would have had a big strategic effect on the making and breaking of German governments.

Having identified the set of winning legislative coalitions, the next step is to identify the positions of the parties on those dimensions of policy that we assume motivate them when bargaining over government formation. As we indicated in Chapter 2, there is no unambiguously "right" way to identify the set of key policy dimensions. Analyzing this particular case, therefore, we proceed incrementally, beginning with what we take to be the most important dimensions of policy, then adding another, and another, building an account of government formation in stages.<sup>4</sup>

Few would argue with the assertion that, in almost every modern parliamentary democracy, the management of the economy is today considered to be the government's most important policy concern. Certainly, if we are forced to select only one dimension of policy with which to reflect the concerns of German parties, a left-right economic policy dimension would be an obvious choice.

The next task is to estimate the policy position, or ideal point, of each legislative party on the left-right economic dimension. There are a number of ways to do this, reviewed in Laver and Hunt (1992: 31-34). These include: content analysis of party policy documents; analysis of mass survey data (relating either to the policy positions of party supporters, or to respondents' perceptions of party ideal policies); and surveys of expert commentators on politics in the country in question. The most comprehensive set of expert estimates of party positions on a range of policy dimensions is based on a survey conducted by Laver and Hunt (1992). In this, 1,228 experts on the politics of 25 democracies were asked to place all parties in their respective countries on eight common policy dimensions, as well as any "local" dimensions that they felt appropriate. We use

<sup>4</sup>In practice, the lack of comprehensive data on party positions on every relevant policy dimension, the massive computer firepower needed to solve high-dimensional cases and the real-world correlations between party positions on different dimensions that we discuss in Chapter 11 combine to mean that we will only ever need (or be able) to analyze the allocation of the subset of "key" cabinet portfolios.

Table 6.2. Positions of German parties on two economic policy dimensions

Party	Mean position (standard error)	
	Increase taxes (1) vs. cut services (20)	Promote public ownership (1) vs. oppose pub. ownership (20)
Greens	5.2 (0.65)	7.1 (0.58)
SPD	6.5 (0.44)	8.1 (0.52)
CDU/CSU	13.5 (0.54)	13.6 (0.40)
FDP	15.7 (0.61)	17.4 (0.39)

Source: Laver and Hunt, 1992: 197

Note: Estimates are based on 19 expert responses.

estimates of party positions based on these data in most of the empirical analyses that follow. These estimates can be supplemented for most parties in a number of countries with the results of a content analysis of party and coalition policy documents, conducted by the Manifesto Research Group of the European Consortium for Political Research (Budge et al., 1987; Laver and Budge, 1992).

Positions of the German parties on the economic left-right policy dimension can be derived from both sources. Two of the specific scales used in the Laver-Hunt expert survey relate to this policy dimension. The first scale contrasts raising taxes in order to increase public services, on the left, with cutting public services in order to cut taxes, on the right. The second scale contrasts promoting maximum public ownership of business and industry, on the left, with opposing all public ownership of business and industry, on the right. The "increase services versus cut taxes" dimension was rated by country specialists to be the more salient of the two in most countries, and we take this as our yardstick of economic policy. In many cases including that of Germany, either dimension would yield the same results. Table 6.2 shows party positions on the two dimensions in Germany in 1989, the time of the expert survey, estimated on a 20-point scale that ranges from 1 on the far left to 20 on the far right.

Whichever dimension is used, it is clear that the median legislator on the economic policy dimension in Germany belongs to the CD. This judgment is confirmed by the Manifesto Research Group's content analyses of party policy documents for 1987. The CD was at the median on both of the main economic policy dimensions coded, reflecting "capitalist economics" and "state intervention" (Klingemann and Volkens, 1992:

209). It was also at the median on all but one of the left-right scales collated from the existing literature by Laver and Schofield (1990).

As we saw in the theoretical discussion in Chapter 4, and in our treatment of van Roozendaal's model in Chapter 5, when only one dimension of policy is salient, then the portfolio allocation model is very simple to implement. The ideal point of the party with the median legislator will always have an empty winset, making the median party very strong. The portfolio allocation model thus characterizes the median party as an essential member of every government if only one dimension of policy is important in government formation. If only the economic left-right policy dimension were important in West German government formation in 1987, therefore, then the CD would be a very strong party and the portfolio allocation model forecasts that it would occupy the all-important finance portfolio. In fact, the CD was in government after the 1987 election and did occupy the finance portfolio.

Many would of course consider a one-dimensional representation of politics such as this to be a gross oversimplification of the complex reality of government formation in Germany. Our model allows us to consider any number of additional policy dimensions, provided that we can both identify these and derive reliable estimates of party positions on them.

Which additional policy dimensions should we consider for Germany in 1987? Laver and Hunt set out to answer this type of question in the specific context of the government formation game by asking experts to list the key cabinet portfolios that must be filled as part of the process of forming a government, ranking these in order of importance. They derived mean rankings for the 10 most important German cabinet portfolios, shown in Table 6.3.

The two most important portfolios are foreign affairs and finance. There is no statistically significant difference in the expert rankings of these portfolios, but each is ranked significantly higher than the next portfolio, interior. Interior, in turn, has a significantly higher ranking than the next three most important portfolios – defense, labor and social affairs, and economics. These latter three are effectively ranked equally. On this basis, the next dimension of policy that we should consider in the German case is clearly foreign affairs. By implication, the foreign affairs portfolio and that of finance are the two most important cabinet positions to be filled. If we want to add a third policy dimension, it should clearly be related to social policy, over which the Ministry of the Interior has jurisdiction.

Laver and Hunt's estimates of the positions of the German parties on the foreign affairs portfolio in early 1989 (before the tearing down of the Berlin Wall) were based on attitudes toward what was then still the Soviet

Table 6.3. Rankings of German cabinet portfolios

Portfolio	Mean ranking of portfolio	Standard error
Foreign affairs	1.8	0.29
Finance	2.1	0.27
Interior	3.3	0.29
Defense	4.6	0.46
Labor and social affairs	4.7	0.38
Economics	4.9	0.42
Justice	6.3	0.35
Youth, family, women, and health	7.3	0.58
Food, agriculture, and forestry	8.8	0.29
Environment	8.8	0.84

Source: Laver and Hunt, 1992: 196

Note: Estimates are based on 19 expert responses.

Table 6.4. Positions of German parties on foreign policy dimension

Party	Mean position (standard error): Pro (1) vs. anti (20) USSR
Greens	4.0 (0.48)
SPD	4.6 (0.35)
FDP	6.6 (0.47)
CDU/CSU	9.8 (0.68)

Source: Laver and Hunt, 1992: 197

Note: Estimates are based on 19 expert responses.

Union. They estimated the various parties to have the positions on this dimension shown in Table 6.4.<sup>5</sup>

Implementing the portfolio allocation model when more than one dimension of policy is important is rather more complex. However when the number of parties is small and only two policy dimensions are impor-

<sup>5</sup>The Klingemann-Volkens manifesto analysis did not estimate party positions on a foreign policy dimension, and we can find no other estimates of German party positions on this dimension.

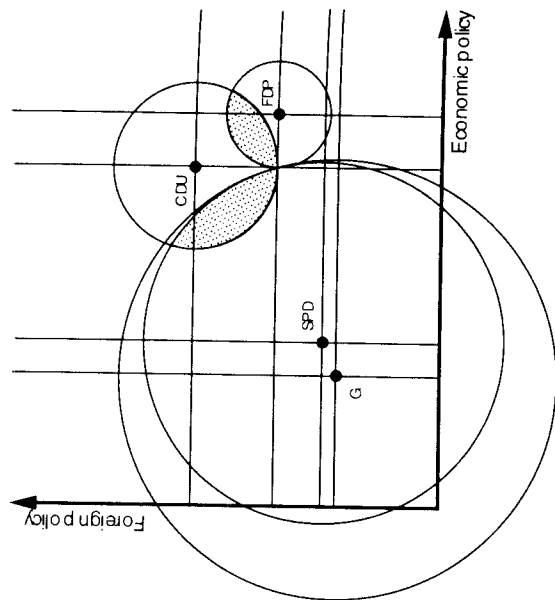


Figure 6.1. Two-dimensional German policy space: Indifference curves relating to CD-FDP cabinet

tant, each allocated to a single jurisdiction – we earlier called this a *simple* jurisdictional structure – it is still possible to draw the relevant policy space and implement the portfolio allocation model “by hand.” The policy space generated by the economic and foreign policy dimensions in Germany in 1987 is shown in Figure 6.1. The economic policy dimension, under the jurisdiction of the finance portfolio, is the horizontal axis, and the foreign policy dimension, under the jurisdiction of the foreign affairs portfolio, is the vertical axis. The ideal policies of the four legislative parties are each marked with a black dot. The 16 possible allocations of the two portfolios between the four parties are given by the intersecting lines of the lattice shown in the figure. In this figure, an indifference curve for each party is traced through the portfolio allocation giving the CD control over the finance portfolio (and allowing it to implement CD economic policy on the horizontal dimension) and the FDP the foreign affairs portfolio (allowing it to implement FDP policy on the vertical dimension).

What those indifference curves show in this particular example is *how* the various parties feel about a potential government that gives *finance* to the CD and foreign affairs to the FDP. The circle centered on the CD shows how the CD feels about this. Everything inside the indifference

curve is closer to the CD’s ideal policy position than this potential government. Thus everything inside the circle is preferred by the CD to the government in question. We note that, obviously, the CD prefers a government in which it gets both key portfolios – represented by the dot at its ideal policy position. We see that the CD also prefers a government in which it gets the foreign affairs portfolio, leaving finance to the FDP – this is the lattice point immediately to the right of the CD position. Each of the other circles represents an indifference curve with the same type of interpretation. Thus the indifference curve centered on the SPD shows which potential cabinets are preferred by the SPD to the cabinet with CD in finance and FDP in foreign affairs, and so on.

When two or more circles through the same cabinet intersect each other, we see policy outputs that *groups* of parties prefer to the cabinet in question. Thus the area inside the intersection of the CD and SPD indifference curves contains policies that *both* of these parties prefer to the CD-FDP cabinet. Note that no lattice point is inside this area – thus there is no cabinet that both CD and SPD prefer to the CD-FDP government.

We have concentrated in Figure 6.1 on the cabinet giving the CD the finance portfolio and the FDP foreign affairs because it is the dimension-by-dimension (DDM) median portfolio allocation. We know from Chapter 4 that only this allocation can have an empty winset. We can see from Figure 6.1 that the DDM allocation in Germany in 1987 does indeed have an empty winset. We do this by considering in turn each of the winning legislative coalitions, as determined by the decisive structure (listed in Table 6.1). We inspect the intersection of the indifference curves through the DDM of each of the parties involved in the winning coalition. This intersection shows us which cabinets are preferred by this winning coalition to the DDM. In this case, we have already seen that no cabinet is preferred to the DDM by the winning coalition of CD and SPD. Likewise, the intersection of the indifference curves centered on the CD and FDP shows that no cabinet is preferred by this winning coalition to the DDM. Finally, the same is true for the CD-Green winning coalition, and for the coalition of Greens, SPD, and FDP (this area is tiny and located to the southeast of the intersection of the circles).

Thus no alternative cabinet is preferred by a winning coalition to the DDM. The DDM – a cabinet giving finance to the CD and foreign affairs to the FDP – has an empty winset. If this cabinet were the status quo at the beginning of the government formation process, as it was in Germany in 1987, then our model predicts that it would remain in equilibrium. This is because any proposal to replace this status quo with an alternative, if made and not vetoed by some participant, would have been blocked by some legislative majority that preferred the CD-FDP cabinet at the multidimensional median position to the alternative in question. There is no proposal

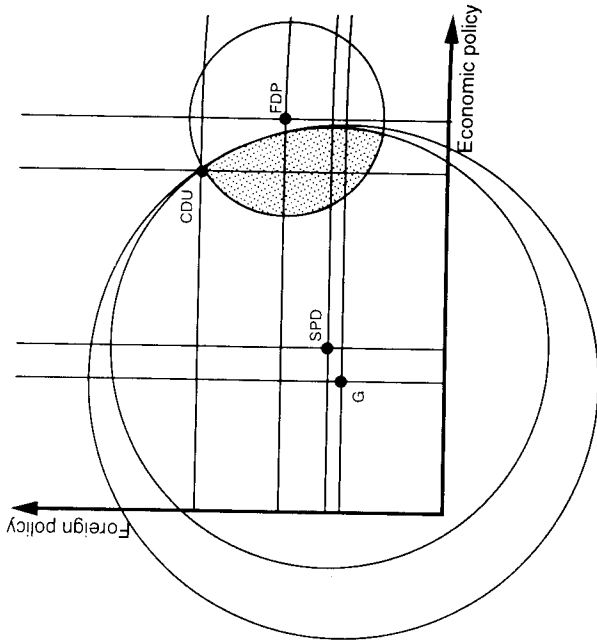


Figure 6.2. Two-dimensional German policy space: Indifference curves relating to CD ideal point

that could have been made that would not have been blocked. As a matter of fact, starting from a status quo CD-FDP cabinet a new CD-FDP cabinet did actually form in Germany after the 1987 election.

Figure 6.2 shows how the parties feel about another point in the space, the ideal point of the CD. From this we can see that the CD was a strong party after the 1987 election. In this particular case, the only decisive coalition we need to consider is the one in which all other parties coalesce against the CD. The lens-shaped shaded area under the ideal point of the CD shows the intersection of these other parties' indifference curves through the CD ideal. It shows that there are indeed other cabinets preferred by a winning coalition to the cabinet giving both portfolios to the CD, but that these all involve the participation of the CD. They are thus susceptible to a veto by the CD. This implies, if we assume only these two dimensions of policy to be important, that there were certain circumstances in which the CD would have been able to sustain themselves as a minority government. This is because the CD's three opponents were unable to agree on an alternative government, excluding the CD, that they all preferred to the CD minority government. Because the CD has

Table 6.5. Positions of German parties on decentralization of decision making

Party	Mean position (standard error): Pro (1) vs. anti (20) decentralization of decision making	
Greens	5.3	(1.18)
SPD	11.1	(0.67)
FDP	11.1	(0.62)
CDU/CSU	9.9	(0.62)

Source: Laver and Hunt, 1992: 197  
Note: Estimates are based on 19 expert responses.

an opposition divided among themselves in this way, our model implies that they could, in the right circumstances, have governed alone.

Note, however, that our model would not have predicted a CD minority government in Germany in 1987, starting the government formation process from the status quo of a CD-FDP coalition cabinet. As we have already seen, some legislative majority would have been able to block any proposal to move away from the status quo at the multidimensional median. Given the particular status quo, the CD was thus not in a position to impose a minority government comprising only itself. If, on the other hand, the status quo had been something else, for example, a coalition between SPD and the FDP, then it is possible that the CD would have been able to use its position as a strong party to impose a CD minority government.<sup>6</sup>

Table 6.3 clearly shows that, if we wish to add a third dimension of policy to our analysis, then it should relate to the jurisdiction of the Ministry of the Interior. A number of policy dimensions might fall within the jurisdiction of this portfolio. One of the most obvious to include in a federal state such as Germany, and on which information was collected by Laver and Hunt, is a "decentralization of decision making" dimension that has to do with the devolution of powers to regional and local government. Estimated party positions in Germany on this dimension are given in Table 6.5.

Obviously, it is not easy to draw the three-dimensional German policy space that we are now dealing with, or the spherical indifference contours that describe how each of the parties feels about each potential cabinet.

<sup>6</sup>In fact, the case of Germany 1987 illustrates in all respects the content of Proposition 4.2 as stated precisely in the appendix to Chapter 4.

However, WINSET, the computer program we described in Chapter 5, does the job for us. If we investigate a three-dimensional, three-jurisdiction representation of the government formation process in Germany after the 1987 election, we can see from Tables 6.2, 6.4, and 6.5 that the dimension-by-dimension median cabinet gives finance to the CD, foreign affairs to the FDP, and the Interior Ministry to the CD. This was not the status quo at the outset of the government formation process, however, since the FDP controlled the interior portfolio. Using the WINSET computer program we can see that this status quo cabinet does not have an empty winset, but that it is, however, in the winset of the strong party ideal. Thus Proposition 4.2 of our model would have predicted that the incumbent CD-FDP-FDP cabinet would remain a potential equilibrium in the new government formation situation. As a matter of fact, this is the cabinet that did actually form in Germany in 1987. WINSET also tells us that the CD remained a strong party in the three-dimensional German representation, albeit not very strong since there were nine governments, including the status quo, in the winset of the CD's ideal point. We also note that the strong party did go into the government in Germany in 1987.

Thus each of the one-, two-, and three-dimensional implementations of our model for government formation in Germany after the 1987 election generates a plausible account of what happened in practice. Since the data on which these implementations are based are derived from expert judgments, however, and since even experts are not only fallible but frequently disagree with one another, we should consider the extent to which our results are subject to measurement error. We could in principle use the standard errors reported in the tables to calculate confidence limits for the positions of the ideal points on which the winset analyses are based. We could then draw a set of lattices and a series of indifference curves for each party based on a set of party ideal point estimates within this range and investigate the myriad different winsets that this generated, but this would be an extremely cumbersome procedure.

An alternative method is to simulate the process of measurement error, and this can be done using the WINSET computer program. Rather than calculating results on a single case, based on the point estimates of party positions, we can calculate results for a large set of cases. Each case is a simulated party configuration. Each has the same party weights as those in Germany after the 1987 election. Party ideal points in each case, however, are based on the point estimates derived from the Laver-Hunt expert judgments, but vary randomly around these in the same way that we assume the measurement error to arise. Specifically, in each case, we calculate each party's position on each dimension as the mean expert judgment of that position, plus a normally distributed random error with a mean of zero and a standard deviation equal to the standard error of the

Table 6.6. Distribution of strong parties and empty-winsset DDMs, given variation in estimates of party ideal positions on economic and foreign policy dimensions

	Cases / 1,000
DDM with empty winset Finance-foreign affairs	
CD-FDP	996
FDP-FDP	4
All other points	0
DDM with non-empty winset	0
Strong party	
CD	710
FDP	216
SPD	0
Greens	0
None	74

estimate of the mean in the expert data, as reported in Tables 6.2, 6.4, and 6.5.<sup>7</sup> In other words, each case represents a set of expert judgments that we could have derived, the probability of deriving which is based on the actual variation in the expert judgments that Laver and Hunt observed when they collected their data.<sup>8</sup>

Table 6.6 reports the results of an analysis investigating the susceptibility of the two-dimensional German analysis to measurement error of this sort. It shows key features of the results of the investigation of 1,000 hypothetical party systems, with party policy positions generated as speci-

<sup>7</sup>With Laver and Hunt's finite sample of experts on German politics, the position of, for example, the CD on the economic policy dimension is calculated for each case, using the parameters reported in Table 6.2, as  $13.5 + \text{normal}(0, 0.54)$ , where normal  $(0, 0.54)$  is a number randomly selected from a distribution with a mean of 0 and a standard deviation of 0.54.

<sup>8</sup>Note that this interpretation of the standard errors of the estimated positions assumes that there is a single "true" position on each dimension, and that the variation in expert judgments represents measurement error. This is consistent with our assumption that all policy positions are common knowledge. It does, however, preclude the possibility that the variation in judgments has some substantive meaning as a parameter in the government formation process – for example, being an estimate of the fuzziness of particular policy positions.

Table 6.7. Decisive structure after the 1992 Dáil election

		Seats
<i>Individual parties</i>		
Fianna Fáil (FF)		68
Fine Gael (FG)		45
Labour (Lab)		33
Progressive Democrats (PD)		10
Democratic Left (DL)		4
Others		5
Total		165
Chair		1
Majority threshold		83
<i>Winning coalitions</i>		
FF+FG		113
FF+Lab		101
FG+Lab+PD		88
FF+FG+Lab		146
FF+FG+PD		123
FF+FG+DL		117
FF+Lab+PD		111
FF+Lab+DL		105
FG+Lab+PD+DL		92
FF+FG+Lab+PD		156
FF+FG+Lab+DL		150
FF+FG+PD+DL		127
FF+Lab+PD+DL		115
FF+FG+Lab+PD+DL		160

fied in the previous paragraph. The results are quite striking, and show the two-dimensional German example we have been discussing to be quite robust to the level of measurement error we are likely to have encountered in the expert data. As we have already seen, given that the CD-FDP cabinet was the status quo, the model (accurately) predicts the continuation of the status quo in 1987. Of the 1,000 simulated cases we

generated, 996 were such that the CD-FDP cabinet was at the DDM and had an empty winset; in all of these cases the correct forecast would have been made (in only 4 of the 1,000 cases would the model's forecast have been incorrect). The analysis reported in Table 6.6 thus strongly suggests that this prediction is not sensitive to potential measurement error in estimates of the party ideal points.

Table 6.6 also shows that the identification of the strong party in the 1,000 hypothetical "German" cases is, however, much more susceptible to measurement error. The reasons for this can be seen clearly from Figure 6.1. The CD and FDP are almost equidistant from both SPD and Greens. Whichever of the two is estimated to be the closer is likely to be the strong party,<sup>9</sup> and small perturbations in their ideal points are likely to make one or the other strong. However, given the status quo of a CD-FDP coalition, the prediction that the strong party, if one exists, will be in government does not depend on whether it is CD or FDP that is strong. What is particularly striking about Table 6.6 is that neither the SPD nor the Greens is identified as being strong in any of the 1,000 simulated cases, and neither, of course, was in government.

Overall, therefore, we can be quite confident that our analysis of the German two-dimensional case is not sensitive to likely levels of measurement error. Our model thus does seem to provide both a plausible and a robust account of government formation in Germany in 1987.

## IRELAND 1992 – 1993

Party strengths in the 166-seat Irish legislature (the Dáil) after the general election of November 1992 are shown in the top panel of Table 6.7. Five parties were represented – the "others" listed were all independents whom we may regard for the sake of simplicity (and realistically enough in this case) as effective votes against any government.<sup>10</sup> With five parties in Ireland in 1992 instead of four in Germany in 1987, there are quite a

<sup>9</sup>This is because the location of the SPD and Green indifference curves are such that, if the CDs are closer to the SPD and Greens than is the FDP, then the CD ideal will be in the winset of the FDP ideal, and the FDP therefore cannot be strong. If the FDP is closer than the CD to the SPD and the Greens, then the converse holds.

<sup>10</sup>One "independent" was in fact a member of the Green Party. A further complication is introduced as a result of the role of the chair. The outgoing chair is a deputy who is reelected unopposed to the subsequent Dáil. The election of a new chair is the first business of the new Dáil and, given a close election result, can if contested have a considerable bearing on government formation. The outgoing chair in 1992 was an independent who it was presumed would continue, thus the effective size of the Dáil is taken as 165 and the threshold is taken as 83. The following analysis would not change if the choice of chair were treated as a part of the government formation process, the effective size of the Dáil were taken as 166, and the threshold were raised to 84 seats.



Table 6.8. Positions of Irish parties on two key policy dimensions

Party	Mean position (standard error)	
	Increase taxes (1) vs. cut services (20)	Pro (1) vs. Anti (20) British presence in N. Ireland
Fianna Fáil	12.05 (0.37)	16.27 (0.31)
Fine Gael	14.23 (0.42)	10.60 (0.59)
Labour	7.45 (0.39)	12.07 (0.54)
Prog. Dems	16.97 (0.42)	10.07 (0.61)
Dem. Left	4.77 (0.74)	8.66 (0.86)

Source: Laver, 1994.

few more possible winning coalitions – 14 as opposed to 8. This more complex decisive structure is listed in the bottom panel of Table 6.7.

As an aside it is worth noting that the decisive structure is incredibly finely balanced in this particular case. Indeed a single closely contested seat, in the Dublin South Central constituency, determined the entire decisive structure. Originally the seat was awarded to the Democratic Left (DL), which would have given the DL 5 seats and Fianna Fáil (FF) 67. The result of this would have been to have given an additional anti-Fianna Fáil coalition (Fine Gael-Labour-DL) a majority. A recount was demanded, and in this and subsequent recounts over a period of a week after the original result was declared, the seat changed hands several times between Fianna Fáil and DL, with the decisive structure flipping at the same time. After ever closer scrutiny of spoilt ballots, a decisive number of which were write-in votes for Dustin, a puppet turkey on a popular children's television show, the seat was decided in the end by five votes, and awarded to Fianna Fáil. Only after this did serious government formation negotiations commence. The delicately poised decisive structure that constrained these was quite possibly shaped by a handful of voters (and a puppet turkey!) in a single constituency.

Turning now to party policy positions, the Laver-Hunt survey was repeated on a panel of 32 Irish politics experts during the 1992 election campaign.<sup>11</sup> Estimated party policy positions on the key policy dimensions, for 1992, are given in Table 6.8. Figures 6.3 and 6.4 give two dimensional plots of these positions. Using these data in the same way as

<sup>11</sup>A detailed report of this survey can be found in Laver (1994).

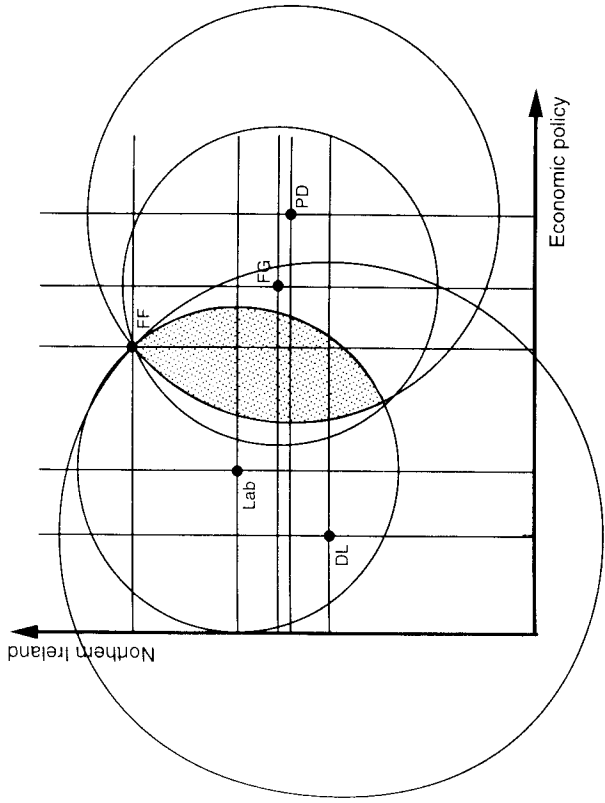


Figure 6.3. Two-dimensional Irish policy space: Indifference curves relating to FF ideal point

we did for Germany in 1987, the most appropriate two-dimensional representation of party policy positions in Ireland makes economic policy the most important dimension and Northern Ireland policy the next most important dimension. Overwhelmingly the most important economic policy portfolio was the Department of Finance, ranked first among cabinet portfolios by each of the 32 expert respondents. Northern Ireland policy was the responsibility of the very highly ranked Department of Foreign Affairs<sup>12</sup> (which deals with Britain on the matter and is largely responsible for the operation of the Anglo-Irish Agreement).

The outgoing government in 1992 was a Fianna Fáil caretaker administration, left in place after the Progressive Democrats had resigned from a coalition with Fianna Fáil following a bitter personal dispute between their respective leaders, Desmond O'Malley and Albert Reynolds. In both the caretaker government and the coalition that preceded it, Fianna Fáil controlled the key portfolios of finance and foreign affairs.

<sup>12</sup>The second-ranked portfolio in Ireland, according to the 1992 resurvey, was the Department of Industry, another important economic policy portfolio. After this came the Departments of the Environment (the main responsibilities of which concern local services) and of Foreign Affairs.

affairs to Labour. As Figure 6.4 shows, this dimension-by-dimension median cabinet has an empty winset.

Three of the cabinets in the winset of the Fianna Fáil ideal are ruled out, according to our model, by Proposition 4.3. This shows that, even if some cabinet is in the winset of the strong party ideal, and even if the strong party cannot win standoffs, a cabinet cannot be an equilibrium if the strong party prefers the dimension-by-dimension median to it. In this case the strong party, Fianna Fáil, prefers the dimension-by-dimension median cabinet – a Fianna Fáil–Labour coalition – to any other cabinet in the winset of its ideal point (i.e., to coalitions between Fianna Fáil and Fine Gael, the Progressive Democrats or Democratic Left). According to our model, this reduces the coalitional possibilities to two – a Fianna Fáil minority government and the dimension-by-dimension median cabinet, a Fianna Fáil–Labour coalition. If Fianna Fáil was forecast to win standoffs, the former should form; if not, the latter.

In the event, Fianna Fáil was in a much enfeebled position after its disastrous electoral performance in November 1992. Its leader, Albert Reynolds, faced a massive threat to his position on the grounds that he was alleged to have precipitated an unwanted election, which he then proceeded to lose. Immediately after the election, Fianna Fáil more or less withdrew from the government formation process, leaving this to a much vaunted “Rainbow Coalition” of Fine Gael, Labour, and the PD. This was an idea promoted by the Fine Gael leader during the election, and one that obsessed much of the news media after the results were declared.

Figure 6.3 in effect shows the area of the two-dimensional Irish policy space preferred by the Rainbow Coalition to the Fianna Fáil status quo. From this, we can very easily see something that took the news media, popular commentators, and indeed many politicians some time to realize – that every majority-preferred alternative to the status quo involved the participation of Fianna Fáil in some coalition or another. In our terms, since Fianna Fáil was a strong party, the opposition simply could not agree on a coalition that excluded it. However, the weakness of the Fianna Fáil leader meant that the party could not win standoffs and thus could not go it alone in a minority government.

In order to face down the opposition parties, credibly to refuse ever to enter any coalition, and to be allowed eventually to form a government on its own, Fianna Fáil needed the other parties to believe that, if it came to the crunch, FF would go back to the Dáil again and again, proposing its leader as prime minister of a minority cabinet and vetoing any other cabinet involving its participation. If the opposition parties had refused to relent and vote for the Fianna Fáil leader, then this would have precipitated a political crisis that would quickly have fed through into the finan-

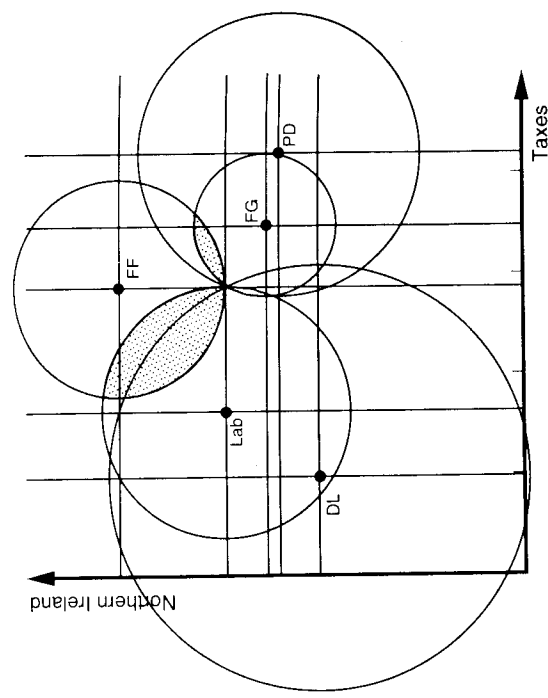


Figure 6.4. Two-dimensional Irish policy space: Indifference curves relating to FF-Labour coalition

The policy status quo of the outgoing government can thus be taken to be the ideal point of Fianna Fáil on these two important policy dimensions. This point is shown in Figure 6.3, together with the indifference curves showing how each of the other parties felt about the Fianna Fáil status quo.

The intersection of the Fine Gael (FG), Labour, and PD indifference curves shows that area of the policy space preferred by a legislative majority to the Fianna Fáil minority caretaker government. What is striking is that, despite the fact that Fianna Fáil had done very badly in the 1992 election, sinking to its lowest level for over 50 years, opposition parties controlling a legislative majority could agree on no alternative government that they all preferred to a Fianna Fáil minority government, and which excluded Fianna Fáil. Fianna Fáil was a participant in every cabinet in the winset of its ideal point, and hence was a strong party. According to our model, if Fianna Fáil could win standoffs with the other parties, then it could form an equilibrium minority administration on its own and take all portfolios. If Fianna Fáil was known not to be able to win standoffs with the other parties, then our model predicts that the equilibrium would be some cabinet in the winset of the FF ideal point. There are four such cabinets, including the dimension-by-dimension median cabinet, a coalition that gives finance to Fianna Fáil and foreign

cial system.<sup>13</sup> This would have been a severe test of political nerve for all concerned. Sooner or later, one side or the other would have had to give way. What the Irish opposition parties knew was that, if this scenario unfolded, it would have resulted in the removal of Albert Reynolds as FF leader, given his already weakened position within the party. Knowing this, and knowing that the opposition parties knew it, Reynolds was in no position to hang tough and face down the opposition in coalition negotiations, as he would have needed to do in order to establish a minority Fianna Fáil government. In order to stave off a leadership "heave" against him, he needed a Dáil majority sooner rather than later. Once installed as prime minister of a coalition cabinet, his position as party leader would be far more secure. The effect of all this was that it was common knowledge that the Fianna Fáil leader could not win standoffs. He thus had no alternative, according to our model, but to go into coalition with Labour and cede them the foreign affairs portfolio. As we have seen from Figure 6.4, this cabinet has an empty winset. In the event, it is the cabinet that formed in early 1993.<sup>14</sup>

All of this is a far cry from the traditional position of Fianna Fáil in the Irish party system. For over 50 years until 1989, the party had promoted single-party Fianna Fáil administrations, with or without a Dáil majority, as the alternative to "weak and unstable" coalition government, and refused to share power with anyone else. This is the classic stance of the strong party that can win standoffs. The credibility of this bargaining position had been enhanced when, on several occasions, Fianna Fáil had chosen to go into opposition rather than a coalition cabinet — an outcome that we can interpret as a periodic testing of the party's resolve by its opponents. Fianna Fáil's "no coalition" position, developed over this 50-year period and never deviated from, had assumed the status of what party stalwarts regarded as a core value.

The core value was shattered in 1989, when Reynolds' predecessor, Fianna Fáil leader Charles Haughey, led the party into coalition with the

<sup>13</sup>Ireland's membership of what at that time was the narrow-band European Exchange Rate Mechanism (ERM) meant that if political uncertainty led to uncertainty about the stability of the Irish currency in international markets, the only way for the government to maintain the exchange rate in the narrow band, given finite foreign currency reserves, was to raise domestic interest rates. As subsequent events in a number of open European economies showed in these circumstances, domestic interest rates can be forced so high (as high as 100 percent) that mass foreclosures and serious economic collapse are threatened. Such pressures led eventually to the effective abandonment of the ERM.

<sup>14</sup>If the recounts in Dublin South Central had ultimately awarded the disputed seat to the Democratic Left, changing the decisive structure, the equilibrium prediction of our model, a Fianna Fáil-Labour coalition with FF in finance and Labour in foreign affairs, would not have changed. However the stability of this equilibrium, conceived in a way that we elaborate in Chapter 10, would have been significantly lower.

progressive Democrats. This was a traumatic event for the party faithful, and was once more in large measure a product of a major threat to the position of Haughey as party leader, reducing his ability to win standoffs (Laver and Arkins, 1990). It is also worth noting that both FF leaders were relatively old at the time when they "blinked" in the government formation negotiations, were approaching the end of their respective political careers, and almost certainly did not expect to lead their party beyond the full term of the coalition administration that they were forming. Having gone into coalition for whatever reason in 1989, however, Fianna Fáil's "no coalition" position, though halfheartedly reiterated in 1992, was impossible to retrieve once lost. Nobody with his head on straight in 1992 believed that Fianna Fáil would irrevocably refuse to share power with another party.

This is not of course to say that Fianna Fáil could not once more become a strong party able to win standoffs. It remains, after all, a strong party. This gives a tough leader whose threats are believed immense bargaining leverage. If a new Fianna Fáil leader stormed into power on a trenchant anticoalition platform, brought down the current coalition, called an election promising single-party government, and then refused implacably to talk turkey, it is quite possible, given Fianna Fáil's size and central location in the Irish legislative policy space, that the other parties would reassess their evaluation of FF's ability to win standoffs. This would reopen the credible possibility of a new series of Fianna Fáil minority governments. What the Irish example shows quite clearly is that, in order to consume the benefits of being a strong party, it is not enough merely to *be* strong. You also have to *act* strong.

## CONCLUSION

We have not set out in this chapter to measure our model systematically against the real political world — we attempt this in Chapters 7, 8, and 9. Rather, after several chapters of rather closely argued theory, we have attempted to convey more informally the overall look and feel of our approach by going in some detail into a couple of particular cases. These were chosen not because they were representative in any precise sense, but because they allowed us to elaborate, in a real political context, several different features of our model.

Obviously, the representations of German and Irish politics that we have developed here have been selected from a range of plausible possibilities, each with a different set of key policy dimensions and a different way of measuring these. They are in no sense definitive analyses of the government formation situations concerned. What is quite clear, however, is that government formation in the two examples we discuss in this chapter

can be analyzed quite plausibly using the technology provided by our model – this was our main objective. Alternative ways of describing the party system concerned could be discussed in the same way. It is worth noting, however, that we have often discovered when playing with examples ourselves that using different representations and operationalization of a particular case may make little difference to our model's identification of the basic strategic realities of a particular government formation context.

In the German and Irish cases we have just discussed, these realities identify a particular centrally located coalition cabinet at the dimension-by-dimension median position. In each case, this cabinet is such that there is no alternative preferred by a legislative majority so that, if it forms, it will be in equilibrium. (In each case it did actually form and did remain in place.)

In both the German and Irish cases there is also one party that is in a stronger position than the others, by virtue of the fact that the only cabinets that are majority-preferred to one in which it gets all portfolios are those in which the “strong” party itself participates. In each case, there are indeed majority-preferred alternatives to a strong-party minority cabinet, so that the ultimate government equilibrium depends on forecasts about the willingness and ability of the strong party to win strategic standoffs with others. In the German case the CDs appear never to have attempted to impose a minority cabinet. In the Irish case, Fianna Fáil has quite often formed minority governments, and clearly would like to do so again, but leadership problems meant that it did not in 1992–1993 have the ability to face down its opponents.

Overall, and the reader will of course be a better judge of this than we are, it does seem that our model can be used in these cases to uncover interesting and nonobvious strategic features of the government formation process in a parliamentary democracy. This gives a feel for the way our model works and provides a qualitative context for the more intense quantitative evaluations that follow.

## Theoretical implications, data, and operationalization

The preceding chapter gave a glimpse of our model at work. The main purpose of that chapter, however, was to illustrate the model rather than to explore its empirical implications in a systematic way. Here we set off on a more comprehensive exploration with the ultimate objective of turning the model loose, so to speak, on the real world of government formation in particular countries. We do not do this because we have ambitions to take over the turf of the country specialists – we have no intention of trying to reproduce the qualitative analyses at which they excel. Rather we hope that an operational version of our model will provide a technology that allows us to be more systematic in how we go about specific aspects of particular country analyses. In this chapter, we begin the process of applying our model systematically to the formation of actual governments. After first presenting a series of theoretical implications of our model for government formation in the real world, we then turn to matters of operationalizing the model and using it to engage in comparative empirical analysis.

### THEORETICAL IMPLICATIONS

The most fundamental principle of our entire approach states that, when the government formation process is triggered for some reason, either the status quo government remains in power or it is replaced by some alternative that is preferred to this by a parliamentary majority. We state this “ground zero” implication as:

*Implication 0:* The status quo cabinet at the beginning of the government formation process either remains the cabinet in place at the end of the process or is replaced by some alternative in its winset. (Formally, if the status quo at time  $t - 1$  is  $SQ_{t-1}$  and at time  $t$  is  $SQ_t$ , then:  $SQ_t \in \{SQ_{t-1}\} \cup W(SQ_{t-1})$ .)

Proposition 4.1 identifies the dimension-by-dimension median (DDM) cabinet as an equilibrium if it has an empty winset.<sup>1</sup> This allows us to make the following forecast:

*Implication 1:* If the status quo cabinet at time  $t-1$  is at the dimension-by-dimension median, and this has an empty winset at time  $t$ , then this cabinet remains in place.  
(Formally if, at time  $t$ ,  $W(SQ_{t-1}) = \emptyset$ , then  $SQ_t = SQ_{t-1}$ .)

That is to say, a sitting government with an empty winset cannot be displaced, since there is no alternative government on which any majority could agree. Such a government remains in place. However, because an empty-winsset DDM cabinet need not be a *unique* equilibrium outcome of the government formation process, the cabinet need not become the government if it is not already the government at the start of the process.

When the DDM cabinet is some party's ideal point and has an empty winset, then the party in question is very strong. Implication 1, of course, holds in this instance. But we can say more:

*Implication 2:* If a party is very strong, then it is assigned all portfolios in the government formation process.  
(Formally, if  $W(s^*) = \emptyset$ , then  $SQ_t = s^*$ .)

In this special instance of a party ideal point at the DDM position with an empty winset, Proposition 4.2 identifies this very strong party as the equilibrium outcome of the government formation process regardless of the government in place at the start of the process.<sup>2</sup>

Proposition 4.2 also has something to say about strong parties in general, whether they are merely strong or very strong:

*Implication 3:* If a party is strong, then it participates in the cabinet that is the outcome of the government formation process.  
(Formally, if  $S$  participates in every element of  $W(s^*)$ , then  $S$  participates in  $SQ_t$ .)

In other words, our model of the making and breaking of governments implies that a strong party cannot be denied a place in the cabinet. It either controls the entire cabinet, obtaining all portfolios, or is awarded some subset of portfolios. Empirically, this has several more detailed corollaries that may be tested separately. Each of these implications elaborates the point that our model implies that we should see portfolios

<sup>1</sup>Recall that the *only* cabinet that may have an empty winset is the DDM, though it need not. Also recall that even if the DDM does have an empty winset, it need not be a *unique* equilibrium outcome of the government formation process as we model this.  
<sup>2</sup>Proposition 4.2 identifies the equilibrium of the government formation as an element in  $\{s^*\} \cup W(s^*)$ , and the latter set is empty in this case.

assigned either to the strong party or to one of the parties participating in one of the governments in the winset of the strong-party ideal point.

*Implication 3A:* If there is a strong party and every government in the winset of its ideal point assigns a specific portfolio to that party, then the outcome of the government formation process will be a cabinet in which the strong party controls that portfolio.  
(Formally: If party  $S$  is strong and every element of  $W(s^*)$  assigns  $S$  a particular portfolio, then  $S$  receives that portfolio in  $SQ_t$ .)

*Implication 3B:* If there is a strong party, then the outcome of the government formation process will be a cabinet assigning each of the portfolios to the strong party or to one of its partners as identified in the winset of the strong party ideal.

(Formally: If party  $S$  is strong, then each portfolio in  $SQ_t$  is assigned to one of the parties identified in  $\{s^*\} \cup W(s^*)$ .)

We have now derived directly and explicitly from our model a series of statements about government formation in the real world. This allows us to apply our model systematically to actual instances of government formation and hence to evaluate whether it consistently provides us with some insight into the making and breaking of real governments. In order to do this, of course, we have to collect systematic information on government formation in a range of parliamentary democracies.

## DATA AND OPERATIONALIZATIONS

In order to examine empirically the implications listed here, we collected information for every European parliamentary democracy since the end of World War II whose government formation process approximates our model. We exclude every legislature in which a single party controlled a majority of seats, since our theory would be trivially confirmed in every instance of this. We also excluded several countries that, for various reasons, did not seem appropriate to include.<sup>3</sup> This leaves us with a dataset covering the countries and elections listed in Table 7.1. The interval covered by the study period in each country is given in Table 7.2.

<sup>3</sup>France, Greece, and Switzerland were deleted because their respective government formation processes are not captured by our model, and their institutional arrangements depart in various ways from conventional parliamentary democracies. Portugal and Spain were deleted because of the difficulty of getting reliable estimates of party positions in their relatively new party systems. Finally, because virtually all elections manufactured a single-party majority government, Malta, Norway prior to 1961, and the United Kingdom were deleted. In some cases – for example, Ireland in 1954 and 1961 – the number of independent MPs for which data on issue positions were unavailable was a sufficient cause to exclude the case.

Table 7.1. Data set for empirical analysis

Country	Election
Austria	1949, 1953, 1956, 1959, 1970, 1983, 1986 <sup>a</sup>
Belgium	1946, 1949, 1954, 1958, 1961, 1965, 1968, 1971, 1974, 1977, 1978, 1981, 1985, 1987 <sup>a</sup>
Denmark	1945, 1947, 1950, 1953a, 1953b, 1957, 1960, 1964, 1966, 1968, 1971, 1973, 1975, 1977, 1979, 1981, 1984, 1987, 1988
Finland	1945, 1948, 1951, 1954, 1958, 1962, 1966, 1970, 1972, 1975, 1979, 1983, 1987 <sup>a</sup>
Germany	1961, 1965, 1969, 1972, 1976, 1980, 1983, 1987 <sup>a</sup>
Iceland	1946, 1949, 1953, 1956, 1959a, 1959b, 1963, 1967, 1971, 1974, 1978, 1979, 1983, 1987 <sup>a</sup>
Ireland	1965, 1973, 1981, 1982a, 1982b, 1987, 1989 <sup>a</sup>
Italy	1953, 1958, 1963, 1968, 1972, 1976, 1979, 1983, 1987 <sup>a</sup>
Luxembourg	1945, 1948, 1951, 1954, 1959, 1964, 1968, 1974, 1979, 1984, 1989
Netherlands	1977, 1981, 1982, 1986 <sup>a</sup>
Norway	1961, 1965, 1969, 1973, 1977, 1981, 1985, 1989
Sweden	1948, 1952, 1956, 1958, 1960, 1964, 1970, 1973, 1976, 1979, 1982, 1985, 1988 <sup>a</sup>

<sup>a</sup> Although there was another election before the end of the study period on January 1, 1993, the government that subsequently formed had not ended by the end of the study period.

For each of the government formation situations we investigate, we needed data on a number of items. First, we needed data on the legislative party system after each election in each country – the identity of parties with seats in parliament, the number of seats won by each party, and the number of seats required to pass an investiture or no-confidence motion.<sup>4</sup>

<sup>4</sup>Data on this are taken from Mackie and Rose (1991), supplemented by annual reports on election results by Mackie in the *European Journal of Political Research* and, after 1991, by the annual data issues of this journal.

Table 7.2. Length of study period

Country	Beginning	End
Austria (Not 1963-70)	7/11/49	17/12/90
Belgium (Not 1950-54)	11/3/46	7/3/92
Denmark	8/11/45	17/12/89
Finland	17/4/45	26/4/91
Germany	14/11/61	18/1/91
Iceland	4/2/47	30/4/91
Ireland (Not 1969-73, 1977-81)	1/4/65	5/2/92
Italy	17/7/53	4/7/92
Luxembourg	20/11/45	14/7/89
Netherlands	19/12/77	1/11/89
Norway	11/9/61	2/11/90
Sweden	28/10/48	3/10/91

Second, we needed data on which party held each government portfolio, both at the beginning and the end of each government formation process.<sup>5</sup>

Third, we needed data on party positions on salient issue dimensions. In order to describe how we have proceeded on this matter, it is necessary to identify a number of operational decisions that have had to be made. Most European cabinets comprise at least a dozen and sometimes as many as two dozen ministerial positions. This number does not exceed the capacity of our model, which can in principle handle any number of portfolios, but it does exceed our practical ability to collect and process data on party positions.<sup>6</sup>

More important than the practical problems associated with doing a complete analysis of the allocation of the full range of portfolios in any particular cabinet, however, is the fact that there are very sound theoretical reasons for not doing this. As we argue in Chapter 11, when party

<sup>5</sup>Data on this are taken from Woldendorp, Keman, and Budge (1993).

<sup>6</sup>The computing horsepower needed by WINSET to investigate completely a 10-party system with 15 cabinet portfolios involves comparing every cabinet on a lattice of 10<sup>15</sup> points – that's 1,000,000,000,000,000 points – to every other. Even in these stirring times, this is something which exceeds the capacity of any supercomputer that might be put at our disposal. Printing the ensuing report would entail the destruction of an entire forest so that, even if the computer horsepower were available, only an environmental terrorist would conduct such an investigation.

positions on a number of policy dimensions are highly correlated to each other, one consequence of this is to reduce the effective dimensionality of the space in which the government formation process takes place. The effect of this is that a more straightforward and intuitive, yet just as valid, account of government formation can be conducted by concentrating on a relatively small number of the most important portfolios. Thus, for both practical and theoretical reasons, it is neither possible nor desirable to consider the allocation of every single cabinet portfolio when analyzing the formation of a particular government.

In the analyses that follow, therefore, we have confined ourselves to the allocation of *key* portfolios, those that clearly deal with highly salient policies. For each of these key portfolios (we will describe how we determine which portfolios are “key”), we assume that the jurisdiction for which a minister has responsibility can be described by a single policy dimension.<sup>7</sup> Thus we need to know three different things: Which portfolios are key in each country? What dimension of policy best describes the jurisdiction of each key portfolio? Where does each party stand on each of these policy dimensions? We use data from the expert survey administered in 1989 by Laver and Hunt (1992).<sup>8</sup>

Key portfolios?

In order to define key portfolios, we draw on the item in the Laver-Hunt questionnaire that asked respondents to rank-order cabinet positions in “their” country in terms of their importance in the government formation process. For each of the countries in Table 7.1 we have taken the mean ranking of the experts for that country as a measure of portfolio importance. Because there is some disagreement among experts on this matter, we also take the variance around this mean into account. For each country we are able to rank-order the top several ministries. Sometimes there is a clear-cut (statistically significant) difference between rankings of the first, second, and third most important portfolios. At other times, there is insufficient statistical difference to discriminate whether one is first and the other second, or the reverse. In any event, given the computational and data limitations alluded to, we operationalize key portfolios to mean the top two portfolios when there is a statistically significant difference between the mean expert rankings of the second- and third-ranked portfolios. If finance is one of these, as it always is in the countries of interest, then the next ranked ministry we consider is the next highest noncor-

<sup>7</sup>In Part II of this book, we referred to these as *simple jurisdictions*.

<sup>8</sup>For all of the world's parliamentary democracies, Laver and Hunt sent a postal questionnaire to a collection of country specialist experts. For countries listed in Table 7.1, there were from 5 to 36 respondents per country, with an average of 14.

Table 7.3. Policy jurisdictions of key cabinet portfolios

Country	1st portfolio	2nd portfolio	3rd portfolio
Austria	Finance	Interior	Foreign affairs
Belgium	Finance	Justice	—
Denmark	Finance	Foreign affairs	—
Finland	Finance	Foreign affairs	—
Germany	Finance	Foreign affairs	Interior
Iceland	Finance	Foreign affairs	—
Ireland	Finance	Foreign affairs	Agriculture
Italy	Finance	Foreign affairs	Interior
Luxembourg	Finance	Foreign affairs	—
Netherlands	Finance	Foreign affairs	Home affairs
Norway	Finance	Foreign affairs	—
Sweden	Finance	Foreign affairs	—

monic portfolio. If, on the other hand, there is no statistical difference in the mean rankings of the second and third portfolios, then we operationalize key portfolios as the top three portfolios. Using this algorithm to identify key portfolios, the top portfolios were always finance, foreign affairs, and the most important internal affairs ministry, typically the Department of Justice or Interior.

The data to allow us to identify key portfolios are given in appendix B of Laver and Hunt (1992). Table 7.3 lists the key portfolios for each country in our study. As can be seen, finance is always top rated; foreign affairs is next in every country but Austria and Belgium, where domestic ministries are ranked higher.

We are acutely aware of the danger, when theorists test their own models empirically, that individual operational decisions may be made that favorably bias the tests. Accordingly, we have taken care to apply the algorithm given here mechanically and to avoid ad hoc adjustments. Readers with a detailed local knowledge of a particular country may feel an alternative operationalization is more appropriate. We felt, however, that comparative evaluation of our approach across a range of different countries was best served by adopting an arm's length approach to operationalization.

Another important feature of our operational definition of key portfolios is worthy of comment at this stage. While most readers will find the prominence given to financial matters very plausible, some may be surprised by the prominence that our definition gives to foreign affairs.

Taking party competition as a whole, and electoral competition in particular, foreign policy issues are often not the most salient. Remember, however, that we are dealing with the formation of real working governments. If we consider the practical policy decisions that must be taken, and cannot be avoided, by any government, then matters of foreign relations are clearly prominent. This, we believe, is what led country specialists in the Laver-Hunt expert survey to place the foreign affairs portfolio so high in their rankings. In effect, they are telling us, in country after country, that for *executive* politics, foreign affairs is a key policy dimension.

### Policy jurisdictions?

The next empirical matter is to identify the policy dimensions falling under the jurisdictions of key portfolios in each country. Clearly any ministerial jurisdiction is in reality multidimensional. There is absolutely no problem for either our model or our computer program in analyzing multidimensional policy jurisdictions if reliable data are available on these and sensible interpretations can be made of them. Nonetheless, in order to keep our preliminary operationalization as straightforward as we can, we have restricted our description of cabinet policy jurisdictions to a single dimension in each case. For the finance portfolio we chose the question asked for the Laver-Hunt expert respondents on the trade-off between "raising taxes to increase public services" and "cutting public services to reduce taxes." For the foreign affairs portfolio, our operational definition consisted, except in the case of Ireland, of responses to the question of whether to "promote or oppose the development of friendly relations with the Soviet Union."<sup>9</sup> In the Irish case, the most salient foreign policy issue concerned attitudes toward the British presence in Northern Ireland, responsibility for which lies within the jurisdiction of the Department of Foreign Affairs. For the countries with a noneconomic domestic portfolio listed in Table 7.2, the question varied according to the ministry and country in question.<sup>10</sup>

<sup>9</sup>The survey was conducted in 1989, before the Berlin Wall came down and before the Soviet Union disintegrated. The question is certainly meaningful for the entire cold war period, essentially the period of our study.

<sup>10</sup>For Austria (interior), Italy (interior), and the Netherlands (home affairs), the issue defining this domestic noneconomic portfolio was support of or opposition to "permissive policies on matters such as abortion and homosexual law." For Belgium (justice) and Germany (interior), both federal countries, the question defining this ministry's jurisdiction involved promoting or opposing "decentralization of decision making." Finally, for Ireland (agriculture), the defining question was whether to "promote the interests of urban and industrial voters above all others or promote the interests of rural and agricultural voters above all others."

### Party policy positions?

The next task is to locate the ideal points of the political parties on the dimensions in question. Although any other data source that gave party positions on a range of different policy dimensions characterizing the jurisdiction of key cabinet portfolios would have done equally well, no alternative to the Laver-Hunt survey is, to our knowledge, available for each policy dimension we use for every one of the range of countries in our analysis. Expert respondents were asked to place the political parties of their respective countries on each of the dimensions describing the jurisdictions of the key portfolios of Table 7.2. For each party we take the mean of these country-specific responses as the party's position on issues coming under the jurisdiction of the relevant portfolio.<sup>11</sup>

These data permit us to construct the lattice of governments that structures our theoretical model of government formation. It is important to bear the limitations of our data on party policy positions very firmly in mind, however, and, since one of us was responsible for collecting them, we are allowed to be quite brutal on this matter. Expert judgments are no more than surrogates for real data on party positions on key issues. At worst, they may be no better than aggregated professional folk wisdom, unsuitable for testing theories in political science because the political scientists who generated them are aware of the general thrust of the theories to which the data are to be applied. Far more valid measures would be based on elite surveys of party politicians and activists, or on the content analysis of policy documents, to name but two obvious possibilities.

At the current state of the discipline, however, theoretical models of party politics in multidimensional issue spaces have outstripped systematic comparative empirical accounts of real party positions on real issue dimensions other than the standard and very general "left-right" dimension. Thus, while a range of alternative data sources can be used as the basis for an empirical elaboration of unidimensional models of various aspects of party politics, very few sources are available for elaborating multidimensional models. To the best of our knowledge, as we have argued, none provides information on as many countries, as many parties, and as many policy dimensions as the Laver-Hunt study. The very real danger of limiting the analysis to a very few countries on which "harder" data on multidimensional policy positions are available is that results become highly susceptible to case selection bias, avoided by using

<sup>11</sup>In subsequent analysis we will also make use of the disagreement about party locations contained in these data – the variance in positions attributed by expert respondents.



a more comprehensive dataset.<sup>12</sup> For this reason, we make no apology for basing our initial empirical elaboration on expert data, although we must emphasize forcefully that our model can be elaborated with any systematic multidimensional data on party positions, and does not in any way depend upon the validity of the expert data methodology.<sup>13</sup>

In principle we might have extended the time series backward to the beginning of parliamentary democracy in each of the countries concerned. However, it is quite apparent that our expert opinion data on portfolio importance and party locations cannot be applied across any long expanse of time as if no change at all had taken place.<sup>14</sup> Indeed we believe we are pushing the estimates generated by these opinions, collected in 1989 about country-specific party politics in the late 1980s, to their very limits in taking them back to the mid-1940s.<sup>15</sup> In some cases such change has been so self-evident – with the emergence of new parties and the splitting and fusing of old ones – that our data clearly do not apply and we have excluded all preceding elections.<sup>16</sup>

In our theoretical development of Chapters 4 and 5 we implicitly treated all jurisdictions as being equally salient to each political party. This was done by employing Euclidean distance from a party ideal policy position as an inverse measure of preference – implying that a party's preference for a point is a decreasing function of its distance from that party's ideal. All of our theoretical results hold, however, if we relax this assumption in order to allow for the possibility that different policy dimensions (and hence jurisdictions) have different salience for different parties. A conservative party, for example, may care most about policy dimensions under the jurisdiction of the finance ministry, whereas a social

<sup>12</sup>The empirical elaboration of government formation theories may be particularly susceptible to case-selection bias, since theories do perform much better in some countries than in others. (See Laver and Schofield, 1990, for numerous examples of this phenomenon.) The original empirical elaboration of Axelrod's minimal winning theory, for example, used data from Italy, which he happened to have available (Axelrod, 1970). Subsequent more comparative evaluations (e.g., by Taylor and Laver, 1973), showed that Italy was far from a typical case, generating much better results for minimal-winning theory than most other countries.

<sup>13</sup>In fact, party positions estimated on the basis of the Laver-Hunt survey correlate very highly with positions on comparable scales derived from other sources, including the content analyses of party manifestos. See Laver and Hunt (1992: 41–42, 126–128).  
<sup>14</sup>Even more problematical are the births and deaths of political parties no longer present in 1989 at the time the Laver-Hunt survey was conducted.

<sup>15</sup>In the multivariate analysis of Chapter 9, we will include decade dummies to help sort out statistical explanation in light of the “aging” of our opinion data as we push it back in time.

<sup>16</sup>As can be seen from Table 7.1, such changes in party systems led to the exclusion of legislatures in Germany before 1961, in Ireland before 1954, and in the Netherlands before 1977.

democratic party may care more about those under the jurisdiction of a Department of Social Welfare.<sup>17</sup>

In order to allow for the operationalization of models of party competition that take account of interparty variations in perceptions of dimension weights, the Laver-Hunt expert survey estimated the salience to political parties of the various policy dimensions that were considered. Thus, we were also able to conduct the analysis in Chapter 8 using sets of interparty policy distances that were weighted to take account of the particular policy dimensions for particular parties. We report only the results based on *unweighted* policy distances, however, for two reasons. First, sets of unweighted policy distances are so much more straightforward and intuitive (forming the basis for a single graphical representation of a party policy space that we can draw and easily envisage). Second, our empirical reanalysis of the entire set of cases based on weighted interparty policy distances made no substantial difference to any of the empirical conclusions we arrive at.

<sup>17</sup>Our results, as well as Kadane's Improvement Algorithm, continue to hold in such circumstances. Strictly, they hold even if indifference curves are ellipses instead of circles (or, in higher dimensions, ellipsoids instead of hyperspheres), so long as preferences are separable. Separable preferences imply that parties may differentially evaluate dimensions, but their evaluations on one dimension are effectively carried out independent of evaluations on other dimensions.