Chapter 4
Party Systems

Effective parties that work well can serve multiple functions in democracies: simplifying and structuring electoral choices; organizing and mobilizing campaigns; articulating and aggregating disparate interests; channeling communication, consultation and debate; training, recruiting and selecting candidates; structuring parliamentary divisions; acting as policy think tanks; and organizing government. The direct impact of electoral systems on patterns of party competition has long been regarded as one of their most important effects. Electoral engineering has been advocated in systems suffering either from the dangers of excessively unstable and fragmented party systems, such as Italy and Israel, or from the opposite dangers of unchanging one-party predominant systems, exemplified by Singapore and Japan. But electoral systems can potentially indirectly affect many other features of how parties work, such as the strength of bonds between citizens and parties and how far party identification shapes voters' choices. This chapter therefore explores how far electoral systems are systematically related to patterns of party competition. Subsequent chapters then examine the relationship between electoral systems, the strength of party identification and general orientations towards political parties, as well as how far partisan alignments influence voter decisions in the countries under comparison.

The Mechanical effects of Electoral Systems on Party Competition

The classic starting point for any analysis has to be Duverger's famous claims about the relationship between electoral systems and party systems. Duverger's first law is (1) "the plurality single-ballot rule tends to party dualism." The second claim is that (2) "The double-ballot system and proportional representation tend to multipartyism." While originally stated as a universal law-like regularity, without exception, Duverger subsequently suggested that this was only a weaker probabilistic generalization. The conditions under which this relationship holds, and its status as a law, have attracted considerable debate marked by continued reformulations of the original statement and many efforts to define precisely was is to 'count' as a party in order to verify these claims. The effects of electoral systems are partly mechanical, depending upon the working of the rules, exemplified by the vote hurdles that single-member districts create for minor parties with dispersed support. The effects can also be partly psychological, by shaping the incentives facing parties and the public, for example if minor party candidates are discouraged from running in majoritarian elections where they believe they cannot win, or if citizens cast a 'strategic', 'tactical' or 'insincere' vote for a major party in the belief that voting for minor parties in these systems is a 'wasted vote'. Subsequent studies have recognized that the hurdles facing minor parties under majoritarian electoral systems vary under certain conditions, the most important of which concern: (i) the geographic distribution or concentration of party support; (ii) specific aspects of electoral systems beyond the basic formula, notably the use of voting thresholds, the size of the district magnitude in proportional systems, and the use of manipulated partisan bias such as gerrymandering to include or exclude minor parties; and also (iii) the type of major social cleavages within a nation, an issue explored in the next chapter. The reasons why geography is so important is that minor parties with spatially-concentrated support can still win seats in single-member districts and plurality elections, such as regional, nationalist, or ethnic parties that are strong in particular constituencies, exemplified by the success of the Bloc Quebecois and the Reform party in Canada, or the Scottish National Party and Plaid Cymru in the UK. Majoritarian and plurality systems are most problematic for parties with modest support that is widely dispersed across many single-member districts, such as the Australian Greens or the Canadian Progressive Conservatives. Specific aspects of the electoral system are also important because minor parties still face considerable barriers under proportional electoral formula that combine small district magnitudes with high vote thresholds, exemplified in the countries under comparison by contests for the Polish Sejm. Partisan manipulation of the electoral rules, such as the use of malapportionment (producing constituencies containing different sized electorates), gerrymandering (the intentional drawing of electoral boundaries for partisan advantage), as well as restrictive legal rules for nomination to get on the ballot, can also function to benefit or penalize minor parties. Lastly the number, distribution, and depth of social cleavages, and their
politicization by linking groups to political parties, is also critical to differences between the workings of electoral systems in relatively homogeneous and heterogeneous societies, producing an interaction between the type of electoral rules and social heterogeneity.

Before examining the evidence for the relationship between electoral and party systems in the societies under comparison, we first need to consider what is to ‘count’ as a party. One problem in the literature concerns how to distinguish between fringe parties and independent candidates, a problem particularly evident in the Ukrainian and Russian parliamentary election, where many candidates stood (and were often elected in single-member districts) as a strategy to gain exception from criminal prosecution. Since there is no single best measure, the wisest strategy is to compare alternative summary measures of the number of parties in different countries, ranging from simple to more complex indices, to see if the specific choice of measures makes a substantial difference to the interpretation of the results. ‘Electoral parties’ are defined most simply as all those parties standing for election, and ‘parliamentary parties’ as all those that win at least one seat in the lower house. Yet these simple measures are too generous to capture many of the most important distinctions commonly made between systems: for example, if all electoral parties count equally for ‘one’, then almost every country except those where opposition parties are banned by law would qualify as a multiparty system. In the United States, for example, normally understood as a classic two-party system, the Democrats and Republicans would count as equal to all other fringe parties holding no seats but contesting presidential elections, including the Greens, the Reform party, the Communist party, the Natural Law party, the Libertarians, and the Workers’ Party. One way to narrow this measure to generate a more meaningful comparison is to count relevant parties, defined as those gaining more than a certain threshold of national votes or parliamentary seats; in this study ‘relevant electoral parties’ are defined as those gaining 3% or more of the national vote, while ‘relevant parliamentary parties’ are understood as those getting 3% or more of seats in election to the lower house.

Yet adoption of the conventional 3% threshold is in itself arbitrary, as the cut-off point could equally be set slightly higher or lower. Measures of relevant parties can also prove misleading: for example, if four parties are of roughly equal size, each gaining about one quarter of the parliamentary seats, then there is no problem about counting them all equally as a four-party system. But if there are considerable disparities in size among parties, for example, if two major parties predominate with over 75% of all parliamentary seats, holding the balance of power between the opposition and government, and yet another eight fringe parties each get only 3% of seats, then given the imbalance of power it does not seem satisfactory to count each party equally to produce a ten-party system. The most popular method to overcome this problem is the Laakso and Taagepera measure of the ‘effective number of parliamentary parties’ (ENPP), and also the ‘effective number of electoral parties’ (ENEP), both of which take account not only of the number of parties but also the relative size of each. Although the measure is abstract, it is also fairly intuitively meaningful to grasp the difference between party systems containing, say, 2.6 and 5.5 effective parliamentary parties. Using this measure, Arend Lijphart reexamined the evidence for the Duverger thesis by comparing election results in 27 advanced industrialized democracies from 1945-90. The study estimated that the effective number of parliamentary parties was 2.0 in plurality systems, 2.8 in majoritarian, and 3.6 in proportional systems. Yet even here there are important variations beyond the basic formula, because Lijphart found that the minimum threshold of votes within proportional systems also had an important effect on the inclusion of minor parties. An alternative study by Richard Katz compared a broader range of countries, using a database with over 800 national elections held until 1985, and found many significant deviations around the mean effective number of parliamentary parties, particularly among sub-types within the basic proportional and majoritarian families. Katz concluded that there was little support for any simple version of Duverger’s claim that plurality elections inevitably generate two-party systems, as a universal law, although nevertheless as a probabilistic generalizations plurality systems usually proved more reductive than PR elections.

To examine the evidence for a wider range of countries in recent years we can compare party systems in national elections for the lower house of parliament held under the different electoral families and their sub-types. For comparison across alternative measures, to see if the
results are robust when replicated, the analysis uses three summary indicators to assess levels of party competition:

_Party competition_

- The mean number of _all_ parliamentary parties (defined as all parties winning at least one seat),
- The mean number of _relevant_ parliamentary parties (all parties holding 3% or more of parliamentary seats),
- The mean number of _effective_ parliamentary parties (calculated for the CSES elections by the Laakso and Taagepera method (1979)),

The estimates are based on the most recent national election for the lower house of parliament, with 170 contests held worldwide from 1995 to 2000, and the 32 parliamentary elections in the CSES countries under comparison, with the results derived from _Elections Around the World_10.

Table 4.1 shows that worldwide the mean number of parliamentary parties (based on the simplest definition of parties holding at least one seat) was 5.22 in the countries using majoritarian systems, 8.85 in combined systems, and 9.52 in societies with proportional electoral systems. In other words, in countries using any form of PR there are almost twice as many parliamentary parties as in countries using any form of majoritarian electoral system11. Confirming this broad pattern, although with less of a sharp contrast between the major types of electoral system, the comparison of the mean number of _relevant_ parties (holding over 3% of parliamentary seats) was 3.33 in all majoritarian systems, 4.52 for combined systems, and 4.74 for all proportional systems. Yet at the same time there are also some important variations evident among sub-types of electoral systems within each family, for example among proportional systems, systems using party lists had more parliamentary parties (and relevant parliamentary parties) than in the two nations (Ireland and Malta) using the Single Transferable Vote. Duverger claims that there is an important difference between simple plurality (first-past-the-post) and majoritarian 2nd ballot systems. The comparison shows that there were indeed more parliamentary parties (and more relevant parties) in the 28 nations using 2nd ballot runoff elections than in the 49 states using first-past-the-post. Yet at the same time under the 2nd ballot system far fewer parliamentary parties, and relevant parliamentary parties, were elected than under party list PR.

Nevertheless despite establishing these broad patterns by electoral family, the means can disguise considerable deviations, as there are important cross-national differences within each of the major types. Deviations from the mean are produced as the relationship between the type of electoral system and party system in each country is conditioned by the geographical distribution of party support, the level of electoral threshold, the average size of the district magnitude, and any manipulated partisan bias in the system. To illustrate this, the mean number of effective parliamentary parties (ENPP) for the thirty countries in the CSES dataset under detailed comparison is illustrated in Figure 4.1. Again the basic pattern by party family is shown, with majoritarian systems having an average ENPP of 2.42, compared with 3.54 in combined systems, and 4.45 in proportional systems. If we break this down further by country, the pattern shows that among Anglo-American countries all using first-past-the-post, the mean number of effective parliamentary parties is 2.0 in the United States, 2.1 in the UK, but 3.0 in Canada; in the latter case, despite first-past-the-post, regional Canadian parties gain seats in their heartland provinces. There is some overlap between plurality systems and the least proportional party list electoral systems, notably Spain with a mean ENPP of 2.7 due to small district magnitude, and Poland (ENPP 3.0) which has a high (7%) vote threshold to enter the Sejm. Nevertheless as predicted many of the PR systems under comparison can be classified as moderate multiparty systems, with an ENPP ranging from 3.4 to 5.6, while Belgium qualifies as a polarized party system with an ENPP of 9.1.
The combined electoral systems show substantial variations in party competition. As expected, some of the combined-independent systems with many single-member districts, including South Korea, Japan and Taiwan, are closer to the mean ENPP found in majoritarian systems. In comparison, the combined-dependent systems, with the outcome based on the party list share of the vote, exemplified by New Zealand and Hungary, are closer to the multiparty system common under PR systems. The primary exceptions to the overall pattern are Russia and Ukraine, which both have fragmented multiparty systems, despite using combined-independent electoral systems. The pattern in these nations is explained by the instability of their party systems, the fragility of the consolidation process in their democratic transitions, along with the existence of multiple social cleavages, and the election of many independents and small parties via the single-member districts, for reasons explored more fully in the next chapter.

Therefore overall the analysis of all elections worldwide, and the more detailed comparison of elections held in the thirty nations within the CSES dataset, support the reductive effect of the basic electoral formula. This generally confirms Duverger's main proposition that plurality electoral systems tend towards party dualism, while PR is associated with multipartyism. Yet the extent of the difference in the effective number of parliamentary parties should not be exaggerated, ranging in the CSES countries under comparison from an average of 2.42 in majoritarian systems to 4.45 in proportional systems. Moreover the variations evident within each electoral family show that the relationship between electoral systems and party systems is probabilistic not universal, as illustrated by the marked contrasts between Spain and Belgium, although both have proportional party list elections. These variations are generated by the factors discussed earlier, namely (i) the geographic distribution of party support; (ii) specific features of electoral design beyond the basic electoral formula, such as formal vote thresholds and district magnitude; and, as we shall see in subsequent chapters, (iii) the number and depth of social cleavages within each nation. Smaller parties can do well under first-past-the-post, especially regional or ethnic-national parties with spatially concentrated support. At the same time, minor parties can be heavily penalized in proportional systems with high thresholds and small district magnitudes.

The Proportionality of Votes to Seats

Many studies have commonly found proportionality to be significantly greater under PR than under majoritarian systems, although again important variations exist within electoral families and sub-types. Proportionality is gauged in this study by three measures:

- The percentage share of the vote won by the party in first place, to provide an indication of how far electoral systems generated a vote majority for the leading party.
- The percentage share of seats won by the party in first place, to provide an indication of how far the electoral system generated a parliamentary majority for the leading party.
- The Rose index of proportionality to show the relationship of votes to seats (a standardized version of the Loosemore-Hanby index).

All the alternative measures of proportionality summarize the degree to which each party's share of seats corresponds to their share of votes but alternative measures reflect slightly divergent notions of the underlying concepts. The oldest measure used by Douglas Rae simple uses the average of the deviations, summing the absolute differences between the vote percentages and the seat percentages and then dividing by the number of parties. One potential problem with the Rae Index, however, is that it is over-sensitive to the number of parties, understating the disproportionality of systems with many small parties. One of the most widely used alternatives is the Loosemore-Hanby index which adds the absolute values of all vote-seat share differences and then divides by 2, instead of Rae's division by the number of parties. For ease of interpretation, following Rose, this measure can be standardized, and in theory the standardized Loosemore-Hanby index of proportionality ranges from 0 to 100. Majoritarian systems provide a winner's bonus for the party in first place, while penalising others, so the size of the winner's
bonus provides another indication of disproportionality. As expected, the variations are predictable; the mean Rose Index of Proportionality was 91.2 for all proportional systems around the world, compared with 85.0 for all combined systems, and 81.9 for all majoritarian systems.

[Table 4.2 about here]

To see whether this pattern was generated by the specific measure used, or whether it remains robust under alternative indicators, the proportionality of the electoral systems can also be compared by calculating the votes-to-seats ratio for each party in elections held from 1995 to 2000 in 143 nations around the globe, based on the summary unstandardized regression coefficient (beta) for each electoral family. The results in Figure 4.3 further confirm, as expected, that proportional electoral formula produce the closest reflection of votes to seats ratios ($R^2 = .95$). A few parties scatter more widely around the top of the regression line in these systems, but most fall where expected, suggesting a fairly close match between the percentage of votes that a party receives and its percentage of seats won. The combined formula proved marginally less proportional results ($R^2 = .93$). In comparison, the majoritarian formula shows the widest scatter of votes to seats ($R^2 = .82$). This is caused primarily by minor and fringe parties failing to gain any or few seats in these elections, shown visually by the parties falling above the regression line. The ‘winner’s bonus’ is illustrated by the parties falling below the regression line, where parties gain a greater percentage of seats than their share of the vote.

[Figure 4.3 about here]

The indicators of the capacity of the electoral system to generate a working majority can also be examined by comparing the vote share and the seat share for the leading party in worldwide national elections (see Table 4.2). These comparisons in Table 4.2 confirm, as expected, that the leading party usually won a comfortable majority of votes (54.5%) and seats (56.8%) in majoritarian and plurality electoral systems (with the exception of the Australian AV system first preference distribution). Majorities of votes and seats for the leading party were also evident under combined-independent electoral systems. By contrast, the leading party generally failed to gain a majority of votes or seats under combined-dependent and proportional party list systems. Under all proportional systems, the leading party gained on average 45.3% of the vote and 43.8% of the seats. This evidence confirms, as proponents of each type of electoral system claim, that PR systems are more likely to prioritize legislative inclusiveness and multiparty systems while in comparison majoritarian systems are more likely to provide a decisive outcome and single-party executives. The electoral threshold for government office, if gauged by the average share of the vote for the party in first place, is about 10% higher under majoritarian than proportional electoral systems worldwide. This is important if, as argued in the introduction, the higher level of threshold in majoritarian systems provides incentives for parties to develop bridging strategies appealing to multiple sectors of the electorate, and if the lower thresholds in proportional systems provide incentives for bonding strategies designed to mobilize core groups of supporters. These claims are examined further in the next chapter.

[Figure 4.2 about here]

To explore the consistency of these patterns further, the distribution of the standardized Loosemore-Hanby index of proportionality, a common measure used in the literature, can be compared in more detail for the nations included in the CSES. Figure 4.2 confirms the pattern observed earlier: the mean proportionality was 85.3 under majoritarian systems, 89.6 under combined systems, and 92.6 under proportional systems. Proportionality was therefore usually lower in majoritarian elections, with the exception of the United States that generated a highly proportional result despite FPTP elections due to the two-party predominance in the House of Representatives and a fairly even share of the vote. Proportionality was usually highest under party list PR, although again there are some exceptions, in Poland and Romania, due to high thresholds or low district magnitudes. Combined systems generally fell into the middle of the distribution although dependent-combined systems prove more proportional than independent-combined systems. In the countries under comparison, the average ‘winner’s bonus’ (representing the difference between the vote share and seat share for the leading party, exaggerating their legislative lead over all other parties) is 12.5 percentage points under
majoritarian systems, compared with 7.4 under mixed systems, and 5.7 percent under proportional representation. Hence under majoritarian electoral systems a party which won 37.5 percent of the vote or more could usually be assured of a parliamentary majority (50%+) in seats, whereas under PR systems a party would normally require 46.3 percent of the vote or more to achieve an equivalent result. As proponents argue, therefore, one-party governments with a working parliamentary majority are generated more easily in majoritarian than in proportional electoral systems, but at the expense of the legislative representation of minor parties.

Conclusions

Reformers often suggest that constitutional changes, particularly modifications to the electoral system, can contribute towards better governance, either through more majoritarian arrangements that are believed to strengthen governability or through more proportional formula that are designed to improve power-sharing and social inclusiveness. In this chapter we focused upon the consequences of electoral systems for party systems, and in particular whether there is convincing evidence that electoral system have the capacity to shape patterns of party competition. Throughout the analysis we have assumed that the electoral system is exogenous, so that it is capable of determining patterns of party competition. Where electoral systems have been in existence for many decades, indeed in some cases for more than a century, it seems safe to assume that the cumulative effect of repeated contests under these rules is capable of shaping the party system, for example by constantly excluding minor parties from office or by giving them as seat as ‘king-maker’ in cabinet governments. Nevertheless where electoral systems are experienced frequent changes from majoritarian to proportional or vice versa, as in France, or where electoral systems in newer democracies have only recently been adopted, it is far more difficult to regard the institutional rules as truly exogenous. In this context, levels of party competition, and the process of bargaining and negotiation over the constitutional rules of the game, are likely to shape the adoption of electoral systems. In newer democracies, then, there is likely to be interaction between the type of electoral system and the type of party system, and estimates that treat electoral systems as exogenous are likely to over-estimate their causal effects15. Case studies examining a series of election results within each country, as well as policy studies of the adoption and reform of electoral rules in each nation, as well as more sophisticated models using two-staged least squares analysis, are the most satisfactory approaches to disentangling these relationships, taking us far beyond the scope of this study. Nevertheless even if unable to establish the direction of the causal relationship within the limitations of the cross-sectional comparison, the results provided in this chapter serve to confirm some of the basic patterns in the relationship between electoral systems and party systems, which is necessary as the basis for subsequent chapters.

Overall the results of the comparison of elections in all nations worldwide, and the detailed analysis of elections held in the thirty-two countries in the CSES dataset, lends further confirmation to support the reductive impact of the basic electoral formula. With the important limitations already noted, the analysis generally supports Duverger's generalization that plurality electoral systems tend towards party dualism, while PR is associated with multipartyism. The comparisons support the classic claims made by proponents on both sides of the normative arguments, namely that majoritarian elections usually generate one-party governments with a secure parliamentary majority, while proportional elections generally lead towards more inclusive multiparty parliaments and more proportional results. Yet two important qualifications should be stressed when interpreting these results.

First, the difference in party competition by electoral family proved relatively modest in size; worldwide, the mean number of relevant parties was 3.33 in majoritarian systems and 4.74 in PR systems. The contrasts were slightly greater in the CSES elections under comparison, where the effective number of parliamentary parties was 2.42 in majoritarian systems and 4.45 in proportional elections. Yet although the relative or the effective number of parliamentary parties elected under each system may not appear greatly different, the contrast does reflect the classic categorical distinction between a two-party system (or two-and-a-half party) where the organizing principle is a division of the spoils of office between the government and opposition, accompanied by one-party cabinet government resting upon a secure parliamentary majority, and multiparty
competition, where parliament contains multiple actors and coalition government among multiple parties is the essential to secure a working parliamentary majority.

At the same time, it should be noted that there are important variations in party competition and proportionality within each electoral family. As discussed earlier, the relationship between electoral systems and party systems is conditional upon many factors, including most importantly: (i) the geography of electoral support; (ii) specific features of electoral design such as the use of formal thresholds and the size of districts; and (iii) the number and depth of social cleavages within a nation. Minor parties can do well in gaining seats under first-past-the-post, especially regional or ethnic-national parties with spatially concentrated support, while at the same time such parties can also be heavily penalized in proportional systems with high thresholds and small district magnitudes. Having confirmed these basic patterns and tendencies, the next chapters go on to explore the psychological capacity of electoral systems to influence the relationship between parties and voters, and in particular the strength of social cleavages and partisan identities in the electorate.
### Table 4.1: Electoral systems and party systems

<table>
<thead>
<tr>
<th>Electoral System</th>
<th>Mean number of parliamentary parties (with at least one seat)</th>
<th>Mean number of relevant parliamentary parties (with over 3% of seats)</th>
<th>Number of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Majoritarian</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative Vote</td>
<td>9.00</td>
<td>3.00</td>
<td>1</td>
</tr>
<tr>
<td>Block vote</td>
<td>5.60</td>
<td>4.57</td>
<td>10</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Ballot</td>
<td>6.00</td>
<td>3.20</td>
<td>23</td>
</tr>
<tr>
<td>FPTP</td>
<td>4.78</td>
<td>3.09</td>
<td>49</td>
</tr>
<tr>
<td><strong>All Combined</strong></td>
<td><strong>8.85</strong></td>
<td><strong>4.52</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td>Independent</td>
<td>8.89</td>
<td>3.94</td>
<td>19</td>
</tr>
<tr>
<td>Dependent</td>
<td>8.71</td>
<td>6.17</td>
<td>7</td>
</tr>
<tr>
<td><strong>ALL Proportional</strong></td>
<td><strong>9.52</strong></td>
<td><strong>4.74</strong></td>
<td><strong>61</strong></td>
</tr>
<tr>
<td>STV</td>
<td>5.00</td>
<td>2.50</td>
<td>2</td>
</tr>
<tr>
<td>Party List</td>
<td>9.68</td>
<td>4.82</td>
<td>59</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7.05</strong></td>
<td><strong>4.12</strong></td>
<td><strong>170</strong></td>
</tr>
</tbody>
</table>

Note: The data includes the results for 1,263 parties contesting the latest elections to the lower house of parliament from 1995 to June 2000. Parliamentary parties are defined as those winning at least one seat in the lower house. The results of the elections were calculated from *Elections Around the World*. [www.agora.stm.it/elections/alllinks.htm](http://www.agora.stm.it/elections/alllinks.htm).

The classification of electoral systems is discussed fully in chapter 2 and is derived from Andrew Reynolds and Ben Reilly. 1997. *The International IDEA Handbook of Electoral System Design*. Stockholm: International IDEA. Annex A. 'Independent' combined systems include two electoral systems used in parallel. 'Dependent combined' systems include two electoral systems used where the results depend upon the combined share of the vote.
### Table 4.2: Electoral systems and proportionality

<table>
<thead>
<tr>
<th>Electoral System</th>
<th>Rose’s Index of Proportionality</th>
<th>% Vote for the party in first place</th>
<th>% Seats for the party in first place</th>
<th>Number of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Majoritarian</td>
<td>81.9</td>
<td>54.5</td>
<td>56.8</td>
<td>83</td>
</tr>
<tr>
<td>Alternative Vote</td>
<td>84.0</td>
<td>40.3</td>
<td>45.3</td>
<td>1</td>
</tr>
<tr>
<td>Block vote</td>
<td>75.6</td>
<td>52.9</td>
<td>56.2</td>
<td>10</td>
</tr>
<tr>
<td>2nd Ballot</td>
<td>92.2</td>
<td>54.8</td>
<td>57.8</td>
<td>23</td>
</tr>
<tr>
<td>FPTP</td>
<td>83.0</td>
<td>55.1</td>
<td>57.8</td>
<td>49</td>
</tr>
<tr>
<td>All Combined</td>
<td>85.0</td>
<td>46.8</td>
<td>49.5</td>
<td>26</td>
</tr>
<tr>
<td>Independent</td>
<td>82.6</td>
<td>51.7</td>
<td>53.9</td>
<td>19</td>
</tr>
<tr>
<td>Dependent</td>
<td>90.1</td>
<td>33.9</td>
<td>36.9</td>
<td>7</td>
</tr>
<tr>
<td>ALL Proportional</td>
<td>91.2</td>
<td>45.3</td>
<td>43.8</td>
<td>61</td>
</tr>
<tr>
<td>STV</td>
<td>93.9</td>
<td>45.3</td>
<td>50.1</td>
<td>2</td>
</tr>
<tr>
<td>Party List</td>
<td>91.1</td>
<td>44.5</td>
<td>43.6</td>
<td>59</td>
</tr>
<tr>
<td>TOTAL</td>
<td>87.2</td>
<td>48.7</td>
<td>50.0</td>
<td>170</td>
</tr>
</tbody>
</table>


The classification of electoral systems is discussed fully in chapter 2 and is derived from Andrew Reynolds and Ben Reilly. 1997. *The International IDEA Handbook of Electoral System Design*. Stockholm: International IDEA. Annex A. ‘Independent’ combined systems include two electoral systems used in parallel. ‘Dependent combined’ systems include two electoral systems used where the results depend upon the combined share of the vote.
Figure 4.1: Effective Number of Parliamentary Parties (ENPP) by electoral family

Note: The Effective Number of Parliamentary Parties (ENPP) is calculated following the method of Laakso and Taagepera (1979). For details of the elections see Table 2.1.

Figure 4.2: Proportionality by electoral family
Note: The Index of Proportionality, following Rose, is a standardized version of the Loosemore-Hanby index. This is calculated as the difference between a party’s percentage share of the vote and its percentage share of the total seats in Parliament, summed, divided by two and subtracted from 100. Theoretically it can range from 0 to 100. For details see Rose, Munro and Mackie 1998. For details of the elections see Table 2.1.
Figure 4.3: The proportionality of party votes to seats

**Majoritarian formula**

- SNTV
- Two round
- AV
- Block Vote
- FPTP

**Combined formula**

- MMP
- Parallel

**Proportional formula**

- STV
- List PR

Legend:

- Rsq = 0.8128
- Rsq = 0.9291
- Rsq = 0.9532


7 M. Laakso and Rein Taagepera. 1979. ‘Effective number of parties: a measure with application to Western Europe.’ *Comparative Political Studies*. 12: 3-27.


10 Election results were compared based on the data contained in *Elections Around the World*. www.agora.stm.it/elections/alllinks.htm. Where election results were missing from this source then alternatives were used, including *Electoral Studies* and the *International Foundation for
Electoral Systems (IFES) http://www.ifes.org/eguide/elecguide.htm. The total analysis compared elections held from 1995 to 2000 for the lower house of parliament in 143 nations where results were available, including the share of votes and seats held by 1,244 electoral parties.

11 Similar patterns were found if the analysis is confined to the 37 nations classified worldwide by the Freedom House Gastil index as ‘older’ or ‘newer’ democracies. In these countries, the mean number of parliamentary parties was 7.4 in majoritarian systems and 10.22 in PR systems. The mean effective number of relevant parties was 3.0 in majoritarian systems and 5.5 in PR systems.


