

# Electoral systems

## Lesson 4

# 1. Types of electoral systems

# Electoral System

- District magnitude: representatives per district
- Ballot structure: individual or party
- Type of vote: choice of one, several, or ranking
- Electoral formula: votes => seats

# Plurality System

- aka First-Past-the-Post, Winner-Take-All or Single Member Districts (SMDs)
- Formula: most votes wins seats
- Why does district magnitude usually = 1?
  - What happens when district magnitude > 1?
- A few problems:
  - Drawing district boundaries: gerrymandering
  - Few choices
  - Can win with minority of votes
  - All politics is local

## VOTE FOR ONE CANDIDATE ONLY

<b>1</b>	<b>GRIFFIN</b> Theresa Griffin of 16 Dovedale Road, Liverpool L18 1DW Labour Party	
<b>2</b>	<b>MORRIS</b> Richard James Morris of 46 Croxteth Road, Liverpool L8 3SQ Liverpool Green Party	
<b>3</b>	<b>MUIES</b> Gabriel Muies of 26 Loudon Grove, Liverpool L8 8AT Independent	
<b>4</b>	<b>PRIDDIE</b> Hulbert Llewelyn Priddie of 10 Lesseps Road, Liverpool L8 0RD Liberal Democrat	
<b>5</b>	<b>ZSIGMOND</b> Carol Ann Zsigmond of 43 Rodney Street, Liverpool L1 9EW Conservative Party Candidate	

Figure 2.1 A British SMP ballot paper

# Majority System

- Two round system
- Only certain candidates move on to second round
  - Either top two or all with  $>$  certain % of vote
- Common in presidential elections. Why?
- What can go wrong?

# France, 2002

First Round	
Chirac	20%
Le Pen	17%
Jospin	16%
Bayroux	7%
Lagullier	6%
Many others	...

Second Round	
Chirac	82%
Le Pen	18%

# Proportional Representation

- Formula: Assign seats to parties based on vote percentages
- Therefore district magnitude  $> 1$ . Why?
  - Chilean system, DM = 2. How does it work?
- Therefore usually vote for parties not individuals





# BALLOT PAPER

Place your mark next to the party you choose  
 Etse lesameo pele mabala oo u o tsehang  
 Tseba uqhawo ehlolani kwantlemba tshetshisa  
 Endo mabala ehlolani ka vanda len u o tsehang  
 Bese lesameo go rabaqo le tseko le gape  
 Tseba uqhawo tsho ehlolani rabaqo ophethisa

Place a mark next to the party you choose  
 Otsa lesameo le gape go tseko le phole joo u o tsehang  
 Kwa ntsi ka tseko phole le tseko joo ntsi tsho  
 Tseba uqhawo tsho ehlolani kwantlemba tshetshisa  
 Dindeba uqhawo ehlolani ehlolani kwantlemba tshetshisa

PAN AFRICANIST CONGRESS OF AZANIA		PAC		<input type="checkbox"/>
SPORTS ORGANISATION FOR COLLECTIVE CONTRIBUTIONS AND EQUAL RIGHTS		SOCCER		<input type="checkbox"/>
THE KEEP IT STRAIGHT AND SIMPLE PARTY		KISS		<input type="checkbox"/>
VRYHEIDSPRONT - FREEDOM FRONT		VF-FF		<input type="checkbox"/>
WOMEN'S RIGHTS PEACE PARTY		WRPP		<input type="checkbox"/>
WORKERS' LIST PARTY		WLP		<input type="checkbox"/>
XIMOKO PROGRESSIVE PARTY		XPP		<input type="checkbox"/>
AFRICA MUSUM PARTY		AMP		<input type="checkbox"/>
AFRICAN CHRISTIAN DEMOCRATIC PARTY		ACDP		<input type="checkbox"/>
AFRICAN DEMOCRATIC MOVEMENT		ADM		<input type="checkbox"/>
AFRICAN MODERATES CONGRESS PARTY		AMCP		<input type="checkbox"/>
AFRICAN NATIONAL CONGRESS		ANC		<input type="checkbox"/>
DEMOCRATIC PARTY - DEMOKRATIESE PARTY		DP		<input type="checkbox"/>
DIKWANKWETLA PARTY OF SOUTH AFRICA		DPSA		<input type="checkbox"/>
FEDERAL PARTY		FP		<input type="checkbox"/>
LUSO - SOUTH AFRICAN PARTY		LUSAP		<input type="checkbox"/>
MINORITY FRONT		MF		<input type="checkbox"/>
NATIONAL PARTY - NASIONALE PARTY		NP		<input type="checkbox"/>
INKATHA FREEDOM PARTY - IQEMBU LENKATHA YENKULULEKO		IFP		<input type="checkbox"/>

Presented by the Voter Education Programme of the Independent Electoral Commission.

Figure 4.2 A South African PR list ballot paper

# Variations on PR

- District size = # of elected officials/district
  - Larger districts => more proportional. Why?
- Formulas for votes => seats
- Thresholds: only parties with  $> X\%$  of votes get seats
- Open/Closed List
  - Closed List: can only vote for party
  - Open List: can also choose candidate

# Poland and thresholds

- 1991 elections – 1<sup>st</sup> fully free
  - 20 parties get seats
  - Smallest gets 0.5% of vote and 1 seat (largest around 15%)
  - Includes Party X, Friends of Beer Party
- 1993 elections (5% threshold)
  - 6 parties get seats
  - 35% of votes to parties with less than 5%
- Later elections: voters learn

Arrondissement . . . . .  
 Election de . . . . . représentants.  
 Election de . . . . . sénateurs.  
 Le . . . . . 19..

SIGLE

1	2	3	4
[ ]	[ ]	[ ]	[ ]
Verbois	Collin	Maenhout	Nicoles
Dubois	Delval, Jan	Ducange	5
Amman	Uyterelet	Hermand	[ ]
	Mabille	Jacques	[ ]
	Nelson	Linsack	Delval, Pieter
	Nick	Delcampe	SUPPLEANT
	Papin	Niemand	Van Loy
	Gelris	SUPPLEANTS	6
	SUPPLEANT	Xhoffer	[ ]
	Vermou	Tikquin	[ ]
		Van Dierst	Delton
		Robin	SUPPLEANT
			Hommen

Figure 4.3 A Belgian PR list ballot paper

# Worries with PR

- Extremism
- Reifies divisions
- Weaker governments?
- Less accountability of MPs

# Mixed Electoral Systems

- Combine majoritarian and PR
- Mixed-member proportional - PR half determines total allocation (eg, Germany)
- Mixed-member parallel – each half separate

# Sie haben 2 Stimmen

**hier 1 Stimme**  
für die Wahl  
eines Wahlkreisabgeordneten  
(Erststimme)

**hier 1 Stimme**  
für die Wahl  
einer Landesliste (Partei)  
(Zweitstimme)

1	<b>Dr. Kreutzmann, Heinz</b> Parl. Staatssekretär Borken (Hessen) Kellerwaldstraße 7 <b>SPD</b>	Sozialdemo- kratische Partei Deutschlands	<input type="radio"/>
2	<b>Jagoda, Bernhard</b> Obersekretär a. D. Schwalmstadt-Treysa Am Weißen Stein 31 <b>CDU</b>	Christlich Demo- kratische Union Deutschlands	<input type="radio"/>
3	<b>Wilke, Otto</b> Elektromeister Demisee-Adorf Bredelerer Straße 1 <b>F.D.P.</b>	Freie Demokratische Partei	<input type="radio"/>
4	<b>Funk, Peter</b> Werkzeugmacher Baumatal 6 Triftweg 6 <b>DKP</b>	Deutsche Kommunistische Partei	<input type="radio"/>
5	<b>Keller, Gerhard</b> Zivildienstleistender Frielendorf 2 Friedhofsweg 30 <b>GRÜNE</b>	DIE GRÜNEN	<input type="radio"/>

<input type="radio"/>	<b>SPD</b>	Sozialdemokratische Partei Deutschlands Leber, Matthofer, Jahn, Frau Dr. Timm, Zander
<input type="radio"/>	<b>CDU</b>	Christlich Demokratische Union Deutschlands Dr. Dregger, Zink, Dr. Schwarz- Schilling, Frau Geier, Haase
<input type="radio"/>	<b>F.D.P.</b>	Freie Demokratische Partei Mischnick, von Schoeler, Hoffe, Wurbs, Dr. Prinz zu Solms-Hohensolms-Lich
<input type="radio"/>	<b>DKP</b>	Deutsche Kommunistisch Partei Mayer, Knopf, Frau Dr. Weber, Funk, Frau Schuster
<input type="radio"/>	<b>GRÜNE</b>	DIE GRÜNEN Frau Ibbeken, Hecker, Horacek, Kerschgens, Kuhnert
<input type="radio"/>	<b>EAP</b>	Europäische Arbeiterpartei Frau Liebig, Halßmann, Stalleich, Frau Kaestner, Stalla
<input type="radio"/>	<b>KBW</b>	Kommunistischer Bund Westdeutschland Schmierer, Frau Monich, Frau Eckardt, Dresler, Lang
<input type="radio"/>	<b>NPD</b>	Nationaldemokratische Partei Deutschlands Philipp, Brandt, Sturtz, Lauck, Bauer
<input type="radio"/>	<b>V</b>	VOLKSFRONT Gotz, Taufertshofer, König, Hebe, Frau Weißert

Figure 5.1 A German MMP ballot paper

# Preference Voting

- Rank candidates in order of preference – first, second, third...
- Forces parties to seek support from supporters of other parties
- Plurality version: alternative vote (instant runoff)
- Proportional version: single transferable vote



# Alternative Vote

- If one candidate gets a majority of first preferences, then wins
- If not, then eliminate candidate with fewest and redistribute their second preferences
- What sort of incentives?
  - Also a PR version, single-transferable vote (STV)
- How do voters need to be distributed?

**BALLOT PAPER  
HOUSE OF REPRESENTATIVES  
WESTERN AUSTRALIA  
ELECTORAL DIVISION OF  
MOORE**

***Number the  
boxes from 1 to 5  
in the order of  
your choice.***

LLOYD, Alan R  
AUSTRALIAN DEMOCRATS

WATSON, Mark  
GREY POWER

FILING, Paul  
LIBERAL

STEELS, Brian  
THE GREENS (W.A.)

BLANCHARD, Allen  
AUSTRALIAN LABOR PARTY (ALP)

**Remember...number every box  
to make your vote count.**

Australian Electoral Commission **AEC**

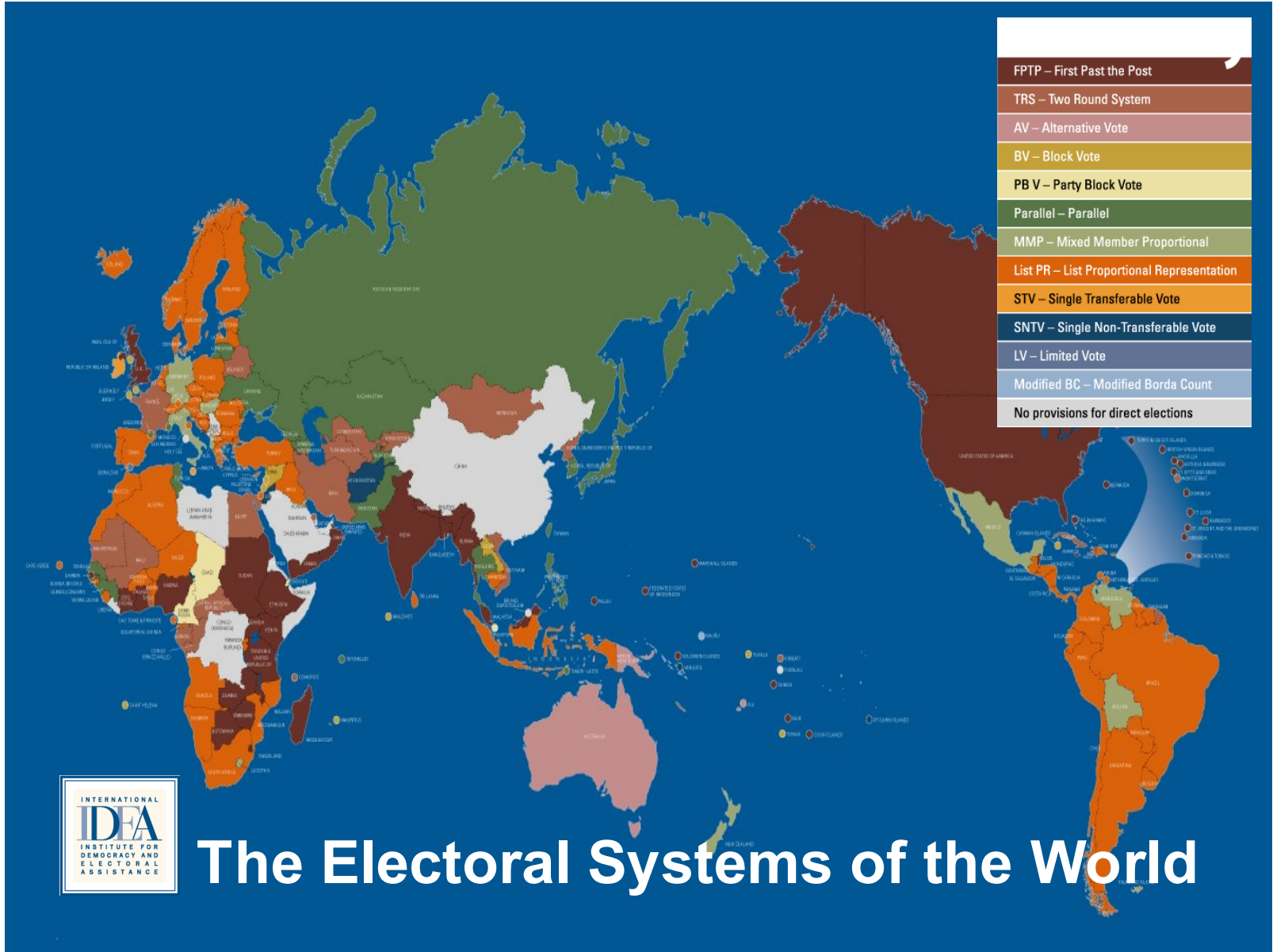
Figure 3.2 An Australian alternative vote ballot paper

# Crazy electoral systems?

- Electoral systems don't take into account the intensity of preferences
  - Quadratic voting: you can buy as many votes as you want, but price rises quadratically & money collected is returned to everyone
- What about pros and cons of election by lottery?

# Ensuring minority/female representation

- PR systems
  - Quotas
  - But be careful of details
- Plurality systems
  - Reserved seats
  - Majority/minority districts
  - But often seen as undemocratic



# The Electoral Systems of the World

# Distribution of electoral systems

- Most common
  - List PR: 65 countries (Europe, LA)
  - Plurality: 41 (North America/Caribbean)
  - Mixed: 33
  - Two rounds: 21
  - Other: 17

## 2. Effects of Electoral Systems

# Effects of Electoral System

- Number of parties
- Fairness
- Ideological complexion
- Representation
- Relation between politicians and voters
- National/local centered politics
- Party strength



# Duverger's Law

- Plurality elections lead to 2 party systems
- PR allows multiparty systems
- If true, means only way we can get more/fewer parties is to change electoral system

# Plurality and two-party system

- Mechanical Effect
  - Translation of votes into seats rewards large parties and punishes small parties
- Strategic Voting
  - don't waste your vote
- Strategic Entry
  - don't waste your time forming a party

# **But only applies at district level**

- Two party competition in each district
- But not necessarily the same two parties
- What unites the districts?



EARTH  
CAPITAL

# PR and multiparty system

- Permissive: allows social divisions to be expressed
- Number of parties depends on:
  - District Size: bigger => more parties
  - Threshold: lower => more parties

# Was Duverger Right?

<b>Country</b>	<b>Type of System</b>	<b>ENP</b>
New Zealand	Plurality	1.96
UK	Plurality	2.11
Canada	Plurality	2.37
Austria	PR	2.48
Germany	Mixed	2.93
Sweden	PR	3.33
India	Plurality	4.11
Belgium	PR	4.32
Israel	PR	4.55
Italy	PR	4.91

# Exceptions

- PR systems with few parties: Austria
- Plurality systems with multiple parties: India, Canada, UK
- How to explain?

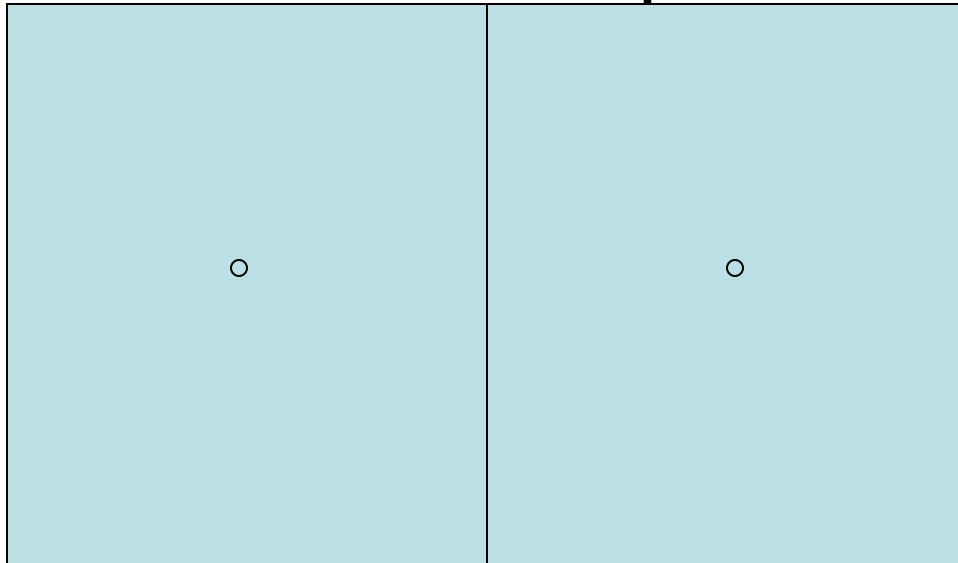
# Electoral law puzzle

	Plurality	PR
Homogeneous society	2 parties (US)	Few parties (Austria)
Heterogeneous society	> 2 parties (India)	Many parties (Belgium)



# Hotelling and Ice Cream Sellers

- Beach with two ice cream sellers
- Everyone goes to seller closest to them
- Where do sellers end up?



# Median voter is king

- In 2 party system, parties should move to center to win
- What prevents this from happening?

# Disproportionality

- Relationship between seats and votes
- Should plurality system have higher disproportionality?
- Why is it high in CZ?
- Is this only idea of fairness?

# PR & representation of women

- With multiple candidates can appeal to sub-sectors of population versus simple head-to-head
- Internal party politics: don't want to displace entrenched males who have personal vote
- Nominating mechanisms: usually local in majoritarian, hard to balance; national in PR, easier to balance
- Easier to implement quotas in PR

# Other Considerations

- Relation between citizens and politicians
  - Plurality: you know representative and can monitor
  - PR: often only know party
- Nationally/locally centered politics
  - Plurality: all politics is local. Why?
  - PR: can get broader interest

# 3. How to study effects of electoral systems

# Cross-tabulations

Electoral system	Percentage of women in lower house
Majoritarian	8.5
Mixed	11.3
PR	15.2

- Is this persuasive?
- What are the problems?
- How do we fix them?

# Regressions

- Women percentage =  $a * \text{electoral system} + b * \text{measure of culture} + c * \text{economic/ social structure}$
- Look at all countries in the world cca. 2010
- What are the problems here?
- How could we fix them?



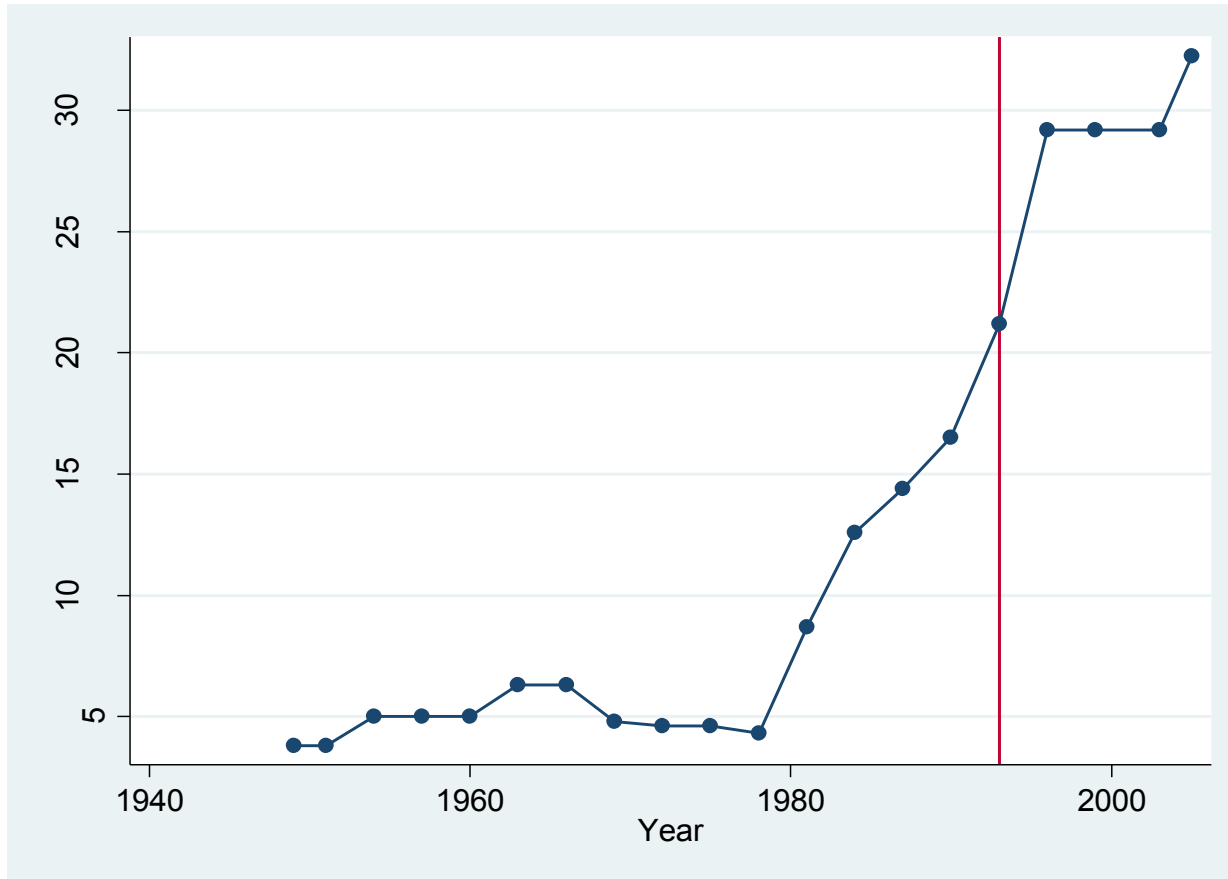
# Problems with regression

- Endogeneity: electoral systems are not exogenous; they are chosen for particular reasons related to outcomes
- Omitted variables: often hard to measure – eg, culture
- Time trends: women's representation changing over time
- Causal heterogeneity: OLS measures only average effects

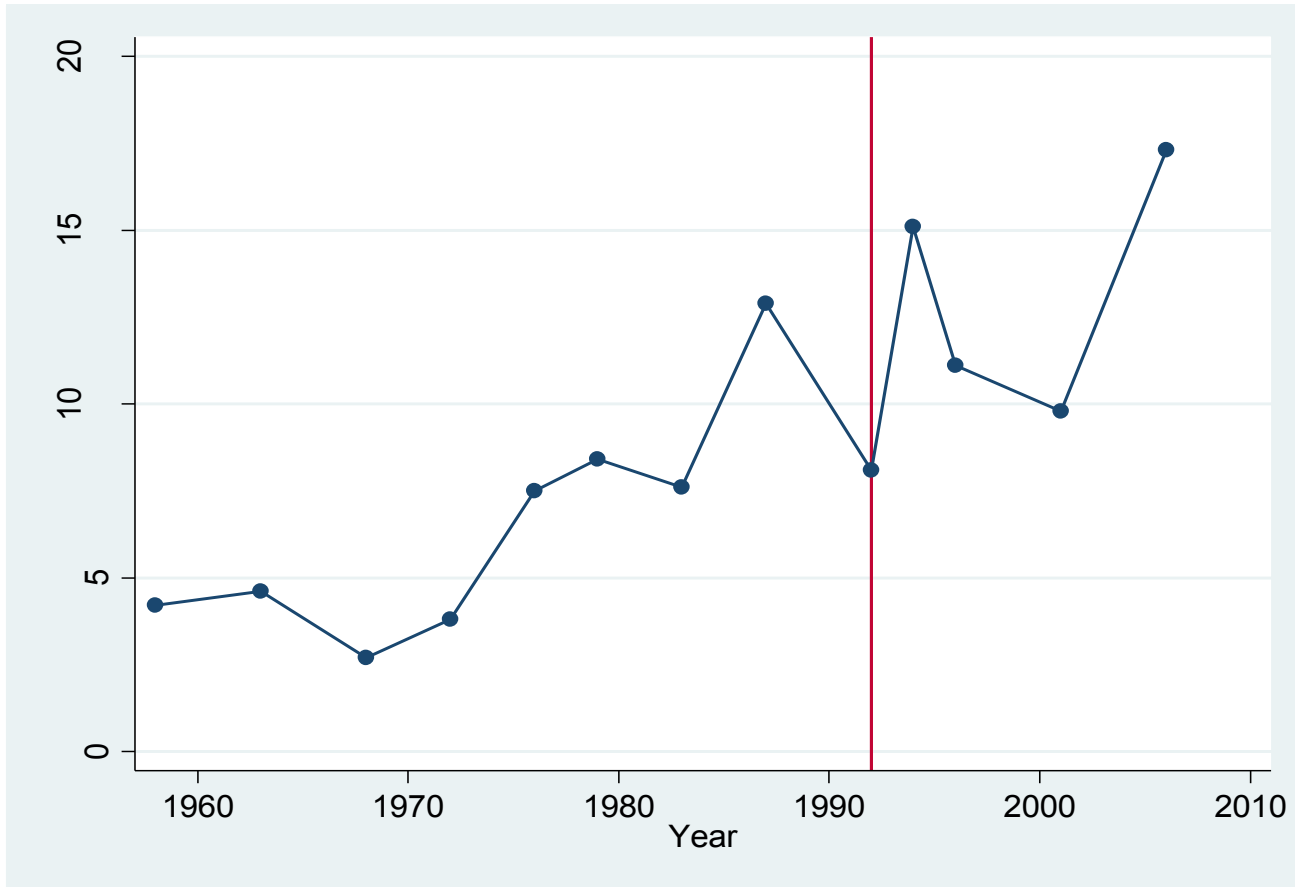
# Better techniques

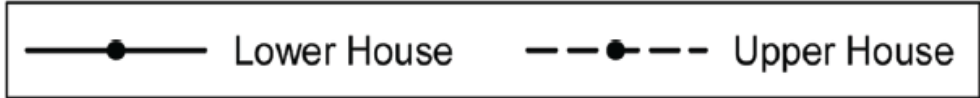
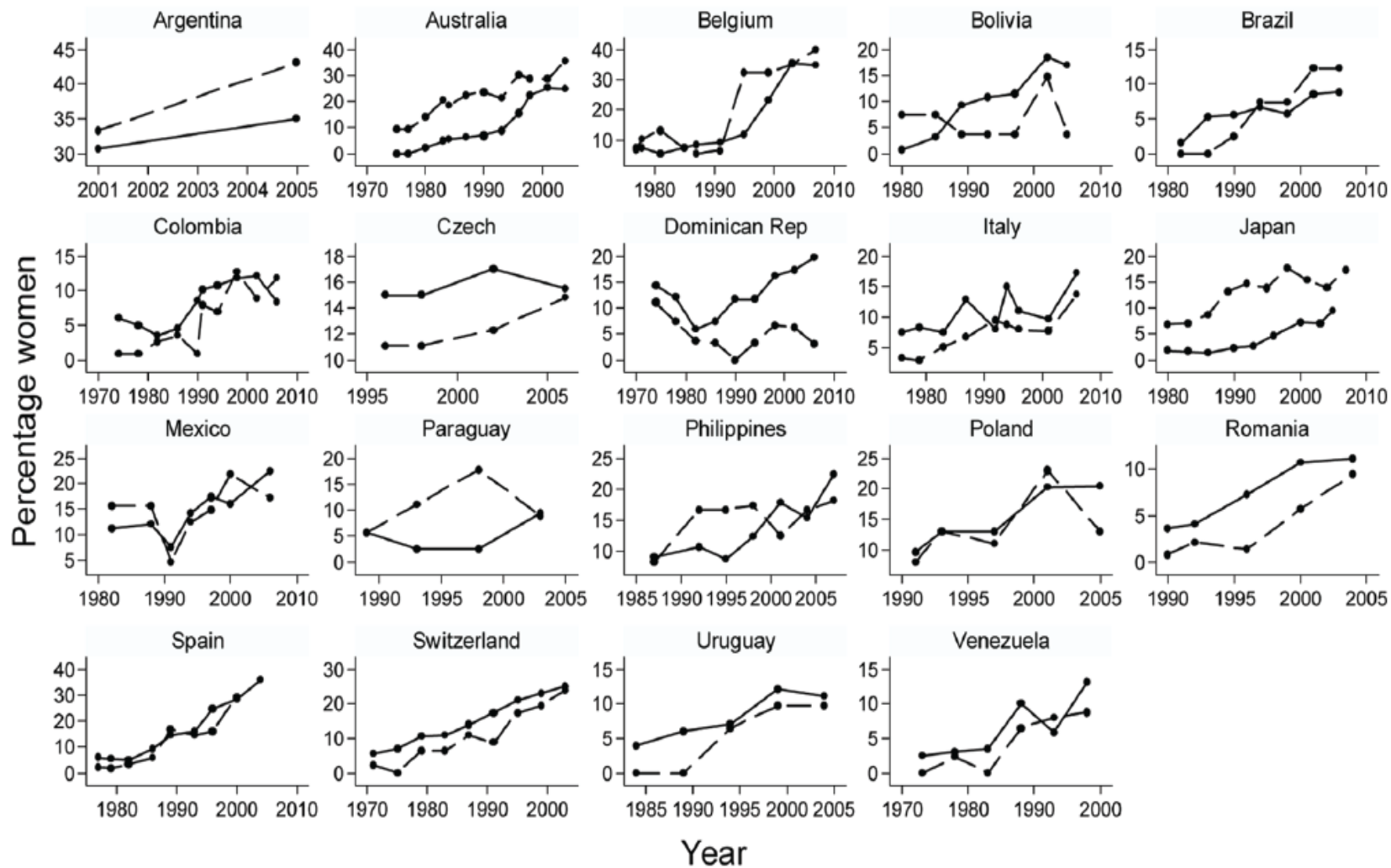
- Electoral system changes
  - Account for time trend, control for most other causes, closest to policy recommendation
- Bicameral systems or mixed electoral systems
  - Control for other causes, endogeneity
- Matching methods
  - Deal with endogeneity, possible causal heterogeneity
- 2SLS: model choice of electoral system
- Experimental methods (or natural experiments)
  - India randomly assigns reserved seats for women

# New Zealand



# Italy





# Matching analysis

- Compare countries who should have same electoral rule, but in fact do not
  - Apples and apples versus apples and oranges
- Account for self-selection into electoral rules
- Also for possible causal heterogeneity
- Finding: PR has very small effects

# Statistics and lies

- How robust is the result: do different datasets, techniques yield same result?
- Statistical versus substantive significance
- Individual findings aren't right or wrong – should simply shift your views
- Correlation is not causation
- Gold standard is randomized experiment

# 4. Choosing an electoral system



# What do you want?

- Representation
- Moderation
- Stable and efficient government
- Government accountability
- Individual accountability
- Interethnic cooperation
- Encourage political parties
- Turnout
- Legitimacy/satisfaction
- Ease of administration

# Cost and administration

- Drawing electoral boundaries
- Voter registration
- Ballot design and production
- Voter education
- Number of polling days
- By-elections
- Counting votes

	Drawing Electoral Boundaries	Voter Registration	Ballot Paper Design and Production	Voter Education	Number of Polling Days	By-elections	The Count
FPTP	☹️	☹️	😊	😊	😊	☹️	😊
BV	😐	😐	😐	😐	😊	☹️	😐
TRS	☹️	☹️	☹️	😐	☹️	☹️	😐
AV	☹️	☹️	😊	☹️	😊	☹️	😐
PBV	😐	😐	😊	😊	😊	😊	😊
List PR	😊	☹️	😐	😐	😊	😊	😊
STV	😐	😐	😐	☹️	😊	☹️	☹️
Parallel	😐	☹️	😐	😐	😐	😐	☹️
MMP	😐	☹️	😐	☹️	😐	😐	☹️
BC	😐	☹️	😐	☹️	😊	☹️	😐
SNTV	😐	😐	😐	😊	😊	☹️	😊
LV	😐	😐	😐	😐	😊	☹️	😐

Key: 😊 = Low cost and complexity; 😐 = Medium cost and complexity; ☹️ = High cost and complexity.