

Single Transferable Vote (STV)

**Combining Preference Voting,
Proportionality and Local Representation**

Objectives

- to demonstrate how Single Transferable Vote works
- to illustrate how proportionality can be achieved under this system

Key features

- proportional system where voters vote preferentially for candidates
- candidate based not party based
- surplus votes are transferred to other candidates

Inherent tension in Single Transferable Vote (STV)

- local representation best achieved with smaller geographic districts
- proportionality best achieved with larger geographic districts

Where is STV used?

- Ireland and Malta
- Australia at the national Senate and state upper house (state Senate)
- in lower house elections in Tasmania Australian Capital Territory

Elements of STV

- district magnitude is always greater than one (*i.e.*, multi-member districts)
- ballot structure is ordinal (*i.e.*, ranking of candidates)
- formula is proportional -- DM must be large to achieve proportionality at district level

District magnitude is always greater than one

- to achieve proportionality solely throughly candidate-based elections at the district level, DM must be greater than one

TREORACHA

1. Féach chuige go bhfuil an marc oifigiúil ar an bpaipéar.
2. Scriobh an figiúr 1 le huis aims an chéad iarthóra rogha leat, an figiúr 2 le huis do dhara rogha agus mar sin de.
3. Fill an páipéar ionas nach bhfeicfead do vóta. Taispeáid *cil an pháipéir* don oifigeach ceannais, agus cuir sa bhosca ballóide é.

INSTRUCTIONS

1. See that the official mark is on the paper.
2. Write 1 beside the name of the candidate of your first choice, 2 beside your second choice, and so on.
3. Fold the paper to conceal your vote. Show the *back of the paper* to the presiding officer and put it in the ballot box.

	AHERN - FIANNA FÁIL (BERTIE AHERN) of St. Lukes, 161 Lower Drumcondra Road Dublin 9; Taoiseach)		
	COSTELLO - THE LABOUR PARTY (JOE COSTELLO of 66 Aughrim Street Dublin 7; Public Representative)		
	FITZPATRICK - FIANNA FÁIL (DR. DERMOT FITZPATRICK of 80 Navan Road, Dublin 7; Medical Doctor and Public Representative)		
	GREGORY - NON PARTY (TONY GREGORY of 5 Sackville Gardens; Ballyhough, Dublin 3; Full-Time Public Representative)		
	KEHOE - SINN FÉIN (NICKY KEHOE of 30 Fanum Road Cabra, Dublin 7; Bricklayer)		
	MITCHELL - FINE GAEL (JIM MITCHELL of Leinster House, Dublin 2; Full-Time Public Representative)		
	O'DONNELL - NON PARTY (PATRICK NOEL O'DONNELL of 14 Cliftonville Road, Glasnevin, Dublin 9; Businessman)		
	O'LOUGHLIN - COMHAR CRÍOSTAÍ - CHRISTIAN - SOLIDARITY PARTY (PAUL THOMAS O'LOUGHLIN of Flat 4 255 Northcircular Road Phibsborough Dublin 7; Shop Assistant)		
	PREDEVILLE - NON PARTY (TOM PREDEVILLE of 52 Goldsmith Street, Phibsborough, Dublin 7; News Reporter)		
	SIMPSON - GREEN PARTY - COMHAONTAS GLAS (TOM SIMPSON of 3 Hampstead Avenue, Glasevin, Dublin 9; FAS Instructor)		

Ballot structure: ranking local candidates

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Ballot structure: ranking local candidates

- voters rank candidates so that *preferences* are accounted for
- ballot structure is ordinal

Ballot Structure: ranking local candidates

- in Ireland & Malta, voters rank as many or few candidates as they wish
 - greater choice but ballot becomes “exhausted” earlier
- in Australian elections, voters must rank all candidates or a minimum
 - ‘compulsory choice’ but ensures that ballots are not “exhausted”

STV formula is proportional

- quota formula is the minimum vote that ensures all seats will be filled
- votes divided by seats +1, then add 1
 - quota = $\lceil \text{votes} / \text{seats} + 1 \rceil + 1$

- Anyone who reaches quota is elected.
- If all seats are not filled, how do other candidates get to the quota?
- Votes are transferred from other candidates until all seats are filled.

Which votes are transferred?

- those votes not initially used to elect a candidate:
 - surplus votes (votes above the quota)
 - transfers from eliminated candidates

Counting procedures under STV

1. transfer surplus votes

- votes above the quota (surplus votes) are transferred to other candidates

How to transfer surplus ballots?

- transfer 'last parcel' of ballots
- transfer random selection of ballots
- transfer all ballots at a discounted value

Counting procedures under STV

2. transfer last placed candidate

- the votes of the eliminated candidates are transferred by counting the next choice on those ballots
- this process of transferring votes continues until all seats are filled

Summary of the counting procedures under STV

- winners' surplus votes are transferred
- lowest candidates' votes are transferred

Effects of STV

- greater voter choice
 - among candidates of different parties
 - among candidates within the same party
- local representation
- proportionality if DM is large

Effects of STV

- creates intra-party competition because members of the same party compete against each other
- more independent candidates
- Ireland Malta have small number of parliamentary parties
 - may be a result of STV or political culture

Relating STV to principles

- **legitimacy**

- seeks to achieve proportionality while maintaining local, candidate-centred elections

- but

- achieving both proportionality and local representation may be difficult

Relating STV to principles

- **fairness of representation**

- can achieve proportionality (with large DM)

- but

- does not have list mechanism which may encourage demographic representation

Relating STV to principles

- **voter choice**

- offers choice of candidates *among* and *between* parties

Relating STV to principles

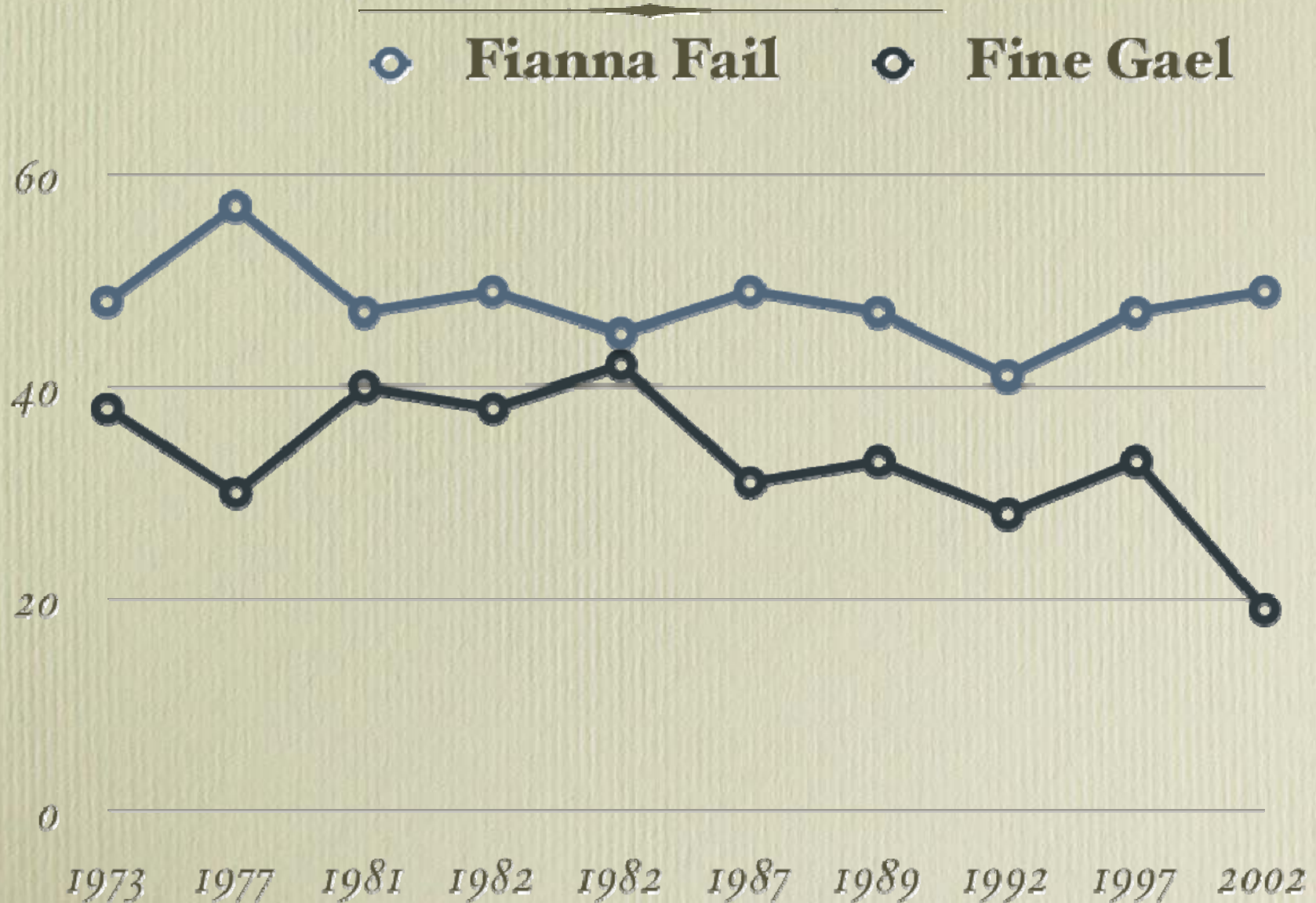
- **effective parties**

- small parties and independents can obtain seats

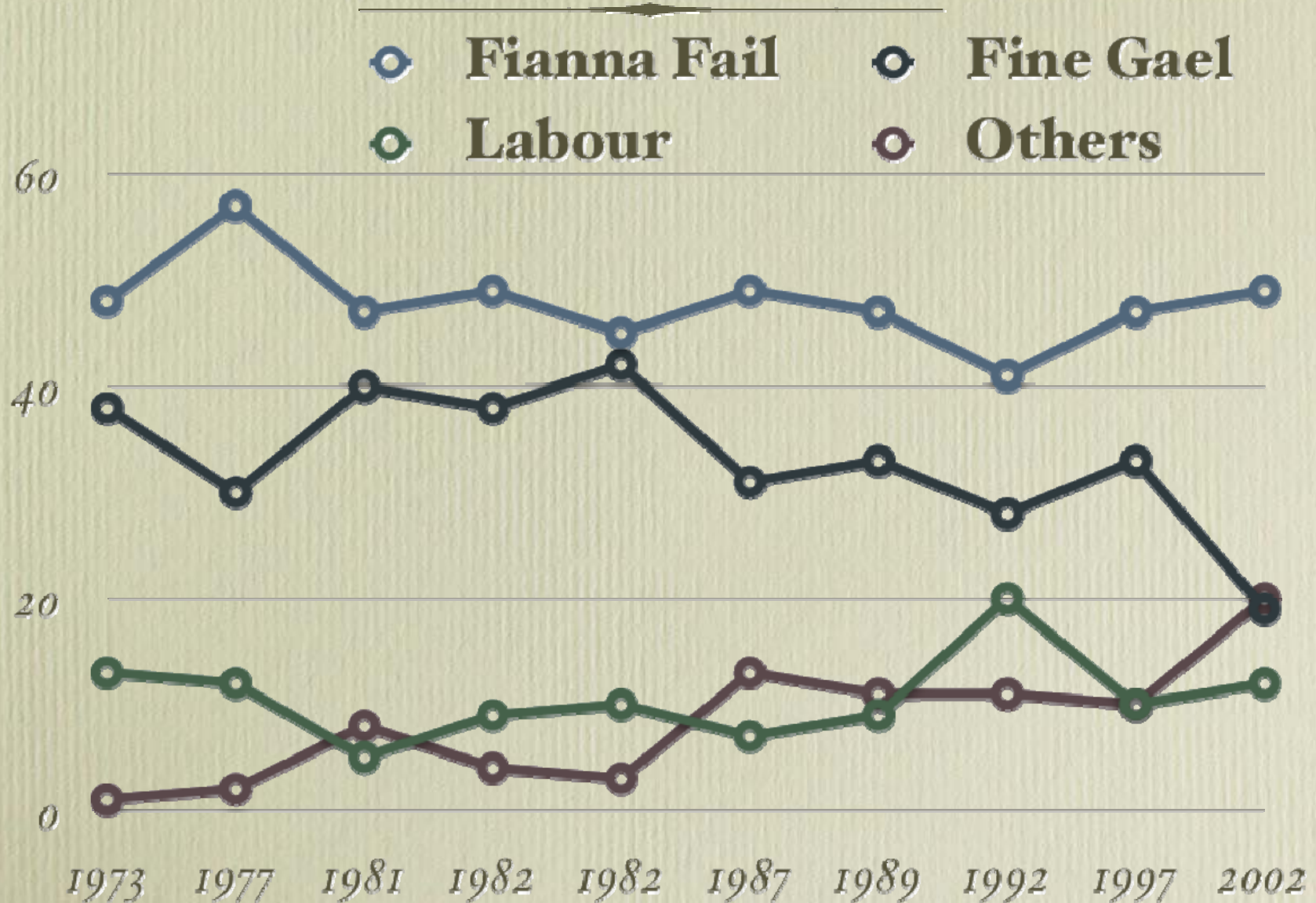
- but

- large parties tend to dominate in STV systems

Elections in the Republic of Ireland percentage of seats won

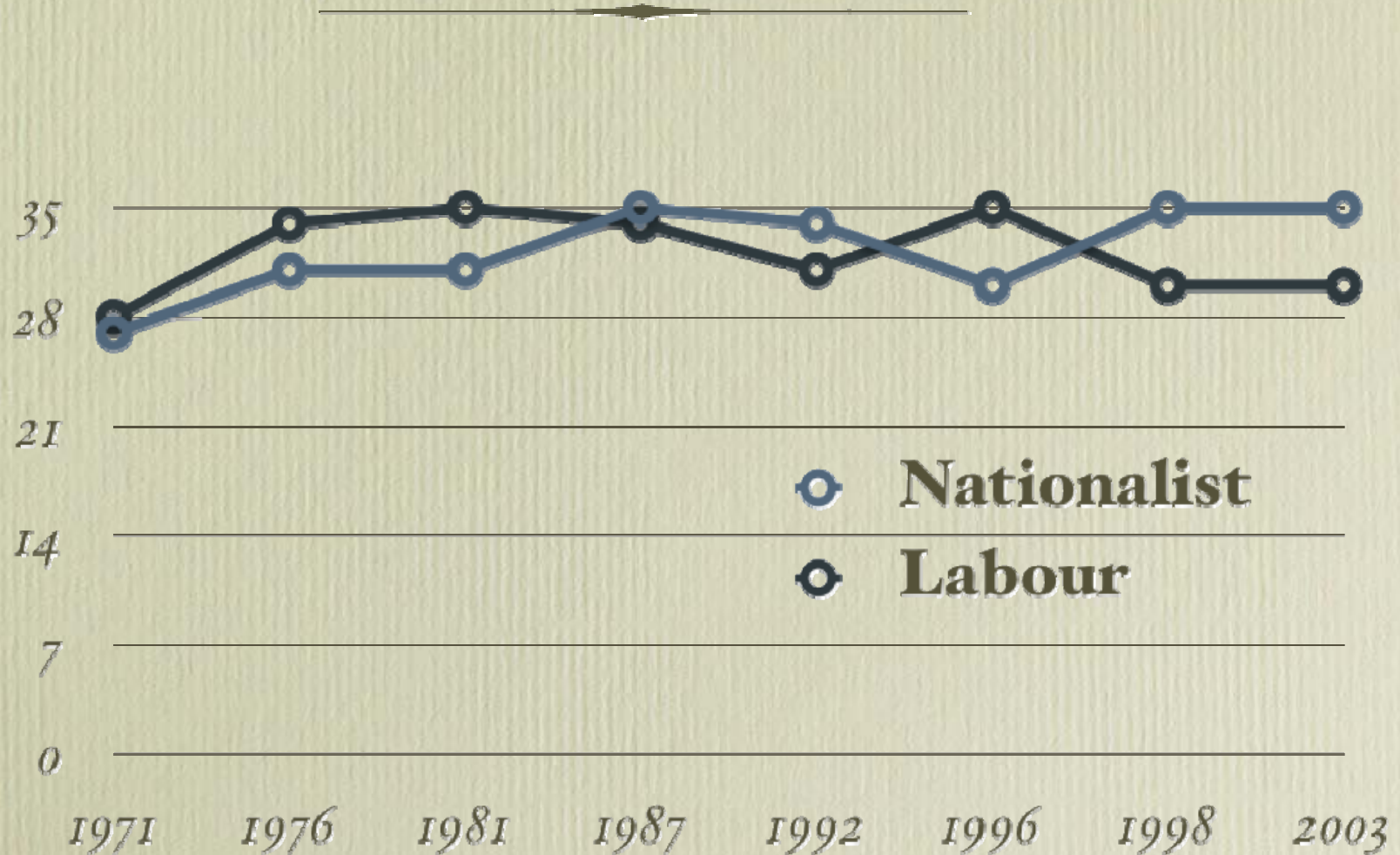


Elections in the Republic of Ireland percentage of seats won



Elections in Malta

number of seats won



New South Wales Senate (DM = 21)

- In 2003, Labour and Liberal received 71% of seats
- 4 other parties were elected (including the Shooters Party)

New South Wales Senate (DM = 21)

- In 1999, Labour and Liberal received 57% of seats (8 and 4 seats)
- 1 other party received two seats
- 7 other parties received one seat (including the Outdoor Recreation Party)

Relating STV to principles

- **stable and effective government**

- a small number of large parties contributes to stable government

Relating STV to principles

- **accountability**

- local representation ensures connection between voters and representatives

- but

- multi-member districts can dilute local representation

Relating STV to principles

- **simplicity and practicality**

- complex voting if compelled to vote for all candidates

- complex counting procedure

- but

- voters have adapted to it in some democracies

Conclusion

- seeks to achieve proportionality using only local, candidate-centred election
- encourages electoral competition within a party
- allows for voter choice by ordinal ranking

Ontario



Citizens' Assembly
on Electoral Reform

L'Assemblée des citoyens
sur la réforme électorale