Elections and Electoral Systems
Democracies are sometimes classified in terms of their electoral system.

An electoral system is a set of laws that regulate electoral competition between candidates or parties or both.
Elections are increasingly used to fill legislative and executive offices around the world.

185 of the world’s 193 independent states now use direct elections to elect people to their lower house of parliament.
Electoral integrity refers to the extent to which the conduct of elections meets international standards and global norms concerning ‘good’ elections.

These norms and standards are usually set out in treaties, conventions, and guidelines issued by international and regional organizations.
Violations of electoral integrity are referred to as electoral malpractice.
Figure 13.2: Electoral Integrity in Four Countries

**UNITED STATES**

- **PEI Index**
- Laws
- Procedures
- Boundaries
- Voter Registration
- Media
- Finance
- Party Registration
- Count
- Voting

**TURKEY**

- **PEI Index**
- Laws
- Procedures
- Boundaries
- Voter Registration
- Media
- Finance
- Party Registration
- Count
- Voting

**BELARUS**

- **PEI Index**
- Laws
- Procedures
- Boundaries
- Voter Registration
- Media
- Finance
- Party Registration
- Count
- Voting

**EGYPT**

- **PEI Index**
- Laws
- Procedures
- Boundaries
- Voter Registration
- Media
- Finance
- Party Registration
- Count
- Voting
Democracies tend to have higher levels of electoral integrity than dictatorships.

There is variation, though, among both democracies and dictatorships.
Electoral integrity is influenced by:

- Domestic structural constraints
- The role of the international community
- Institutional design
- Electoral management bodies
Two strategies to identify election fraud:

1. Election monitoring

2. Election forensics
Political scientists have begun to develop tests to identify election fraud. The underlying idea is that human attempts to manipulate election results leave telltale signs that can be picked up by statistical tests (Hicken and Mebane 2015). Many of these tests focus on the frequency distribution of digits in reported vote totals. Benford’s law describes a pattern for the frequency distribution of digits in numbers that occurs in many settings (Mebane 2013, 9). Although we might think that each digit from 1 to 9 has an equal probability of appearing as the first digit in a number, this is often not the case. It turns out that in a wide variety of settings, smaller digits are more common than larger digits. To illustrate why this might be the case, Deckert, Myagkov, and Ordeshook (2011, 246) give the example of collecting house street numbers at random from a telephone book. As street numbers tend to begin with 1 (or 10 or 100) and restart at 1 after crossing a boundary or end before higher numbers are reached, addresses that start with the number 1 will be more common than those that start with the number 2, and those that start with a 2 will be more common than those that start with a 3, and so on. According to Benford’s law, the first and second digits in a number will follow the frequency distributions shown in Table 13.1. For example, the probability that the first digit in a number will be a 3 is 0.125, and the probability that it will be a 6 is 0.067. Similarly, the probability that the second digit in a number will be a 0 is 0.120, and the probability that it will be a 6 is 0.093. The mean or expected value of the first digit is 3.441, whereas it is 4.187 for the second digit.

Benford’s law has been used to detect financial and accounting fraud (Cho and Gaines 2007). The general idea is that individuals who fabricate numbers have a tendency to do so uniformly. As a result, one can compare the frequencies with which different digits appear as the first number in financial accounts with the expected probabilities for those digits from Benford’s law. Significant deviations would indicate “suspicious” numbers and possible fraud. Scholars have adopted the same basic idea to try to identify electoral fraud in voting returns (Cantu and Saiegh 2011), though they tend to focus on the distribution of the second digit rather than the first digit (Mebane 2006, 2008; Pericchi and Torres 2011). For example, Mebane (2013) examined electoral returns from 45,692 ballot boxes in the 2009 presidential elections in Iran and found that the frequency distribution of the second digits in the vote totals for the incumbent president, Ahmadinejad, was suspicious. Rather than focus on Benford’s law, other scholars have argued that fair elections should produce voting returns that have uniformly distributed 0–9 last digits. Using this method, Beber and Scacco (2012)

<table>
<thead>
<tr>
<th>Table 13.1</th>
<th>Benford’s Law: The Frequency Distribution of First and Second Digits</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>—</td>
<td>0.301</td>
</tr>
<tr>
<td>0.120</td>
<td>0.114</td>
</tr>
</tbody>
</table>
Political scientists typically distinguish between electoral systems based on their electoral formula.

1. Majoritarian

2. Proportional

3. Mixed

An electoral formula determines how votes are translated into seats.
A majoritarian electoral system is one in which the candidates or parties that receive the most votes wins.
A single-member district plurality system (SMDP) is one in which individuals cast a single vote for a candidate in a single-member district.

The candidate with the most votes wins.
<table>
<thead>
<tr>
<th>Candidate</th>
<th>Party</th>
<th>Votes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben Howlett</td>
<td>Conservative</td>
<td>17,833</td>
<td>37.8</td>
</tr>
<tr>
<td>Steve Bradley</td>
<td>Liberal Democrat</td>
<td>14,000</td>
<td>29.7</td>
</tr>
<tr>
<td>Ollie Middleton</td>
<td>Labour</td>
<td>6,216</td>
<td>13.2</td>
</tr>
<tr>
<td>Dominic Tristram</td>
<td>Green</td>
<td>5,634</td>
<td>11.9</td>
</tr>
<tr>
<td>Julian Deverell</td>
<td>UKIP</td>
<td>2,922</td>
<td>6.2</td>
</tr>
<tr>
<td>Lorraine Morgan-Brinkhurst</td>
<td>Independent</td>
<td>499</td>
<td>1.1</td>
</tr>
<tr>
<td>Jenny Knight</td>
<td>Independent</td>
<td>63</td>
<td>0.1</td>
</tr>
</tbody>
</table>
The single nontransferable vote (SNTV) is a system in which voters cast a single candidate-centered vote in a multimember district.

The candidates with the highest number of votes are elected.
Whereas SMDP and SNTV are ‘plurality’ majoritarian electoral systems, the alternative vote is an ‘absolute majority’ majoritarian system.

The alternative vote (AV) is a candidate-centered preference voting system used in single-member districts where voters rank order the candidates.
If a candidate wins an absolute majority of first-preference votes, she is immediately elected.

If no candidate wins an absolute majority, then the candidate with the fewest first-preference votes is eliminated, and her votes are reallocated among the remaining candidates based on the designated second preferences.

This process is repeated until one candidate has obtained an absolute majority of the votes cast (full preferential system) or an absolute majority of the valid votes remaining (optional preferential system).
# Richmond Constituency, New South Wales, Australia 1990

## Table 13.3

<table>
<thead>
<tr>
<th>Candidate</th>
<th>First count (no.)</th>
<th>First count (%)</th>
<th>Second count (no.)</th>
<th>Second count (%)</th>
<th>Third count (no.)</th>
<th>Third count (%)</th>
<th>Fourth count (no.)</th>
<th>Fourth count (%)</th>
<th>Fifth count (no.)</th>
<th>Fifth count (%)</th>
<th>Sixth count (no.)</th>
<th>Sixth count (%)</th>
<th>Seventh count (no.)</th>
<th>Seventh count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan Gibbs</td>
<td>4,346</td>
<td>6.3</td>
<td>4,380</td>
<td>6.3</td>
<td>4,420</td>
<td>6.4</td>
<td>4,504</td>
<td>6.5</td>
<td>4,683</td>
<td>6.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neville Newell</td>
<td>18,423</td>
<td>26.7</td>
<td>18,467</td>
<td>26.7</td>
<td>18,484</td>
<td>26.8</td>
<td>18,544</td>
<td>26.9</td>
<td>18,683</td>
<td>27.1</td>
<td>20,238</td>
<td>29.4</td>
<td>34,664</td>
<td>50.5</td>
</tr>
<tr>
<td>Gavin Baillie</td>
<td>187</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alan Sims</td>
<td>1,032</td>
<td>1.5</td>
<td>1,053</td>
<td>1.5</td>
<td>1,059</td>
<td>1.5</td>
<td>1,116</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ian Paterson</td>
<td>445</td>
<td>0.6</td>
<td>480</td>
<td>0.7</td>
<td>530</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dudley Leggett</td>
<td>279</td>
<td>0.4</td>
<td>294</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles Blunt</td>
<td>28,257</td>
<td>40.9</td>
<td>28,274</td>
<td>41.0</td>
<td>28,303</td>
<td>41.0</td>
<td>28,416</td>
<td>41.2</td>
<td>28,978</td>
<td>42</td>
<td>29,778</td>
<td>43.2</td>
<td>33,980</td>
<td>49.5</td>
</tr>
<tr>
<td>Helen Caldicott</td>
<td>16,072</td>
<td>23.3</td>
<td>16,091</td>
<td>23.3</td>
<td>16,237</td>
<td>23.5</td>
<td>16,438</td>
<td>23.8</td>
<td>16,658</td>
<td>24.1</td>
<td>18,903</td>
<td>27.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Australian "How-to-Vote" Card from the 2001 Legislative Elections

HOW TO VOTE LIBERAL

A STRONGER ECONOMY
A STRONGER AUSTRALIA

You will be given a Green and a White ballot paper. When completing your ballot papers DO NOT use ticks or crosses. If you make a mistake, please ask for a new ballot paper.

HOUSE OF REPRESENTATIVES:
On the small Green ballot paper, for the House of Representatives, you must number every shown.

HOUSE OF REPRESENTATIVES
(Green Ballot Paper)

1 SOUTHWICK, David (Liberal)
2 JACKEL, G
3 CAMERON, L
4 BEALE, C
7 DANBY, M
8 ISHERWOOD, A
5 HORIN, L
6 LEWIS, J

JOHN HOWARD
PRIME MINISTER

DAVID SOUTHWICK
MELBOURNE PORTS
The **majority-runoff two-round system (TRS)** is another ‘absolute majority’ majoritarian electoral system.
In a **majority-runoff TRS** voters cast a single candidate-centered vote in a single-member district.

Any candidate who obtains an absolute majority in the first round of elections is elected.

If no one obtains an absolute majority, then the top two vote winners go on to compete in a runoff election in the second round.
<table>
<thead>
<tr>
<th>Candidate</th>
<th>Party</th>
<th>Vote share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roch Christian Kaboré</td>
<td>People’s Movement for Progress</td>
<td>53.49</td>
</tr>
<tr>
<td>Zéphirin Diabré</td>
<td>Union for Progress and Reform</td>
<td>29.65</td>
</tr>
<tr>
<td>Tahirou Barry</td>
<td>National Rebirth Party</td>
<td>3.09</td>
</tr>
<tr>
<td>Bénéwendé Stanislas Sankara</td>
<td>Union for Rebirth</td>
<td>2.77</td>
</tr>
<tr>
<td>Ablassé Ouedraogo</td>
<td>Alternative Faso</td>
<td>1.93</td>
</tr>
<tr>
<td>Saran Sérémé</td>
<td>Party for Development and Reform</td>
<td>1.73</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>7.33</td>
</tr>
<tr>
<td>Candidate</td>
<td>Party</td>
<td>Vote share (%)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Lionel A. L. Zinsou-Derlin</td>
<td>Cowry Forces for an Emerging Benin</td>
<td>28.4</td>
</tr>
<tr>
<td>Patrice A. G. Talon</td>
<td></td>
<td>24.8</td>
</tr>
<tr>
<td>Sébastien G. M. A. Adjavon</td>
<td></td>
<td>23.0</td>
</tr>
<tr>
<td>Abdoulaye B. Bio-Tchane</td>
<td>Alliance for a Triumphant Benin</td>
<td>8.8</td>
</tr>
<tr>
<td>Pascal J. I. Koupaki</td>
<td>New Consciousness Rally</td>
<td>5.9</td>
</tr>
<tr>
<td>Robert Gbian</td>
<td></td>
<td>1.6</td>
</tr>
<tr>
<td>Fernand M. Amoussou</td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>Salifou Issa</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>5.3</td>
</tr>
</tbody>
</table>

**Second round**

| Patrice A. G. Talon             |                                                     | 65.4           |
| Lionel A. L. Zinsou-Derlin      | Cowry Forces for an Emerging Benin                  | 34.6           |
A proportional, or proportional representation (PR), electoral system is a quota- or divisor-based electoral system employed in multimember districts.

The rationale behind PR systems is to produce a proportional translation of votes into seats.
Proportional representation (PR) electoral systems come in two main types:

1. List proportional representation systems (List PR)

2. Single transferable vote (STV)
In a list PR system, each party presents a list of candidates to voters in each multimember district.

Parties receive seats in proportion to their overall share of the votes.

These seats are then allocated among the candidates on their list in various ways.
List PR systems differ in important ways:

1. The precise formula for allocating seats to parties
2. The district magnitude
3. The use of electoral thresholds
4. The type of party list employed
All PR systems employ either quotas or divisors to allocate seats to parties.
A quota is essentially the ‘price’ in terms of votes that a party must ‘pay’ to guarantee themselves a seat in a particular electoral district.
A quota, $Q(n)$, is calculated as

$$Q(n) = \frac{V_d}{M_d + n}$$

- $V_d$ is the number of valid votes in district $d$.
- $M_d$ is the district magnitude or number of available seats in district $d$.
- $n$ is the modifier of the quota.
A quota, $Q(n)$, is calculated as

$$Q(n) = \frac{V_d}{M_d + n}$$

- **Hare quota**: $n = 0$.
- **Hagenbach-Bischoff quota**: $n = 1$.
- **Imperiali quota**: $n = 2$.
- **Reinforced imperiali quota**: $n = 3$.
- **The Droop quota** is the same as the Hagenbach-Bischoff quota plus 1.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Votes</td>
<td>47,000</td>
<td>16,000</td>
<td>15,800</td>
<td>12,000</td>
<td>6,100</td>
<td>3,100</td>
<td>100,000</td>
</tr>
<tr>
<td>Seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Quota</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Votes ÷ Quota</td>
<td>4.7</td>
<td>1.6</td>
<td>1.58</td>
<td>1.2</td>
<td>0.61</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>Automatic seats</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Remainder seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
What about the ‘remainder’ seats?

<table>
<thead>
<tr>
<th></th>
<th>Party A</th>
<th>Party B</th>
<th>Party C</th>
<th>Party D</th>
<th>Party E</th>
<th>Party F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Votes</td>
<td>47,000</td>
<td>16,000</td>
<td>15,800</td>
<td>12,000</td>
<td>6,100</td>
<td>3,100</td>
<td>100,000</td>
</tr>
<tr>
<td>Seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Quota</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Votes ÷ Quota</td>
<td>4.7</td>
<td>1.6</td>
<td>1.58</td>
<td>1.2</td>
<td>0.61</td>
<td>0.31</td>
<td>7</td>
</tr>
<tr>
<td>Automatic seats</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Remainder seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Table 13.6** Allocating Seats to Parties Using the Hare Quota
The most common method for allocating the remainder seats is the largest remainder method.

<table>
<thead>
<tr>
<th>Table 13.7: Allocating Seats to Parties Using the Hare Quota with Largest Remainders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party A</td>
</tr>
<tr>
<td>Votes</td>
</tr>
<tr>
<td>Seats</td>
</tr>
<tr>
<td>Quota</td>
</tr>
<tr>
<td>Votes ÷ Quota</td>
</tr>
<tr>
<td>Automatic seats</td>
</tr>
<tr>
<td>Remainder</td>
</tr>
<tr>
<td>Remainder seats</td>
</tr>
<tr>
<td>Total seats</td>
</tr>
</tbody>
</table>
A **divisor**, or **highest average, system** divides the total number of votes won by each party in a district by a series of numbers (divisors) to obtain quotients.

District seats are then allocated according to which parties have the highest quotients.
The three most common divisor systems are:

- **D’Hondt**: 1, 2, 3, 4, …
- **Sainte-Laguë**: 1, 3, 5, 7, …
- **Modified Sainte-Laguë**: 1.4, 3, 5, 7, …
<table>
<thead>
<tr>
<th></th>
<th>Party A</th>
<th>Party B</th>
<th>Party C</th>
<th>Party D</th>
<th>Party E</th>
<th>Party F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Votes</strong></td>
<td>47,000</td>
<td>16,000</td>
<td>15,800</td>
<td>12,000</td>
<td>6,100</td>
<td>3,100</td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Seats</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Votes ÷ 1</td>
<td>47,000 (1)</td>
<td>16,000 (3)</td>
<td>15,800 (4)</td>
<td>12,000 (6)</td>
<td>6,100</td>
<td>3,100</td>
<td></td>
</tr>
<tr>
<td>Votes ÷ 2</td>
<td>23,500 (2)</td>
<td>8,000 (9)</td>
<td>7,900 (10)</td>
<td>6,000</td>
<td>3,050</td>
<td>1,550</td>
<td></td>
</tr>
<tr>
<td>Votes ÷ 3</td>
<td>15,666 (5)</td>
<td>5,333</td>
<td>5,266</td>
<td>4,000</td>
<td>2,033</td>
<td>1,033</td>
<td></td>
</tr>
<tr>
<td>Votes ÷ 4</td>
<td>11,750 (7)</td>
<td>4,000</td>
<td>3,950</td>
<td>3,000</td>
<td>1,525</td>
<td>775</td>
<td></td>
</tr>
<tr>
<td>Votes ÷ 5</td>
<td>9,400 (8)</td>
<td>3,200</td>
<td>3,160</td>
<td>2,400</td>
<td>1,220</td>
<td>620</td>
<td></td>
</tr>
<tr>
<td>Votes ÷ 6</td>
<td>7,833</td>
<td>2,667</td>
<td>2,633</td>
<td>2,000</td>
<td>1,017</td>
<td>517</td>
<td></td>
</tr>
<tr>
<td>Total seats</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>
The key factor influencing the proportionality of an electoral system is the district magnitude.

District magnitude refers to the number of representatives elected in a district.

The larger the district magnitude, the greater the degree of proportionality.
There is considerable variation in the district magnitude across countries.

In 2006 and 2007, Ukraine had a district magnitude of 450.

Serbia currently has a district magnitude of 250.

Historically, Chile has had a district magnitude of 2.
All proportional electoral systems have an electoral threshold.

An **electoral threshold** is the minimum level of support a party needs to obtain representation.
A natural threshold is a mathematical by-product of the electoral system.

A formal threshold is explicitly written into the electoral law.

Electoral system proportionality is low when the electoral threshold is high.
Electoral thresholds can have negative side-effects.

• In Turkey 2002, so many parties failed to surpass the 10% threshold that fully 46% of all votes were wasted.

• In Poland 1993, 34% of the votes were wasted, allowing the former Communists to return to power.
In a **closed party list**, the order of candidates elected is determined by the party itself, and voters are not able to express a preference for a particular candidate.

In an **open party list**, voters can indicate not just their preferred party, but also their favored candidate within that party.

In a **free party list**, voters have multiple votes that they can allocate either within a single party list or across different party lists.
Figure 13.5  South African Closed List PR Ballot Paper
Danish Open List PR Ballot Paper

Folketingsvalget 1990

A. Socialdemokratiet
Ole Stavad
Martin Gierup
Holger Graverse
Ilse Hansen
Arne Jensen
Frank Jensen
J. Risgaard Knudsen
Bjarne Lauridsen
Kaj Poulsen

B. Det Radikale Venstre
Lars Schönberg-Henne
Bent Bundgaard
Marianne Jelved
Bent Jergensen
Hans Larsen-Ledet
Axel E. Mortensen
Lars Lammert Nielsen
Ove Nielsen
Peben Pedersen

C. Det Konservative Folkeparti
Karsten Frederiksen
Niels Ahlmann-Olksen
H. P. Clausen
Suzanne Kogsebøll
Jørgen Lund
Allan Nygaard
Gardar Thynn Pedersen
Per Seeberg
Søren Pflug

D. Centrum-Demokraterne
Peter Duetoft
Gregers Folk Folke Gregersen
Bodil Melgaard Haakonsen
Anton Jepsen
Tove Kattrup
Hartvig Kjeldgaard
Bent V. Villadsen

E. Danmarks Retsforbund
Knud Christensen
Aase Bok-Nielsen
Jone Dyrdal
Karen Hansen
Ejnar Pedersen
Ole Thielemann
Egon Thomsen
The only proportional electoral system that does not employ a party list is the single transferable vote.

The single transferable vote (STV) is a candidate-centered preferential voting system used in multimember districts.
In STV systems, candidates that surpass a specified quota of first-preference votes are immediately elected.

In successive counts, voters from eliminated candidates and surplus votes from elected candidates are reallocated to the remaining candidates until all of the seats are filled.
STV systems, click ➦ here

Australian elections, click ➦ here
STV example

• District magnitude is 3.

• 20 voters.

• 5 candidates: Bruce, Shane, Sheila, Glen, and Ella.

• Droop quota: \[\frac{20}{(3 + 1)} + 1 = 6\]
<table>
<thead>
<tr>
<th>Voting round</th>
<th>Bruce</th>
<th>Shane</th>
<th>Sheila</th>
<th>Sheila</th>
<th>Glen</th>
<th>Ella</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>Shane</td>
<td></td>
<td></td>
<td>Glen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td>Bruce</td>
<td></td>
<td>Ella</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13.9: Results from Twenty Ballots in an STV Election
<table>
<thead>
<tr>
<th>Voting round</th>
<th>Bruce</th>
<th>Shane</th>
<th>Sheila</th>
<th>Glen</th>
<th>Ella</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sheila is elected, and Sheila’s surplus votes are reallocated</td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shane is eliminated</td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bruce is elected</td>
</tr>
<tr>
<td>4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ella is eliminated, and Glen is elected</td>
</tr>
</tbody>
</table>
A mixed electoral system is one in which voters elect representatives through two different systems, one majoritarian and one proportional.
Most mixed systems employ multiple *electoral tiers*.

An *electoral tier* is a level at which votes are translated into seats.

The lowest electoral tier is the district or constituency level. Higher tiers are constituted by grouping together different lower-tier constituencies, typically at the regional or national level.

In a mixed system, it is often the case that a majoritarian system is used in the lowest tier (district level) and a proportional system is used in the upper tier (regional or national level).
There are two basic types of mixed systems.

1. An **independent mixed electoral system** is one in which the majoritarian and proportional components of the electoral system are implemented independently of one another.

2. A **dependent mixed electoral system** is one in which the application of the proportional formula is dependent on the distribution of seats or votes produced by the majoritarian formula.
### Table 13.11  Translating Votes into Seats in an Independent Mixed Electoral System

<table>
<thead>
<tr>
<th></th>
<th>Votes won in each electoral district</th>
<th>National district votes won</th>
<th>Seats won</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Party A</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Party B</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>
In most dependent mixed systems, individuals have two votes.

- One vote is for the representative at the district level (candidate vote).

- One vote is for the party list in the higher electoral tier (party vote).
A Sample Ballot Used in New Zealand's Dependent Mixed Electoral System

YOU HAVE 2 VOTES

PARTY VOTE

Explanations:
This vote decides the share of seats which each of the parties listed below will have in Parliament. Vote by putting a tick in the circle immediately after the party you choose.

- Vote for only one party

ELECTORATE VOTE

Explanations:
This vote decides the candidate who will be elected Member of Parliament for the Taupo electorate. Vote by putting a tick in the circle immediately before the candidate you choose.

- Vote for only one candidate

Final Directions:
1. If you spoil this ballot paper, return it to the officer who issued it and apply for a new ballot paper.
2. After voting, fold this ballot paper so that its contents cannot be seen and place it in the ballot box.
3. You must not take this ballot paper out of the polling booth.
<table>
<thead>
<tr>
<th>Party</th>
<th>Votes won in each electoral district</th>
<th>National district votes won</th>
<th>Seats won</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Party A</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Party B</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>
Map 13.2: Legislative Electoral System Choice around the World in 2016

Legend:
- Black: Mixed
- Dark Gray: Proportional
- Medium Gray: Majoritarian
- Light Gray: Not Assessed