

**Electoral Systems and Political Parties** by Jack Bielasiak  
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**Structural Causes and Partisan Effects**

Elections have become synonymous with democracy. In all corners of the world, especially since the collapse of communism, politicians have sought to design electoral systems that provide at least some choice to their citizenry. But the process of electoral engineering is a complex one, and the choice of particular rules to govern elections has a profound effect on the extent and type of political competition.

A widely accepted proposition in political science, one of the few to claim the status of scientific validity, is Duverger's law. The law concerns the relationship between electoral and party systems: plurality, winner-take-all election rules produce a two-party competitive system, while other electoral regulations, especially proportional representation (PR), tend to form multiparty systems defined by competition among several contending political organizations. The linkage is ascribed to two factors: the mechanical effect and the strategic effect of election rules. The mechanical effect is simply the result of the calculation rules that convert votes into legislative seats. In simple majoritarian systems (i.e., plurality), only those candidates who finish at the top are declared winners and are awarded with parliamentary representation, while losing contenders are left out of the legislature. The electoral regulation of PR systems, on the other hand, rewards as winners many more political contestants, providing legislative seats on the basis of each party's vote share. (See the table below to compare the structures of different nations' electoral systems.)

This mechanical effect of translating votes into seats is reinforced by the strategic effect, which concerns the responses of politicians and voters to the rules of the game. In plurality first-past-the-post (FPTP) contests, small parties have little chance of winning, thus politicians form broad coalitions, gathering diverse constituencies and interests within one party. In PR systems, where seat allocation in parliament is based on vote percentage, there is an incentive to form parties along specific ideological lines or common interests, since even a small share of the vote can be rewarded with legislative representation. Similarly, voters do not like to waste their preferences on likely losers, so in FPTP systems the electorate will coalesce around the most viable contenders rather than support small parties with little chance of success. In this way, the rules of the electoral process influence the psychology of voting, which in turn determines the viability of political contestants.

Electoral systems are the primary institutional mechanism to regulate political competition. While there are numerous types of electoral systems, they can best be understood as falling into three main families: single-member majoritarian, proportional representation, and mixed systems.

**Majoritarian Electoral Rules**

The principal distinction among majoritarian systems is that some require the winning candidate in a single-member district to obtain a simple plurality while others require an absolute majority. The plurality rule is most familiar in the legislative elections in the United States and the United Kingdom, where the national constituency is divided into territorial single-member districts, and the voter casts a single vote for his or her preferred candidate. The winner is the candidate who obtains more votes than any rivals -- for that reason the system is also known as a first-past-the post election, so that a candidate with only a handful more votes than the second- or third-place finishers takes office. The party that succeeds in the most districts emerges as the legislative majority and, in parliamentary systems, forms the government.

A second type of majoritarian formula introduces an absolute majority requirement, so that the winner must obtain at least 50 percent plus one vote to be successful. For that reason, absolute majority rules are applied in

two-round or run-off electoral systems. If a candidate succeeds in getting an absolute majority in the first round, that person is declared elected and is rewarded with a seat. However, if no candidate obtains a majority, another round of elections is held sometime later (usually two weeks after the first) between the two top-placed candidates, one of whom must per force emerge with an absolute majority. In China, where the national assembly is elected by indirect vote of local and regional officials, the absolute majority formula is applied in each constituency.

It is important to emphasize that Duverger's law applies only to plurality systems, not to absolute majority electoral systems. This is because in the former the winner emerges in the first and only contest, so it is vital for voters and politicians to act in a strategic manner and coalesce around likely winners. In the latter, it is possible to vote "sincerely" according to one's true preferences in the first round, even if the choice is unlikely to emerge as the winning candidate, and then vote "strategically" for likely winners in the run-off election. The consequence is that plurality electoral rules concentrate votes around major political parties and tend toward two-party systems. The absolute majority requirement, on the other hand, can still disperse the vote among several candidates, since opportunities remain in the second round for parties to act strategically by forming alliances and for voters to move from defeated sincere preferences to potential winners.

### **Proportional Representation Rules**

Majoritarian systems seek to concentrate votes to produce effective government and efficient policy; proportional representation systems aim to provide a voice to multiple interests in the polity. The essence of PR systems is proportionality, with rules designed to allow the share of the vote for given parties to mirror closely the proportions of seats in the legislature (although proportionality is strongly affected by the type of formula used to convert votes to seats, district size, or minimum thresholds requirements). PR voting, in contrast to majoritarian practice, takes place in multimember constituencies (either nationwide or regional) with the electorate choosing from slates of candidates put forward by political parties. In such a system, the emphasis is on the representation of diverse social, economic, or ideological interests rather than on the linkage between the individual representative and a territorial constituency.

The choice offered the citizenry during elections is primarily among political parties, although two methods of selection prevail in PR systems, distinguished by the ability of voters to influence the party list. The most common is the closed party list, where the vote is simply for a particular party, not an individual candidate, and seats gained by the party are filled by decision of its leadership. The alternative is the open party list, where voters can express preferences for individual candidates on the lists. In this case, votes for candidates from a particular party are added to determine its share of seats in the legislature, yet the voter retains a measure of influence on who will fill those seats. Even here there are variations among preferential voting systems that enable voters to select among candidates from one particular list and vote-splitting systems that permit choice of candidates from competing party lists.

There are several variables that affect how votes are apportioned into parliamentary seats. A primary influence is the type of formula used to calculate the "mechanical" conversion of votes into seats. The two main formula types are the greatest remainder method and the highest averages method, although each family type includes several variations in how the conversion takes place. The more common is the highest averages formula that divides the number of votes gathered by a party list in a given district, the calculation performed by means of a series of divisors. Variations in this method concern the divisors, for example, the simple 1, 2, 3, 4, etc. progression (d'Hondt formula); the odd-number 1, 3, 5, 7, etc. series (Saint-Lague formula); or its variant 1, 4, 3, 5, 7, etc. series (modified Saint-Lague formula). In each case, the mathematical operation results in an average, a quotient, with seats for party lists distributed successively according to the highest quotient, until all seats are filled.

The alternative greatest remainder formulas first determine a "quota" necessary to fill a seat, and each party obtains as many seats as it has quotas. The variations in the formula concern how the quotas are calculated, for example, by simply dividing the total number of votes by the number of seats to be filled in the multimember constituency (the Hare or simple quota) or by increasing the divider by one, i.e., number of seats plus one (Hagenbach-Bischoff quota) or two (Imperiali quota). Since the division of votes by seats always leaves some unused votes for each party list and some seats to be allocated, these are assigned to parties by order of the largest remainder.

The most significant consequence of using different variations of the highest averages or largest remainders PR formula is the extent of proportionality produced by the mechanical calculation. Some methods are more prone to produce highly proportional systems, reflecting accurately the share of votes cast by the electorate in the number of seats assigned to party lists (e.g., the Hare method or the Saint-Lague formula). Other mechanisms tend to distort proportionality and instead favor smaller (Imperiali formula) or larger (d'Hondt formula) political parties.

Since a primary concern in PR systems is to assure political stability by preventing extensive party fragmentation, the prevailing tendency is to distort proportionality by favoring larger parties and reduce the chances for small or extremist parties to gain seats. A similar effect can be achieved by reducing district magnitude (making regional constituencies smaller), since fewer seats for distribution in a given region signify fewer opportunities to obtain a seat. An even more direct method of obtaining a similar result is to impose a minimum threshold requirement, making sure that a political party obtains SOME SPECIFIED MINIMUM PERCENT of the vote before it can participate in the distribution of seats. This method is used in many emerging democracies using the PR formula, including RUSSIA IN WHICH THE THRESHOLD CHANGED FROM 5 TO 7 PERCENT WHEN THE ELECTORAL SYSTEM CHANGED TO A STRICTLY PROPORTIONAL REPRESENTATION SYSTEM IN MAY 2005.

### **Mixed Electoral Systems**

The third major type of electoral system, alongside majoritarian and proportional representation regulations, is a mixed form that combines features of these two. The mixed variant has become more common in recent years, in an attempt to combine the best features of majoritarian practice (stability and effectiveness) and the PR method (representation and proportionality). In this case too there are several different variants of "mixing." The simplest one is the system that combines majoritarian and PR rules alongside each other, in parallel voting mechanisms that operate independently of each other -- in effect producing two electoral rules in one election. In this instance, the voter casts one vote in the majoritarian segment and another vote in the PR tier. The results in each part are calculated separately, without any mutual impact. The proportion of the two segments can vary. Both types can be assigned equal weight, as is the case in elections to the Russian Duma, or one type may be favored over the other, as in the simple majority method prevailing over the PR system in Mexico.

An alternative to the parallel, independent mixed system is a mixed system that explicitly creates a linkage between the majoritarian and proportional representation features of electoral contestation, although here as well several different forms of linking the two methods are in evidence. The primary element in the linked, mixed formula is the fact that the majoritarian and proportional features are used in different stages of determining election results, often to produce compensation for distortions in the translation of the vote count into legislative seats. A well-known example is the mixed-member proportional system used in Germany, where the votes in the majoritarian single-member districts are taken into account to distribute PR votes to party lists in the PR segment of the election. In this case, the intent is to rectify the disproportionality that may occur in the winner-take-all segment of the election by compensating parties that did not obtain their fair share of legislative

seats in the PR part of the electoral regulation.

It should be obvious from the foregoing summary that electoral systems are complex mechanisms to define the choices and determine the results of voting in democracies. The selection of particular electoral codes is often the product of historical legacies, social cleavages, and political expediency. Yet it should also be clear that the choice of election rules has a significant bearing on the nature of the democratic competition, affecting party systems in terms of the number of viable contenders, the nature of political parties, and the concern with stability and efficiency vis-à-vis representation and proportionality. In that sense, electoral engineering is more than an attempt to define optimal rules for electoral contestation, but also a normative understanding concerning the purpose of political competition.

Table: International Electoral Systems

	Electoral System	Electoral Formula	Number of Districts	Assembly Size
China	Electoral college	Absolute majority vote	N.A.	2985
Iran	Qualified majority vote	One-third minimum in first round	196 Single-Member Districts (SMD) or Multiple-Member Districts (MMD)	290
		Plurality in second round		
Mexico	Mixed	SMD plurality for 300 deputies	300	500
		PR Hare for 200 deputies	1	
Nigeria	SMD	Plurality	360	360
Russia	Mixed	SMD plurality for 225 deputies	225	450
		PR Hare for 225 deputies	1	
Great Britain	SMD	Plurality	646	646
European Union	PR	Various PR formulas, dependent on each member state	Various	N.A.

Source: Inter Parliamentary Union, Parline database, accessed at

<http://www.ipu.org/parline-e/parlinesearch.asp>