

Proportional Representation by the Single Transferable Vote (PR-STV)

Weekend 4 : Session 2

Basic principles

- PR-STV aims to create a representative assembly which mirrors the pattern of electoral support in the political community
- Unlike PR-List which reflects the support for political parties, PR-STV achieves proportionality by adding the preferences of voters for individual candidates
- PR-STV requires a preferential ballot on which voters are required to rank candidates (a similar ballot is required for the alternative vote, AV)

Basic principles

- While the mechanics of vote counting under PR-STV can be complicated, the principle is simple—candidates are elected from multimember districts in proportion to the electoral support for the candidates expressed in the voters' preferences
- PR-STV is an anti-majoritarian electoral system; its logic is to promote diversity in representation rather than simple choices between two large parties or groups of parties

History and context

- In the second half of the 1800s, there was apprehension that the extension of the franchise would create political parties which would prevent the representation of the diversity of opinion in parliaments
- PR-STV was devised as way of permitting individuals and groups to express a variety of views in representative assemblies even though their attitudes might be shared by a minority in the community

History and context

- Because the voters' choices are based on ranking candidates rather than choosing a party, PR-STV has an anti-party flavour
- The voters have a choice of which of a party's candidates they prefer
- Parties do not have the ability to guarantee victory to a particular candidate—there are no safe seats under PR-STV
- Each candidate must maintain his or her own personal appeal to the voters

History and context

- Candidates may see their major rivals as other candidates from their own party rather than candidates from opposing parties
- The ability of parties to discipline their candidates is weakened
- This explains, in part, why PR-STV has not been popular with governing parties—it has been adopted in only a few systems

Key elements: District Magnitude

- As with any proportional system, the DM must be 2 or more
- It is not necessary to have the same DM for every electoral district. Ireland has DMs of 3, 4, and 5; the Australian Senate has DMs of 6 and 2; the Western Australian upper house has DMs of 5 and 7
- PR-STV can also be used in at large elections with a DM of 21 (this makes for a long ballot paper)

Key elements: Ballot structure

- Voters must use a preferential ballot for PR-STV (see the examples of AV ballots in Weekend 3; Session 2)
- Voters must rank the candidates
- Voters can be required to express preferences for a minimum number of candidates, or for all candidates
- The design of the ballot paper is important: the grouping and ordering of candidates can be a contentious issue

Three ballots for PR-STV: 5 members to be elected

Red Party Candidates	
Angela	1
Harley	2
Julie	3
Nick	4
Paul	5
Blue Party Candidates	
Brad	
Dan	
Edith	
Ian	
Lianne	
Gold Party Candidates	
Claude	
Frankie	
Gladys	
Manjit	
Ron	
Independents	
Katie	

Blue Party Candidates	
Brad	
Dan	
Edith	
Ian	
Lianne	
Gold Party Candidates	
Claude	
Frankie	
Gladys	
Manjit	
Ron	
Independents	
Katie	
Red Party Candidates	
Angela	4
Harley	5
Julie	1
Nick	2
Paul	3

Red Party Candidates	
Nick	4
Harley	2
Paul	5
Angela	1
Julie	3
Blue Party Candidates	
Edith	
Lianne	
Dan	
Ian	
Brad	
Gold Party Candidates	
Frankie	
Ron	
Claude	
Manjit	
Gladys	
Independents	
Katie	

Key elements: Formula

- PR-STV is a quota preferential system. This means that candidates are elected as they gain a quota of votes. The quota usually used is the Droop quota:

$$\text{Quota} = \frac{\text{Total valid votes in the district}}{\text{Number of seats to be filled (DM) + 1}} + 1$$

- With a DM of 5, for example, the quota is votes/ (5+1) plus one vote, or 16.7 percent of the valid vote

Key elements: Formula

- After an election, the first preference votes are counted
- If a candidate gains a quota of first preferences, the candidate is declared elected
- If the candidate has more than a quota, the surplus is transferred according to the voters' second preferences indicated on the ballot papers (there is a variety of ways of doing this, some quite technical).
- Once there are no more surplus votes to transfer, the least successful candidate is excluded, and the votes are assigned to other candidates remaining in the count according to the voters' second preferences

Key elements: Formula

- This process of distribution of a surplus once a candidate reaches a quota and is elected, followed by the exclusion of the least successful candidates continues until the required number of members is elected
- An animated demonstration of this process can be found on the website of the State Electoral Office of South Australia:

<http://www.seo.sa.gov.au/flash.htm>

Variations

- District magnitude is the most common variation. DMs below 5 reduce proportionality to a marked degree
- Variations can also occur in the number of preferences required for a ballot to be valid
- As already mentioned, ballot design is important; many variations are possible
- At Australian Senate elections, instead of numbering all the squares, voters are urged by parties to make a single party choice 'above the line'. This makes the PR-STV system operate very like a PR-List system

Examples: Ireland

- The Republic of Ireland has used PR-STV for its lower house elections since 1922
- DMs vary between 3 and 5 in a house of 166 members
- Irish politics is brokerage politics; local issues are as important as national ones, and successful candidates must build a local support base
- There has been only one party (Fianna Fáil) in a position to gain a majority of seats on its own. Fine Gail and the smaller Labour Party have formed governing coalitions. Most governments, including coalitions (and minority coalitions) have lasted several years

Examples: Ireland

- There have been two attempts by governments to change the electoral system to a single member system, but both proposals failed at the required referendums
- An example of the counting process under PR-STV is given for Meath (ballot package), and the results of the 2002 Irish election showing the distribution of preferences is available on the web at:

<http://election.polarbears.com/online/online.htm>

Examples: Tasmania

- Tasmania is the only state in the Australian federation to use PR-STV for the election of members of its lower house (the House of Assembly)
- Tasmania adopted PR-STV in 1909 before the current party system had fully emerged
- The Tasmanian House of Assembly has been based on 5 electoral districts; the district magnitude has varied over the years; it was originally 6, then 7, and 5 since 1998. (The House has been comprised of 30, 35 and now 25 members for a current population of 480,000)

ROTATION No. 1 — DENISON — ORDINARY

R1



Electoral Act 1985 — TASMANIA

House of Assembly Ballot-Paper — Election of 5 Members

Electoral Division of Denison

DIRECTIONS — Mark your vote on this ballot-paper by placing the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20 in the squares immediately to the left of the names of the respective candidates so as to indicate the order of your preference for them.

YOUR VOTE IS NOT COUNTED UNLESS YOU VOTE FOR AT LEAST 5 CANDIDATES

CANDIDATES

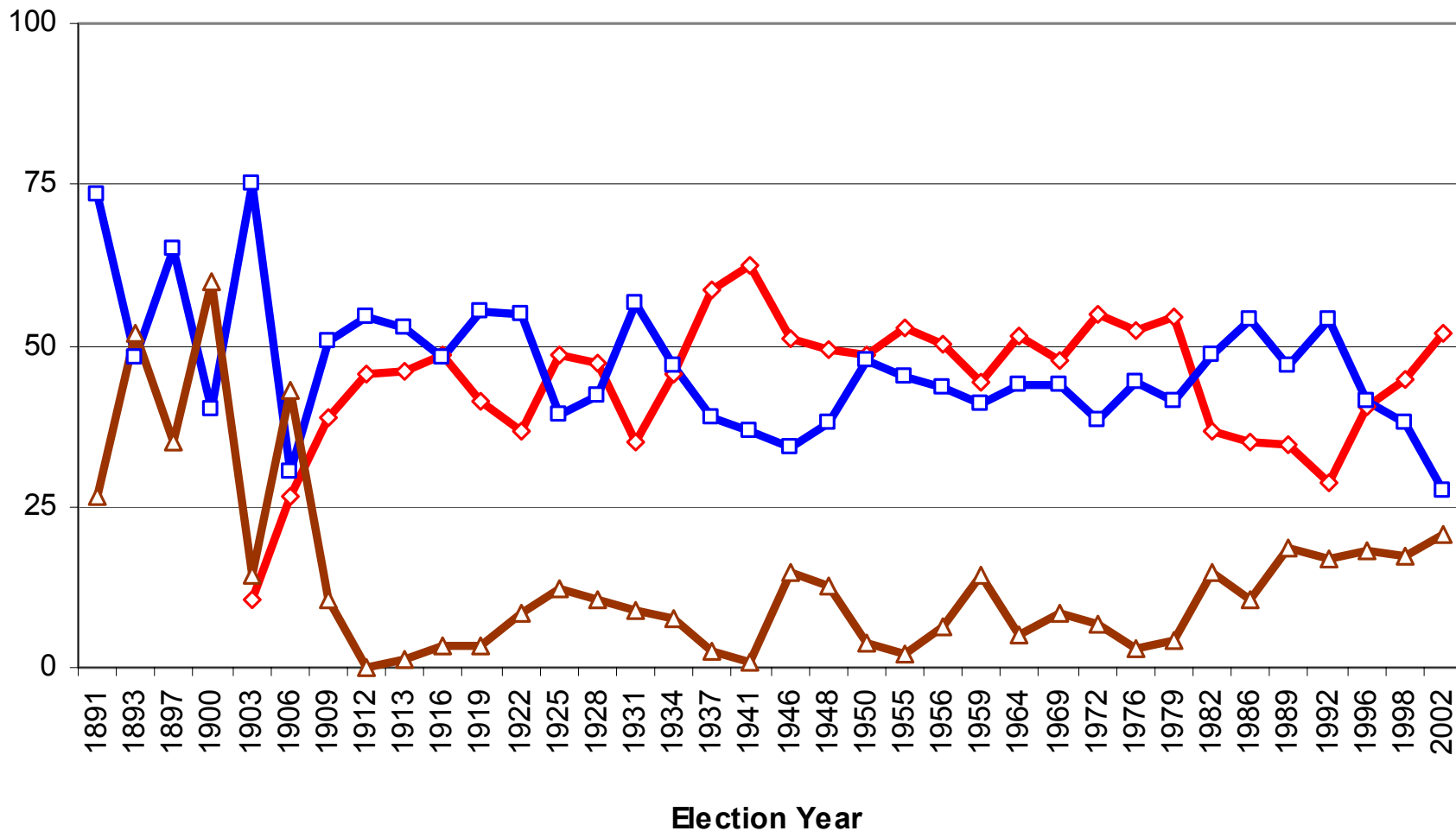
LIBERAL PARTY	AUSTRALIAN LABOR PARTY	SOCIALIST ALLIANCE	TASMANIAN GREENS	GROUP E
<input type="checkbox"/> MAV Steve	<input type="checkbox"/> BARTLETT David	<input type="checkbox"/> GARFIELD Shua	<input type="checkbox"/> HALL Jo	<input type="checkbox"/> NICKLASON Frank
<input type="checkbox"/> KUPLIS Jan	<input type="checkbox"/> BACON Jim	<input type="checkbox"/> BAINBRIDGE Alex	<input type="checkbox"/> HUGHES Cath	<input type="checkbox"/> POULTON Steve
<input type="checkbox"/> CHEEK Bob	<input type="checkbox"/> STURGES Graeme		<input type="checkbox"/> PUTT Peg	
<input type="checkbox"/> HODGMAN Michael	<input type="checkbox"/> JACKSON Judy		<input type="checkbox"/> HINES Mat	
<input type="checkbox"/> STEVEN Tony	<input type="checkbox"/> CROTTY James		<input type="checkbox"/> GRAHAM Tim	
<input type="checkbox"/> WOOLNOUGH Matt				

NOTE — The name of a political party, or the expression 'Group E', appearing above the names of certain candidates in this ballot-paper indicates that those candidates have been grouped under that party name or in that group by mutual consent.

Examples: Tasmania

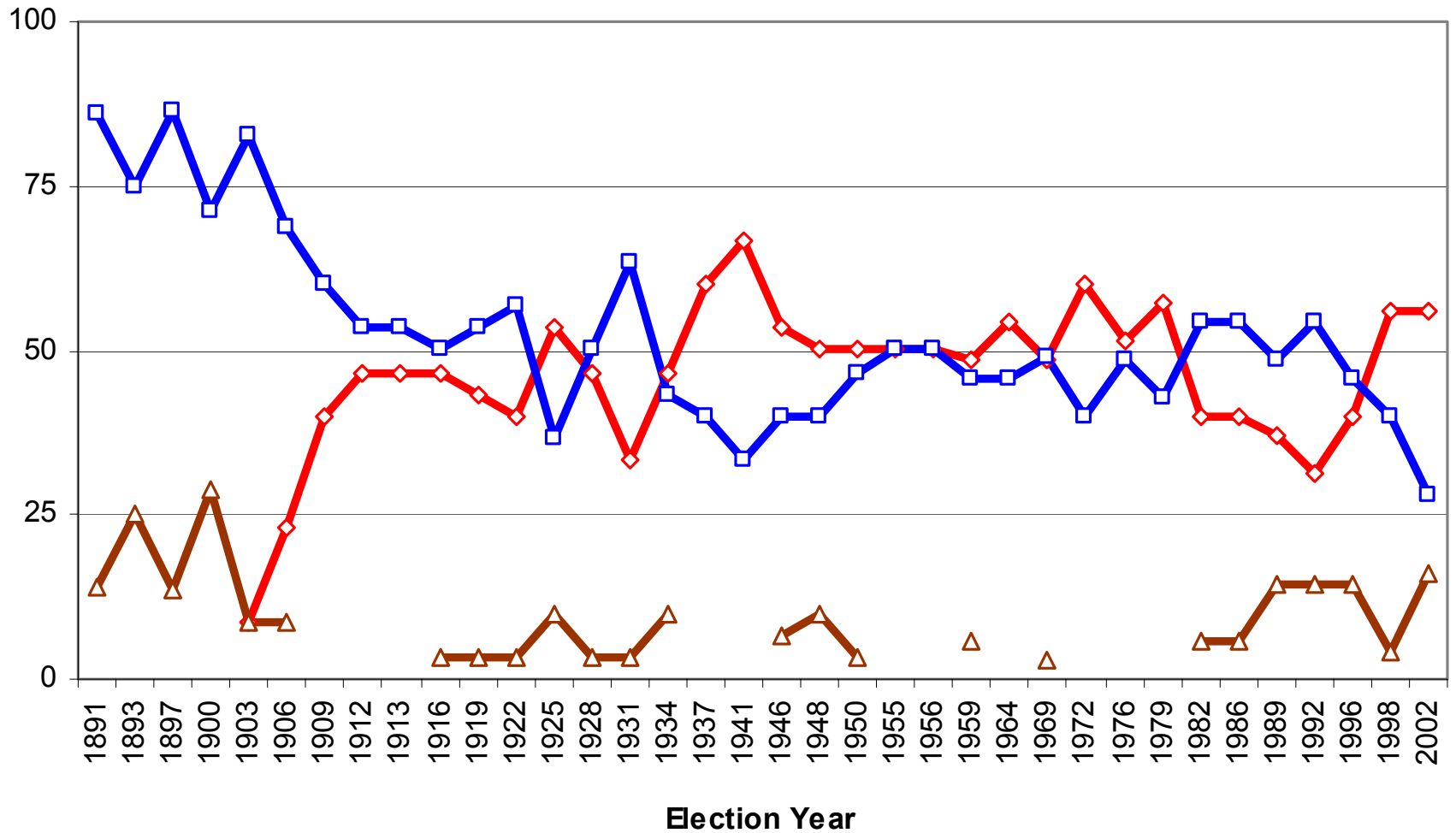
- Tasmania, although small (about twice the size of Vancouver Island), is strongly regionalized with local issues dominating politics
- Politics has been dominated by two large parties, the Australian Labor Party and the Liberal Party (and its precursors). Independent members and the emergence of a Green party in the 1980s have occasionally altered this pattern

**Tasmanian House of Assembly, general elections
1891-2002: Vote share of ALP, Liberal Party (and precursors), and all
other parties (% of first preference vote)**



◆ ALP
 ■ Liberal Party (& precursors)
 ▲ Minor parties & independents (residual)

Tasmanian House of Assembly, general elections 1891-2002: Seat share of ALP, Liberal Party (and precursors), and minor parties and independents (%)



◆ ALP
 □ Liberal Party (& precursors)
 ▲ Minor parties & independents

Examples: Tasmania

- Candidates must have strong constituency support in addition to party endorsement
- This creates competition between candidates of the same party.
- Most governments have been single party governments. Tasmania had a Labor Party government from 1937 until 1969
- Tasmania has several electoral rules which limit party control of candidates. While candidates are grouped on the ballot by party, the ordering is randomized (Robson rotation), and party advertisements indicating a party preferred order of candidates are banned (see ballot)

Examples: Australian Senate

- The Australian Senate is the upper house of the parliament of the Commonwealth of Australia.
- The six states and two territories vote as single electoral districts (currently states DM of 6 (12), territories DM of 2) for a current Senate of 76 senators
- PR-STV was adopted for the 1949 Senate election partly for partisan gain and partly to solve a long running problem with the composition of the Senate
- The Senate is an interesting example of how PR-STV can be manipulated to operate like a PR-List system.

Examples: Australian Senate

- Until 1983, voters were presented with ballots without party labels and had to rank all candidates. This difficult task was made easier by party 'how-to-vote' cards which encouraged voters to fill in the ballot in a party preferred order.
- Since 1984, voters have the option of voting 'above the line' on a ballot which permits a single party choice. The great majority of voters (more than 90 percent) choose this option with the result that candidates are always elected in a party preferred order, and preferences are assigned by party managers before the election (see ballot)

Examples: Australian Senate

- This provides a strong contrast with Ireland and Tasmania where the party preferred ordering of candidates is not an issue (Ireland) or actively discouraged (Tasmania)
- Note that the Australian Senate, as the upper house of the national parliament, attracts some candidates who use their party label as part of an interest group campaign on national, state or even local issues
- Again, this contrasts with the experience of Ireland and Tasmania

Evaluation

Impact on the operation of government

- Stable and effective government **Moderate**
- Electoral accountability **Good**
- Parliamentary check on government **Moderate**
- Monitoring elected representatives **Good**
- Fair representation of parties/groups **Good/Moderate**
- Democratic parties **Good**

Evaluation

Impact on voters

- Choice for the voter **Good**
- Identifiable representation **Good**
- Encouragement to participate **Moderate**
- Identifiable representation **Good**
- Equality of the vote **Good**

Assessment of PR-STV: Strengths

- PR-STV provides the benefits of proportional representation—a close match between seats shares and vote share of parties
- Smaller parties have a better chance of gaining representation
- It gives the voter the opportunity to vote for individual candidates as well as parties, and to choose among candidates of the same party or different parties.
- It permits candidates to be elected who appeal to a particular constituency, whether geographical or based on some other characteristic
- It does not discriminate against independent candidates

Assessment of PR-STV: Weaknesses

- PR-STV requires a preferential ballot which is more complicated for voters than a categorical choice
- There is no single, geographically defined, local member
- PR-STV is more likely to produce coalition governments than plurality or majority systems
- It may encourage regional and/or sectional politics and/or brokerage politics rather than politics based on province-wide issues
- It has the potential to weaken party control of candidates and members of parliament
- The effect of PR-STV can be altered by other electoral rules such as ballot design and campaigning rules

PR-STV in BC?

- Voters outside the lower mainland and Vancouver Island would find themselves in ridings at least 3 times or 5 times bigger than at present
- PR-STV permits the election of candidates with strong local support, but this would require a change in the way parties and voters in dispersed communities viewed candidate selection and campaigning
- Competition between party candidates in electoral contests would require voters and parties to adjust to electoral campaigns which were more personalized
- Voters would have to learn to use preferential ballots (but these seemed to work satisfactorily in 1952-53)