Online appendix for Chapter 2 of *Why Regional Parties*

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The "text reference" column lists locations in Chapter 2 that refer to the online appendix. The "description of content" column explains to what supplemental material each of these references alludes, with further details on the specific material included in the appendix listed in the "material presented in the appendix" column.

Discussion A1. Sample calculation of how to classify parties as regional or national

Assume that elections take place in a country with three regions—A, B, and C—and the number of voters in each region is 200, 100, and 100, respectively. Election results are below in Table A1. Note that Party 1 wins an equal *percentage* of votes across all regions while Party 2 wins an equal *number* of votes in each region. Party 3 wins votes everywhere, but disproportionately from Region A. Party 4 wins most of its votes in one region, while Party 5 wins all of its votes in a single region.

Table A1. Sample VFI Calculation 1: Hypothetical Vote Totals

	Region A	Region B	Region C	*Party Total*
Party 1	50	25	25	100
Party 2	25	25	25	75
Party 3	125	20	30	125
Party 4	0	5	20	25
Party 5	0	25	0	25
Region Total	200	100	100	

Since the regions are of different sizes, the votes must be reweighted by the size of the region. This means dividing a party's votes in a region by the share of the electorate that comes from the region. For example, I divide Party 1's 100 votes in Region A by 50% since Region A's 200 voters represent 50% of the country's total electorate. Reweighted votes are below, in Table A2.

Table A2. Sample VFI Calculation 2: Reweighted Vote Totals

	Region A	Region B	Region C	*Party Total*
Party 1	100	100	100	300
Party 2	50	100	100	250
Party 3	250	80	120	450
Party 4	0	20	80	100
Party 5	0	100	0	100

Based on these reweighted vote totals, I next calculate a Herfindahl-Hirschman Index (HHI), which means first dividing the reweighted votes for a party in a region by the party's total vote and then squaring the result. In other words, for Party 1, for each region the calculation is $(100/300)^2$. The results of these calculations appear in columns (1)-(3) of Table A3. The raw HHI, in column (4), is the sum of columns (1)-(3). To adjust the raw HHI to take account of the number of regions, the calculation is: (HHI - (1/N) / (1 – (1/N). Since N=3, the calculation is: (HHI – (1/3) / (2/3)). This yields the scores listed in column (5). Since 0.18 is the cut-off, Parties 1, 2, and 3 are national parties, while Parties 4 and 5 are regional parties.

Table A3. Sample VFI Calculation 3: Normalized HHI

	(1) Region A	(2) Region B	(3) Region C	(4) Party Total=HHI	(5) Normalized HHI	(6) Vote %
Party 1	0.11	0.11	0.11	0.33	0.00	25.00
Party 2	0.04	0.16	0.16	0.36	0.04	18.75
Party 3	0.31	0.03	0.07	0.41	0.12	43.75
Party 4	0.00	0.04	0.64	0.68	0.52	6.25
Party 5	0.00	1.00	0.00	1.00	1.00	6.25

Thus, the regional vote share is the sum of the total vote share, in column (6), for parties 4 and 5, or 12.5%. The national vote share is 87.5%.

Table A4. Observations included in the cross-national dataset of regional parties

The regional party vote is the vote share won by regional parties. For all countries for which "Unknown vote share" is 0.0%, the remaining votes went to national parties. For example, the regional party vote in Albania is 2.4%. Since the unknown vote is 0%, the national party vote is 97.6%.

The independent vote is the vote share won by independent candidates. Independents count as regional parties, since they are, in effect, regional parties whose party labels are the candidate's name. The independent vote share is therefore always less than or equal to the regional party vote share.

The unknown vote share is the vote share for which I could not calculate a VFI score. In most cases, the unknown vote consists of votes for parties for which I could not obtain region-level vote shares, often because multiple parties' vote shares were combined into an "other" category.

The number of regions refers to the number of regions I use for calculating the regional party vote share.

Country	Election Year	Regional Party Vote	Independent Vote	Unknown Vote	# of Regions
Albania	2005	2.4%	1.2%	0.0%	12
Algeria	2007	9.8%	9.8%	0.0%	49
Argentina	2007	42.4%	0.0%	0.0%	24
Armenia	2012	0.0%	0.0%	0.0%	11
Australia	2010	18.0%	2.5%	0.0%	8
Austria	2008	0.1%	0.0%	0.0%	9
Bangladesh	2008	6.2%	3.1%	0.0%	7
Belgium	2007	99.7%	0.0%	0.0%	3
Benin	2011	2.7%	0.0%	0.0%	12
Bhutan	2008	0.0%	0.0%	0.0%	20
Bolivia	2005	0.0%	0.0%	0.0%	9
Bosnia-Herzegovina	2006	99.9%	0.0%	0.0%	2
Botswana	2009	5.6%	1.9%	0.0%	13
Brazil	2006	0.0%	0.0%	0.0%	26
Bulgaria	2009	0.1%	0.0%	0.0%	29
Cambodia	2008	0.0%	0.0%	0.0%	24
Canada	2011	6.7%	0.5%	0.0%	13
Cape Verde	2001	0.0%	0.0%	0.0%	20
Chile	2009	13.1%	10.4%	0.0%	15
Colombia	2006	13.2%	0.0%	0.0%	33
Comoros	2009	66.8%	66.8%	0.0%	3
Costa Rica	2006	7.7%	0.0%	0.0%	7
Croatia	2007	8.0%	0.0%	0.0%	11
Cyprus	2011	0.1%	0.1%	0.0%	6

Czech Republic	2006	0.1%	0.0%	0.0%	14
Denmark	2011	1.3%	0.1%	0.0%	7
Djibouti	2003	0.0%	0.0%	0.0%	5
Dominican Republic	2006	0.5%	0.0%	0.0%	32
Ecuador	2009	2.5%	0.0%	10.7%	27
El Salvador	2012	2.0%	0.0%	0.0%	14
Estonia	2011	3.6%	2.8%	0.0%	10
Ethiopia	2005	15.4%	1.8%	0.0%	10
Finland	2007	5.5%	0.0%	0.1%	14
France	2012	3.3%	0.5%	9.0%	33
Gabon	2011	3.0%	0.0%	13.5%	9
Georgia	2012	0.0%	0.0%	0.0%	12
Germany	2009	7.7%	0.0%	0.0%	16
Ghana	2008	5.2%	3.8%	0.2%	10
Greece	2012	0.0%	0.0%	0.0%	13
Guatemala	2011	9.4%	0.0%	0.0%	22
Guinea-Bissau	2004	0.0%	0.0%	0.0%	9
Guyana	2006	2.1%	0.0%	0.0%	10
Haiti	2006	14.6%	1.2%	0.0%	10
Honduras	2005	0.0%	0.0%	0.0%	18
Hungary	2010	1.0%	0.3%	0.0%	7
India	2009	44.9%	5.2%	0.0%	35
Indonesia	2004	0.0%	0.0%	4.9%	32
Iraq	2005	6.5%	0.0%	0.0%	18
Ireland	2011	15.2%	10.8%	0.0%	22
Israel	2009	9.3%	0.0%	0.0%	7
Italy	2006	1.9%	0.0%	0.0%	20
Jamaica	2007	0.1%	0.1%	0.0%	14
Japan	2012	4.0%	1.7%	0.2%	47
Kenya	2007	12.9%	0.0%	9.6%	8
Kosovo	2010	7.2%	0.0%	0.0%	7
Latvia	2011	0.2%	0.0%	0.0%	5
Lebanon	2009	4.7%	4.0%	0.0%	6
Lesotho	2012	4.9%	3.3%	0.0%	10
Liberia	2005	15.1%	7.3%	0.0%	15
Lithuania	2008	4.8%	0.0%	0.0%	10
Macedonia	2011	9.2%	0.0%	0.0%	7
Malawi	2004	91.7%	24.4%	0.0%	3
Malaysia	2004	14.8%	2.1%	0.0%	16
Mauritius	2010	7.3%	1.5%	0.0%	10
Mexico	2009	0.0%	0.0%	0.0%	32
Moldova	2010	0.0%	0.0%	0.0%	35
Montenegro	2009	4.3%	0.0%	0.0%	22
Mozambique	2009	5.9%	0.0%	0.0%	13
Namibia	2004	4.1%	0.0%	0.0%	13
Nepal	2008	7.4%	1.2%	0.0%	5

Netherlands	2010	0.0%	0.0%	0.0%	19
New Zealand	2011	0.0%	0.0%	0.0%	15
Nicaragua	2011	0.0%	0.0%	0.0%	17
Niger	1999	7.2%	0.4%	0.0%	16
Nigeria	2007	6.1%	0.0%	0.0%	36
Norway	2009	0.3%	0.0%	0.0%	19
Pakistan	2008	45.8%	9.8%	0.0%	5
Panama	2009	2.4%	0.0%	0.0%	11
Papua New Guinea	2007	46.6%	37.3%	0.0%	20
Paraguay	2008	9.9%	0.0%	0.0%	18
Peru	2011	0.4%	0.0%	0.0%	26
Philippines	2010	12.8%	7.3%	0.0%	17
Poland	2005	0.4%	0.0%	0.0%	16
Portugal	2005	0.0%	0.0%	0.0%	20
Romania	2008	0.4%	0.4%	0.0%	43
Russia	2011	0.0%	0.0%	0.0%	85
Senegal	2012	0.0%	0.0%	0.0%	15
Serbia	2012	3.6%	0.0%	0.0%	31
Sierra Leone	2007	15.4%	0.6%	0.0%	4
Slovakia	2012	0.0%	0.0%	0.0%	8
Slovenia	2011	0.1%	0.0%	0.0%	8
Solomon Islands	2010	82.0%	66.1%	0.0%	10
South Africa	2009	7.0%	0.0%	0.0%	9
South Korea	2012	11.8%	9.4%	0.0%	17
Spain	2008	9.0%	0.0%	0.0%	19
Sri Lanka	2010	4.6%	0.5%	0.0%	9
Suriname	2010	5.0%	0.0%	0.0%	10
Sweden	2010	0.0%	0.0%	0.2%	29
Switzerland	2011	8.5%	0.0%	2.2%	26
Taiwan	2012	7.3%	3.9%	0.0%	22
Thailand	2011	1.3%	0.5%	0.4%	77
Timor-Leste	2012	0.0%	0.0%	0.0%	13
Trinidad & Tobago	2010	2.2%	0.0%	0.0%	15
Turkey	2002	1.0%	1.0%	0.0%	82
Ukraine	2007	0.0%	0.0%	0.0%	28
United Kingdom	2005	9.3%	0.5%	0.0%	4
United States	2010	2.3%	1.3%	0.0%	50
Uruguay	2009	0.0%	0.0%	0.0%	19
Venezuela	2005	18.4%	0.0%	0.0%	24
Zambia	2006	15.8%	9.5%	0.0%	9
Zimbabwe	2008	2.7%	2.4%	0.0%	10

Table A5. Country-specific notes on calculating regional party vote shares

Table A5 includes additional notes in cases where I dealt with missing data or instances where some type of judgement call was necessary in calculating the regional party vote share.

Country	Notes
Argentina	The same parties form different alliances from province to province and, in many cases, these alliances compete as party lists with names that also vary from province to province. I treat each of these fused lists as a distinct party, since they represent a unique merger of different parties that may not be replicated in other provinces.
Armenia	I use the PR tier for calculating regional party vote shares.
Australia	The Liberal National Party of Queensland--which formed as a merger of the Liberal Party and the National Party in Queensland—is treated as a separate party since it competes under a distinct party label.
Benin	Election results are missing for one electoral district. The results for Donga region are therefore incomplete.
Bolivia	I use the PR tier for calculating regional party vote shares.
Chile	I use party labels to calculate the regional party vote share, not the larger electoral pacts. Both the pact and the party label appear on ballots.
Ecuador	I use the SMD tier for calculating regional party vote shares.
Ethiopia	The data for 2005 are incomplete. This is the note about the data on the Psephos website: "These results are incomplete, and do not always tally exactly with the provincial figures below. They should be seen as giving a general indication only." I could not find a better data source for this election.
France	Official election results do not disaggregate minor-party candidates by party label. I treat those listed as "Autres" and "Regionalistes" as those from a single region, since these are either regionalists (likely competing in one region) or very small parties that may consist of just a handful of candidates. I treat those listed as divers gauche (various left), divers droite (various right), extrême gauche (extreme left), extréme droite (extreme right), and écologiste (ecologist) as "Unknown."
Georgia	I use the PR tier for calculating regional party vote shares.
Germany	The CSU is treated as a distinct party from the CDU. I use the PR tier for calculating regional party vote shares.
Guatemala	Most of the regional parties are mergers of various parties that elsewhere contested alone. (See note on Argentina, a similar case).
Hungary	I use the PR tier for calculating regional party vote shares.
Ireland	I mapped the electoral constituencies onto administrative countries by hand as best I could. Some constituencies include multiple counties, in which case I treat the constituency as its own multi-county region. Thus, the number of counties (27) is somewhat larger than the number of regions (22) used to calculate the regional party vote share.
Japan	I use the SMD tier for calculating regional party vote shares.
Kosovo	Excludes mail ballots because I cannot attribute these to a particular region.

Lebanon	I treat the various movements (e.g., March 14 or March 8) as parties. IFES (International Foundation for Electoral Systems) published a list of candidates affiliated with various lists. The election authority in Lebanon provided election results for the various candidates, but without affiliations. I match the candidates and their vote shares (from the election results) to the list of candidates within the movements (from IFES). I am very conservative about matching names, and only includes those that are identical or nearly identical. Note that if I used the specific party affiliations of candidates within the major lists (which are provided for some candidates in the IFES publication) and did not treat the movements as the parties, then the regional party vote share for Lebanon would be extremely high because most of the candidates would be independent. My presumption is that the IFES publication may not be exhaustive in providing party affiliations. Moreover, it seems that the party lists are what people are voting on, and it is not at all clear that additional information on party affiliations within the party lists is provided to voters on ballots. Hence, I use the party lists/movements as the basis for calculating regional party vote shares.
Lesotho	I use the SMD tier for calculating regional party vote shares.
Lithuania	I mapped constituency boundaries to counties by hand. I use the PR tier for calculating regional party vote shares.
Mexico	I use the PR tier for calculating regional party vote shares.
New Zealand	I mapped constituency boundaries to administrative regions by hand. The matches are not perfect. Because the Maori constituencies are completely different, including many administrative regions, I exclude these votes. They account for less than 6% of total votes. I use the PR tier for calculating regional party votes.
Niger	I use the PR tier for calculating regional party vote shares.
Nigeria	Data are not complete. Several seats are missing.
Panama	I use the PR tier for calculating regional party vote shares.
Philippines	I use the SMD tier for calculating regional party vote shares.
Romania	I use the SMD tier for calculating regional party vote shares.
Senegal	I use the PR tier for calculating regional party vote shares.
South Korea	I use the SMD tier for calculating regional party vote shares.
Taiwan	I use the SMD tier for calculating regional party vote shares.
Thailand	I use the SMD tier for calculating regional party vote shares.
Trinidad and Tobago	Electoral districts and administrative units are matched by hand, albeit not matched perfectly. Using SMDs as regions would not change the regional party vote using a VFI threshold of 0.18, but it would change the regional party vote with some other thresholds.
Venezuela	I use the PR tier for calculating regional party vote shares.

Table A6. Data sources for cross-national regional party data

Online data sources typically provide the link to the general data sources (such as a national election commission's homepage), rather than to the specific page listing results for a particular election. I do so because the web addresses for election-specific results frequently change. CLEA refers to the January 19, 2012 release of the Constituency-Level Elections Archive (CLEA), found at http://www.electiondataarchive.org. Psephos refers to Adam Carr's Election Archive, found at http://psephos.adam-carr.net. Global Elections Database refers to Dawn Brancati's archive of election results, found at http://www.dawnbrancati.com/CLE.htm.

Country	Year	Source
Albania	2005	http://www.cec.org.al; CLEA
Algeria	2007	http://www.rnd-dz.org
Argentina	2007	https://www.argentina.gob.ar/dine
Armenia	2012	http://www.elections.am
Australia	2010	http://results.aec.gov.au
Austria	2008	http://www.bmi.gv.at
Bangladesh	2008	CLEA
Belgium	2007	http://polling2007.belgium.be/en/cha/results/results_start.html
Benin[1]	2011	http://www.beninelections.com
Bhutan	2008	Psephos
Bolivia	2005	CLEA
Bosnia-Herzegovina	2006	CLEA
Botswana	2009	http://www.iec.gov.bw[2]
Brazil	2006	CLEA
Bulgaria	2009	http://eed.nsd.uib.no
Cambodia	2008	European Parliament election observation report[3]
Canada	2011	http://www.elections.ca
Cape Verde	2001	CLEA
Chile	2009	https://historico.servel.cl
Colombia	2006	CLEA
Comoros	2009	Psephos
Costa Rica	2006	CLEA
Croatia	2007	CLEA
Cyprus	2011	http://eed.nsd.uib.no
Czech Republic	2006	CLEA
Denmark	2011	http://eed.nsd.uib.no; http://www.dst.dk/valg

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[1] This link is dead. The pdfs I downloaded from this site, which were originally created by Benin's Commission électorale nationale autonome (CENA) and contain the election results, are available upon request.

[2] This link is dead. The document downloaded from the website of the Independent Electoral Commission of Botswana that contains the election results is available upon request.

[3] Authored by Glyn Ford, chairman of the delegation. Available upon request.

Djibouti	2003	http://africanelections.tripod.com; Psephos
Dominican Republic	2006	CLEA
Ecuador	2009	Psephos
El Salvador	2012	http://elecciones2012.tse.gob.sv
Estonia	2011	https://www.valimised.ee/et
Ethiopia	2005	Psephos
Finland	2007	CLEA
France	2012	https://www.interieur.gouv.fr/Elections/
Gabon	2011	Psephos
Georgia	2012	http://www.results.cec.gov.ge/
Germany	2009	http://www.bundeswahlleiter.de
Ghana	2008	Psephos; http://www.ec.gov.gh
Greece	2012	http://www.ypes.gr/en/
Guatemala	2011	http://www.tse.org.gt/index.php
Guinea-Bissau	2004	CLEA
Guyana	2006	CLEA
Haiti	2006	Psephos
Honduras	2005	CLEA
Hungary	2010	CLEA
India	2009	http://eci.nic.in/eci/eci.html
Indonesia	2004	CLEA
Iraq	2005	http://www.ihec.iq[4]
Ireland	2011	http://electionsireland.org/
Israel	2009	http://www.knesset.gov.il/main/eng/home.asp[5]
Italy	2006	http://elezionistorico.interno.it
Jamaica	2007	CLEA
Japan	2012	http://politicalscience.unt.edu/~maeda/
Kenya	2007	Psephos
Kosovo	2010	http://www.kqz-ks.org/an/
Latvia	2011	http://eed.nsd.uib.no
Lebanon	2009	http://elections.gov.lb[6]
Lesotho	2012	Psephos
Liberia	2005	CLEA
Lithuania	2008	http://eed.nsd.uib.no
Macedonia	2011	http://eed.nsd.uib.no
Malawi	2004	CLEA
Malaysia	2004	Psephos
Mauritius	2010	http://www.gov.mu

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[4] This site no longer appears to have the 2005 election results available. The documents that I downloaded that contain the election results are available upon request.

[5] Election results broken down by region no longer appear to be available. Region-wise results are available upon request.

[6] These results were used in combination with a document compiled by the International Foundation for Electoral Systems (IFES), which is available upon request, as are the documents with the election results downloaded from the site indicated in the entry for Lebanon.

Mexico	2009	www.ife.org.mx
Moldova	2010	http://www.cec.md/index.php?l=en
Montenegro	2009	http://www.dik.co.me
Mozambique	2009	http://www.eisa.org.za
Namibia	2004	http://www.ecn.na
Nepal	2008	CLEA
Netherlands	2010	http://eed.nsd.uib.no
New Zealand	2011	http://electionresults.govt.nz
Nicaragua	2011	Psephos
Niger	1999	CLEA
Nigeria	2007	Psephos
Norway	2009	CLEA; http://www.regjeringen.n
Pakistan	2008	CLEA; http://www.ecp.gov.pk
Panama	2009	http://www.tribunal-electoral.gob.pa
Papua New Guinea	2007	http://www.pngec.gov.pg/resultsNat2007/SummaryResults.htm
Paraguay	2008	http://tsje.gov.py
Peru	2011	https://www.web.onpe.gob.pe
Philippines	2010	CLEA
Poland	2005	CLEA; http://www.wybory2005.pkw.gov.pl
Portugal	2005	CLEA
Romania	2008	http://eed.nsd.uib.no
Russia	2011	http://www.vybory.izbirkom.ru
Senegal	2012	http://www.gouv.sn/Arret-du-Conseil-constitutionnel.html
Serbia	2012	http://arhiva.stat.gov.rs/WebSite/Default.aspx
Sierra Leone	2007	http://www.nec-sierraleone.org
Slovakia	2012	http://www.minv.sk/?volby-nrsr
Slovenia	2011	http://volitve.gov.si
Solomon Islands	2010	Psephos
South Africa	2009	http://www.elections.org.za
South Korea	2012	http://www.nec.go.kr/engvote_2013/main/main.jsp
Spain	2008	http://www.infoelectoral.mir.es
Sri Lanka	2010	http://www.slelections.gov.lk
Suriname	2010	http://www.verkiezingen.sr
Sweden	2010	http://www.val.se
Switzerland	2011	http://www.bfs.admin.ch
Taiwan	2012	https://website.cec.gov.tw/english
Thailand	2011	Psephos
Timor-Leste	2012	https://www.stae-tl.org/tl/
Trinidad & Tobago	2010	https://www.ebctt.com
Turkey	2002	Global Elections Database
United Kingdom	2005	https://www.electoralcommission.org.uk
United States	2010	http://artandhistory.house.gov
Uruguay	2009	http://elecciones.corteelectoral.gub.uy
Venezuela	2005	http://www.cne.gov.ve/jne/index.php
Zambia	2006	CLEA
Zimbabwe	2008	http://www.zesn.org.zw

Figure A1. Cross-national distribution of regional party vote shares using a 0.10 VFI cut-off
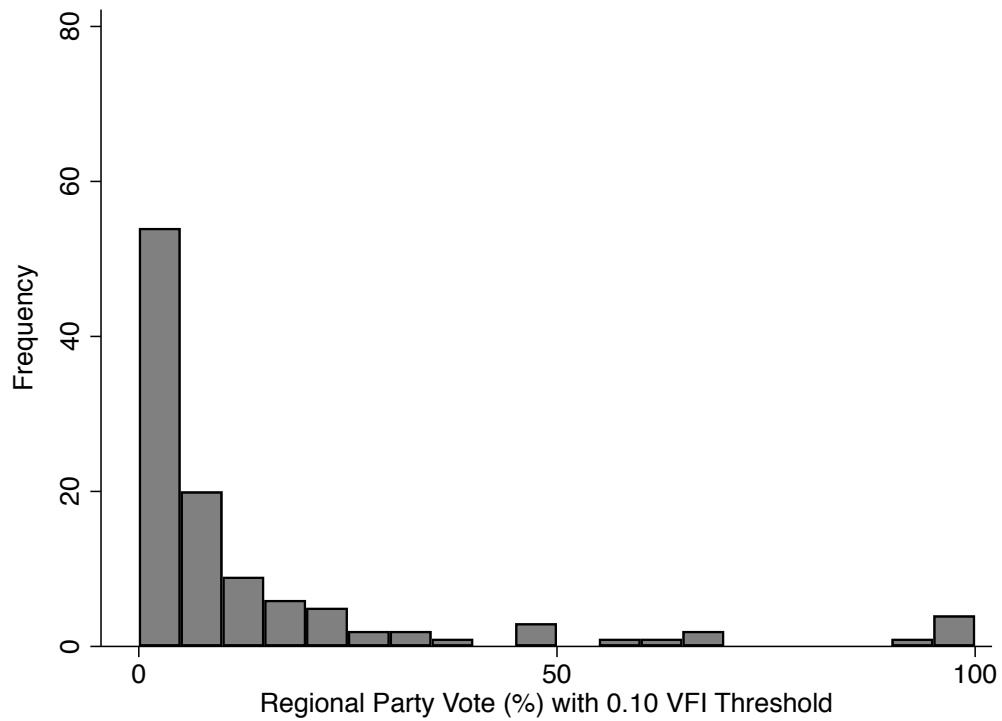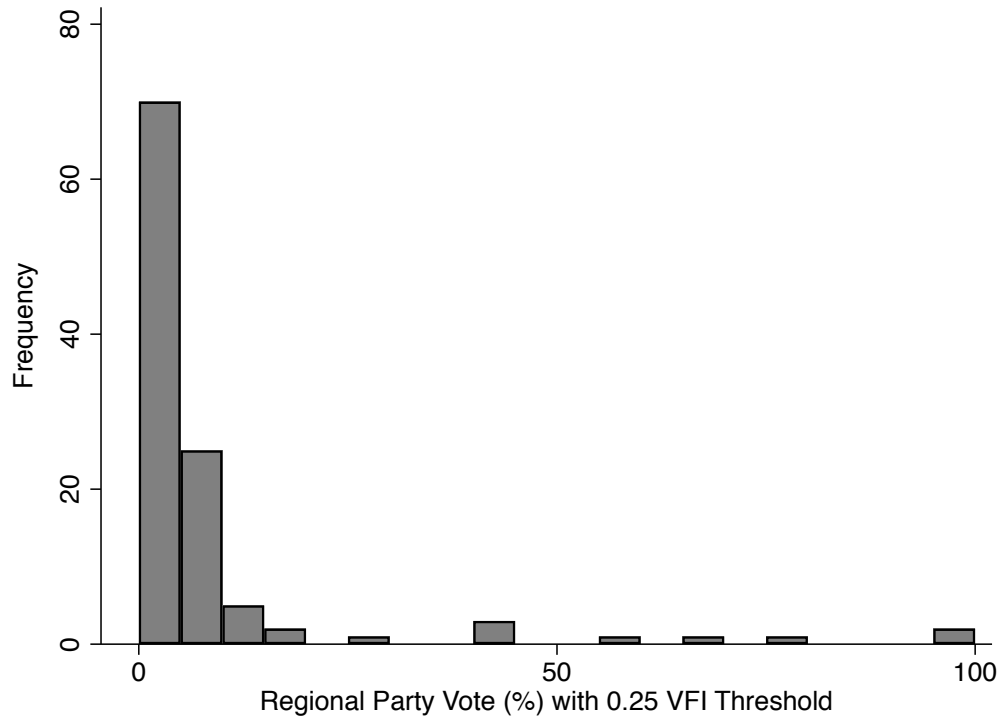

Figure A1 replicates Figure 2.1, on page 28 of the book, but instead of using a VFI cut-off of 0.18 to classify a party as regional or national, it uses a cut-off of 0.10.

Figure A2. Cross-national distribution of regional party vote shares using a 0.25 VFI cut-off

Figure A2 replicates Figure 2.1, on page 28 of the book, but instead of using a VFI cut-off of 0.18 to classify a party as regional or national, it uses a cut-off of 0.25.

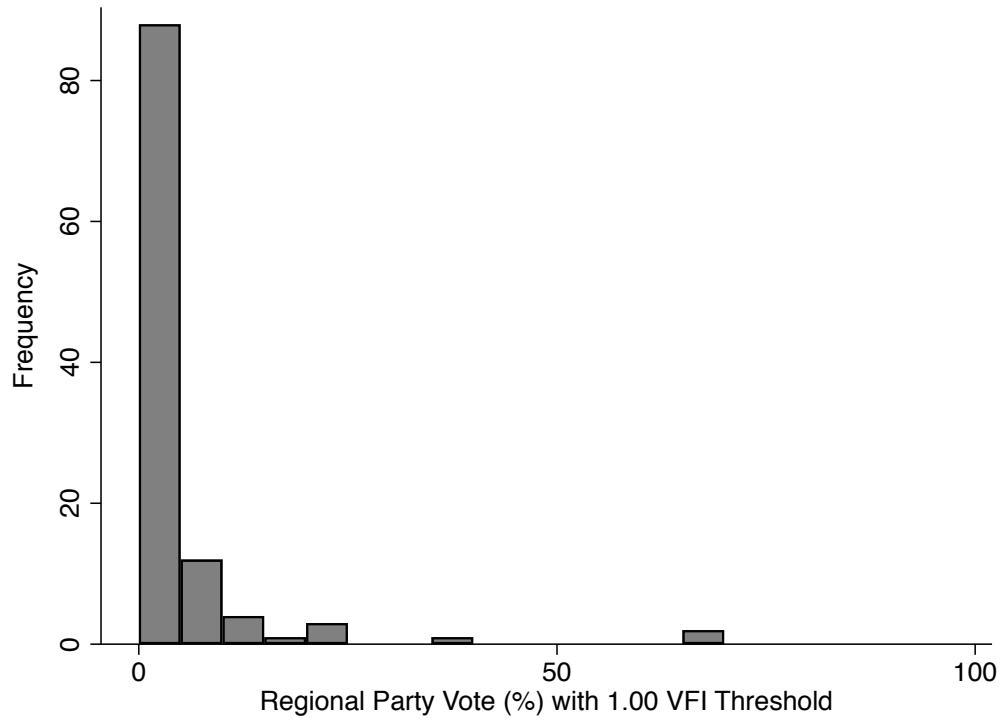**Figure A3. Cross-national distribution of regional party vote shares using a 1.00 VFI cut-off**
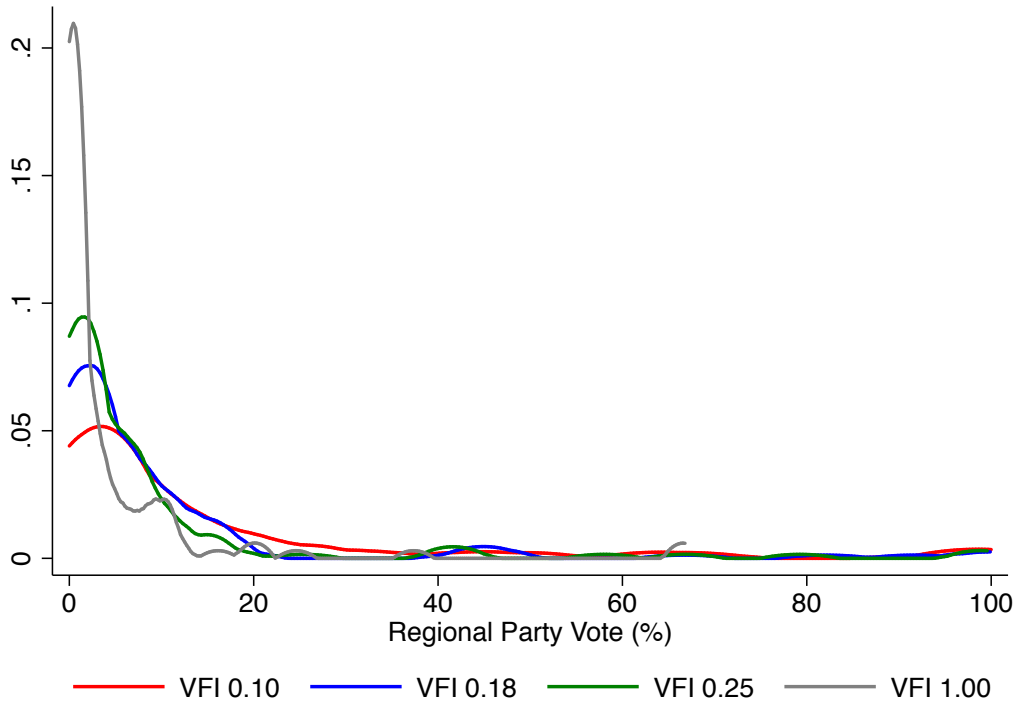

Figure A3 replicates Figure 2.1, on page 28 of the book, but instead of using a VFI cut-off of 0.18 to classify a party as regional or national, it uses a cut-off of 1.00.

Figure A4. Kernel density plot of cross-national regional party vote shares using various VFI cut-offs

To compare the distributions of regional party vote shares across countries using different VFI cut-offs, Figure A4 presents kernel density plots of the distributions of regional party vote shares across the 111 countries for which I have regional party vote shares. The red, blue, and green lines (cut-offs of 0.10, 0.18, and 0.25, respectively) are fairly similar. The gray line, using a VFI cut-off of 1.00—meaning that I only treat a party as regional if it contests in a single region—is somewhat different, indicating a much larger number of countries with no votes or very few votes for regional parties.

Discussion A2. How subnational regional party vote shares in India vary using different VFI cut-offs

Few Indian parties have historically had VFI scores between 0.10 and 0.25, which is a range in which there is potentially some ambiguity as to whether a party should be considered regional or national. Take, for instance, the BJP in 1989, whose score was a 0.08. In this election, the BJP competed in 21 of the 31 states and UTs where elections took place. (No election was held in Assam). The largest share of its votes came from Madhya Pradesh, where it won approximately 23% of its votes. In total, the BJP won more than 85% of its votes from just five states: Madhya Pradesh (22%), Maharashtra (19%), Rajasthan (12%), Bihar (11%), and Uttar Pradesh (9%). Though the BJP certainly won a disproportionate share of its votes from these five states, these five states account for nearly half of the votes cast in the election (48%). In short, though the BJP certainly exhibited distinct strongholds in the 1989 election, a handful of states did not monopolize its vote share.

Now consider a party with a score not far above the 0.25 threshold, the JD(U) in 1999, whose VFI score was 0.33. In this election, the JD(U) competed in only 12 of 32 states and UTs. It won 66% of its votes from one state, Bihar. The JD(U) won an additional 26% of its votes from Karnataka. In other words, nearly 92% of the JD(U)'s votes in 1999 came from just two states that accounted for just 15% of all voters. In other words, two states effectively monopolized the JD(U)'s vote, making it a regional party.

For values of the VFI in between 0.10 and 0.25, there is considerably more ambiguity. In places where these ambiguous parties are electorally successful, the decision to code these ambiguous parties as regional or national could have a substantial impact on a state's regional party vote share. In turn, differences in state-level regional party vote shares bred of different coding decisions could result in a very different picture of subnational variation in regional party success. Fortunately, however, relatively few parties that are even modestly successful fall into this 0.10-0.25 range. From 1951 through 2014, 250 parties won more than 0.5% of the national vote. Of these, 38 (or 15%) had VFI scores ranging between 0.10 and 0.25. Of these 38, many of the same parties appear multiple times, including the BSP (6 times), CPI (4 times), CPM (8 times), SCF/RPI (3 times). Another several appear twice: BJS, JD, NCP and PSP.

Since many of the same parties reappear over time and these parties tend to win sizeable vote shares in just a few states, changes to the VFI cut-off used to classify parties as regional or national disproportionately affect a handful of states. Figure A5 below presents regional party vote shares from 1962 through 2014 for the sixteen largest states in existence during most of this period. (Figure A5 excludes Chhattisgarh and Jharkhand, which are new states). The various lines indicate the regional party vote shares, based on national-level election results, using different thresholds for classifying parties as regional or national. The orange line represents the most inclusive definition (VFI cut-off of 0.10). The green line represents the least inclusive definition (VFI cut-off of 0.25). The gray line, which is difficult to see in most graphs because it so closely overlaps with the green and/or orange lines, represents the regional party vote share using the 0.18 cut-off, which I use throughout the book.

In a number of states—Andhra Pradesh, Gujarat, Madhya Pradesh, Rajasthan, and Tamil Nadu—all of the lines are virtually indistinguishable, indicating that the state's regional party vote share is virtually identical no matter the cut-off used. Interestingly, this group includes both states where regional parties are very weak (Gujarat, Madhya Pradesh, Rajasthan), as well as those where regional parties are extremely strong (Andhra Pradesh, Tamil Nadu).

In another group of states, the lines mainly overlap except for a couple of elections. Assam, Bihar, Delhi, Haryana, Karnataka, Maharashtra, Odisha, and Punjab fall into this category. In these states, a party winning a sizeable vote share in a handful of elections had a VFI score in this ambiguous range. For instance, in 1962 the Jana Sangh (VFI = 0.12) won nearly 33% of the vote in Delhi, and in 2014, AAP (VFI = 0.15) similarly won about a third of the vote in Delhi. In these elections, using a VFI cut-off of 0.10, instead of 0.18, would indicate significantly higher vote shares for regional parties in Delhi in these elections. Consequently, Delhi's place within the field of subnational variation in regional party vote shares in 1962 and 2014 would be very different depending on the cut-off. However, in all other elections, the use of different cut-offs would not change one's appraisal of the relative strength of regional party votes shares in Delhi. So, too, with the other states where the green and orange lines noticeably diverge in only a handful of elections. Recall, however, that Chapter 8's analysis of subnational variation focuses more on state's *overall* trajectories of regional party success rather than explaining subnational variation in any given election.

Figure A5. Regional party vote shares by Indian state using different VFI cut-offs
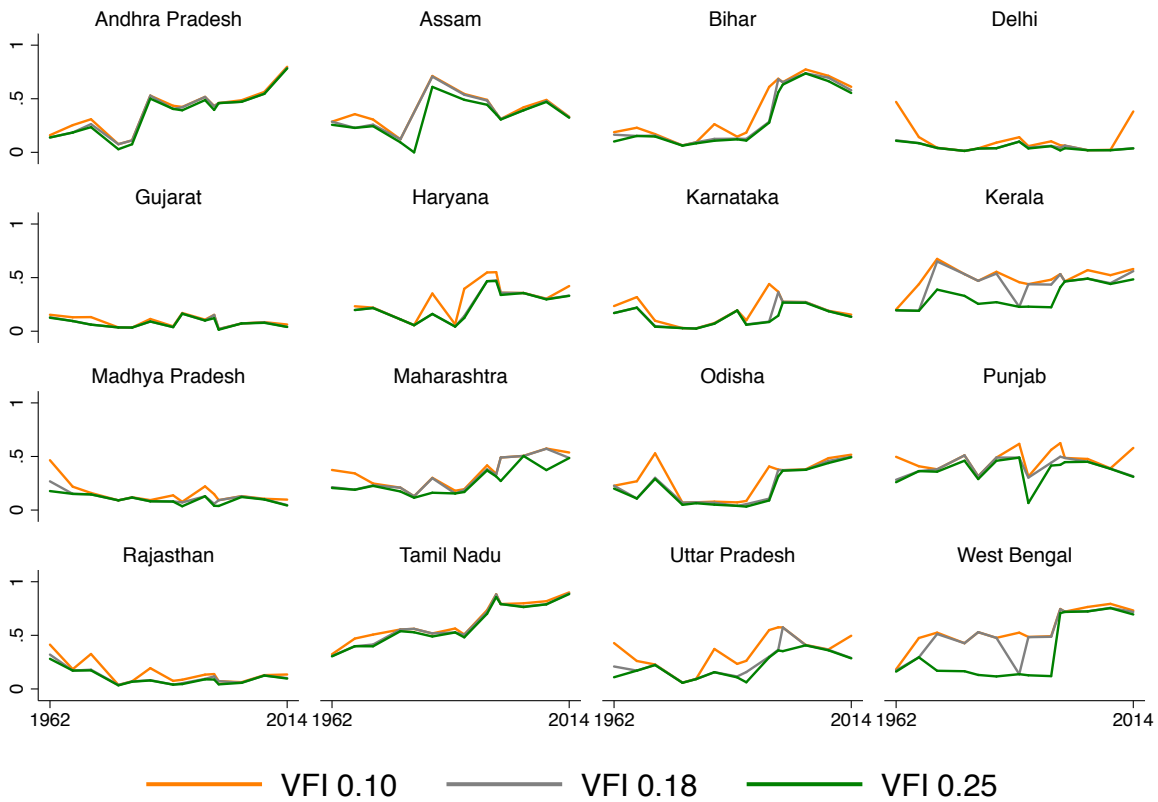
Finally, in three states, Kerala, Uttar Pradesh, and West Bengal, the use of different VFI thresholds would significantly alter whether one perceives regional parties as being strong or weak. In the cases of Kerala and West Bengal, the divergent trends stem largely from the CPM and, to a lesser extent, CPI. For decades, the CPM was one of the largest parties in both states, meaning that the CPM's coding as a regional party (or not) dramatically affects the regional party vote share in these two states. From the party's first national election in 1967 through 1996,

the CPM's VFI score fell in the ambiguous range. Since the late 1990s, its support base has contracted, and its VFI score no longer falls in the ambiguous range. Consequently, the orange and green lines converge from the late 1990s onward in Kerala and West Bengal. In Uttar Pradesh, several parties account for the divergence in regional party vote shares based on the different thresholds: the Jana Sangh in 1957 and 1962, PSP in 1967 and 1971, Lok Dal in 1984, and BSP from 1991 onward. The lines converge in 2004 and 2009, when the BSP's VFI score fell below 0.10 and it was less ambiguously a national party.

In sum, using a more restrictive definition of a regional party (that is, treating more parties as national and fewer as regional) means that Kerala and West Bengal in the 1960s through late 1990s and Uttar Pradesh in the 1960s and again in the 1980s through 1990s have significantly lower regional party vote shares than they would using a more expansive definition of a regional party (treating more parties are regional). In a handful of elections, several other states would have somewhat higher or lower regional party vote shares, while in a number of other states the use of different thresholds does not change the absolute or relative strength of regional parties.

Table A7. Subnational variation in the 1984 election using different VFI cut-offs

VFI cut-off = 0.10		VFI cut-off = 0.18		VFI cut-off = 0.25	
Extremely successful regional parties (> 60%)					
Assam	71%	Assam	71%	Assam	61%
Very successful regional parties (40-60%)					
Kerala	55%	Kerala	54%	Andhra Pradesh	50%
Andhra Pradesh	53%	Andhra Pradesh	53%	Tamil Nadu	49%
Tamil Nadu	52%	Tamil Nadu	52%	Punjab	46%
Punjab	49%	Punjab	49%		
West Bengal	48%	West Bengal	48%		
Moderately successful regional parties (20-40%)					
Uttar Pradesh	37%	Maharashtra	30%	Kerala	27%
Haryana	35%				
Maharashtra	30%				
Bihar	26%				
Relatively unsuccessful regional parties (< 20%)					
Rajasthan	19%	Haryana	16%	Maharashtra	16%
Gujarat	11%	Uttar Pradesh	16%	Haryana	16%
Madhya Pradesh	9%	Bihar	13%	Uttar Pradesh	16%
Delhi	9%	Gujarat	9%	West Bengal	12%
Odisha	8%	Madhya Pradesh	8%	Bihar	11%
Karnataka	8%	Rajasthan	8%	Gujarat	9%
		Karnataka	7%	Madhya Pradesh	8%
		Odisha	7%	Rajasthan	8%
		Delhi	4%	Karnataka	7%
				Odisha	5%
				Delhi	4%

Table A7 list the major states in descending order of regional party vote shares in the 1984 election, based on different thresholds. I chose the 1984 election because this is one in which almost 13% of the national vote went to parties with VFI scores between 0.10 and 0.25, resulting in the possibility of very different regional party vote shares across states, depending on the VFI cut-off used for classification. In other words, subnational variation should be greater across the different VFI cut-offs in 1984 than in most other elections. Yet, across all thresholds, Assam had extremely successful regional parties (winning more than 60% of the vote); Andhra Pradesh, Tamil Nadu, and Punjab all had very successful regional parties (winning 40-60% of the vote); and Rajasthan, Gujarat, Madhya Pradesh, Delhi, Odisha, and Karnataka had relatively unsuccessful regional parties (winning less than 20%).

Between the 0.10 and 0.18 cut-offs, the main differences are that the regional party vote shares in Uttar Pradesh, Haryana, and Bihar are noticeably higher using the more expansive definition of regional parties (VFI = 0.10) because these states had high vote shares for the Lok Dal, whose VFI score was 0.14. And, between the 0.18 and 0.25 cut-offs, regional party vote shares are noticeably lower in Kerala, West Bengal, and Maharashtra using the more restrictive definition of regional parties (VFI = 0.25) because the CPM (which did well in Kerala and West Bengal) and Congress (Socialist) (which won a sizeable vote in Maharashtra) had VFIs between 0.18 and 0.25. Thus, even in an election where a comparatively large share of the vote went to parties with VFI scores between 0.10 and 0.25, the pictures of subnational variation that emerge from the different cut-offs are not radically different.

Table A8. Correlations between regional party vote shares and inflation measures

	VFI 0.10	VFI 0.18	VFI 0.25	VFI 1.00	Inflation1	Inflation2	Inflation3	Inflation4
VFI 0.10	1.0000							
VFI 0.18	0.8506	1.0000						
VFI 0.25	0.8300	0.9706	1.0000					
VFI 1.00	0.6439	0.6641	0.5908	1.0000				
Inflation1	0.5330	**0.5711**	0.5414	0.5254	1.0000			
Inflation2	0.4904	0.5350	0.5175	0.5359	0.9523	1.0000		
Inflation3	0.2597	0.2820	0.2753	0.2987	0.4480	0.5522	1.0000	
Inflation4	0.3509	0.3665	0.3223	0.3353	0.8623	0.8537	0.4702	1.0000

VFI refers to the threshold used to calculate regional party vote shares. For example, VFI 0.10 calculates regional party vote shares using a 0.10 cut-off. These four VFI entries therefore represent regional party vote shares using four different cut-offs. The 0.18 threshold is the one used throughout the book. The Constituency Level Election Archive (CLEA) January 19, 2012 release includes four measures of party system inflation. Inflation1 is the Cox (1999) Inflation Score described in Chapter 2. The CLEA data also include three other variants. Inflation2 is the Moenius and Kasuya (2004) Inflation Score. Inflation3 is the Moenius and Kasuya (2004) Weighted Inflation Score. Inflation4 is the Kasuya and Moenius (2008) Inflation and Dispersion Score. Table A8 presents the correlation coefficients between the different variables. Because the CLEA data are available only for certain countries, the number of observations is 53, as opposed to the 111 countries in the regional party vote share dataset. The entries in red are the correlations between the inflation measure described in the book and the regional party vote shares. The entry in red bold is the correlation between the regional party vote share measure used throughout the book and the Cox inflation measure used in Figure 2.3 of the book. The various regional party vote shares are fairly strongly correlated with Inflation1 and Inflation2 and still positively correlated, though somewhat less strongly, with Inflation3 and Inflation4.

Table A9. Correlations between regional party vote shares and party system nationalization measures

	VFI 0.10	VFI 0.18	VFI 0.25	VFI 1.00	PSNS	PSNS-S	PSNS-W	PSNS-SW
VFI 0.10	1.0000							
VFI 0.18	0.8508	1.0000						
VFI 0.25	0.8301	0.9706	1.0000					
VFI 1.00	0.6453	0.6651	0.5913	1.0000				
PSNS	-0.4540	**-0.4960**	-0.4575	-0.3515	1.0000			
PSNS-S	-0.2946	-0.3640	-0.3655	-0.1541	0.8706	1.0000		
PSNS-W	-0.5312	-0.5460	-0.5034	-0.5551	0.8971	0.6668	1.0000	
PSNS-SW	-0.4746	-0.5211	-0.5072	-0.4926	0.8532	0.8457	0.8778	1.0000

VFI refers to the threshold used to calculate regional party vote shares. For example, VFI 0.10 calculates regional party vote shares using a 0.10 cut-off. These four VFI entries therefore represent regional party vote shares using four different cut-offs. The 0.18 threshold is the one used throughout the book. The Constituency Level Election Archive (CLEA) January 19, 2012 release includes four measures of party system nationalization. PSNS is the Jones and Mainwaring (2003) party system nationalization score described in Chapter 2. The CLEA data also include three other variants. PSNS-S is the standardized party system nationalization score, described by Bochsler (2008). PSNS-W is the weighed party system nationalization score described by Bochsler (2010). PSNS-SW is the standardized and weighted party system nationalization score described by Bochsler (2010). Table A9 presents the correlation coefficients between the different variables. Because the CLEA data are available only for certain countries, the number of observations is 53, as opposed to the 111 countries in the regional party vote share dataset. The entries in red are the correlations between the party system nationalization measure described in the book and the regional party vote shares. The entry in red bold is the correlation between the regional party vote share measure used throughout the book and the Jones and Mainwaring party system nationalization measure used in Figure 2.3 of the book. Because the regional party vote and party system nationalization measures are inversely related, Figure 2.3 subtracts the PSNS from 1. In Table A9, I use the raw party system nationalization measures, which are therefore negatively correlated with the regional party vote shares. The various regional party vote shares are negatively correlated with the Jones and Mainwaring PSNS and even more strongly negatively correlated with Bochsler's PSNS-W and PSNS-SW.

Table A10. Regional parties by type of regional party in the 2014 Indian national election

Regional party type	Party (2014 vote share)
Regionalist	1. All India Anna Dravida Munnetra Kazhagam (3.3%) 2. Asom Gana Parishad (0.1%) 3. Dravida Munnetra Kazhagam (1.8%) 4. Jammu & Kashmir People's Democratic Party (0.1%) 5. Jharkhand Mukti Morcha (0.3%) 6. Marumalarchi Dravida Munnetra Kazhagam (0.3%) 7. Maharashtra Navnirman Sena (0.1%) 8. Nagaland People's Front (0.2%) 9. Shiromani Akali Dal (0.7%) 10. Shiv Sena (1.9%) 11. Telugu Desam Party (2.6%) 12. Telangana Rashtra Samithi (1.2%)
Janata Dal remnants	1. Biju Janata Dal (1.7%) 2. Indian National Lok Dal (0.5%) 3. Janata Dal (Secular) (0.7%) 4. Janata Dal (United) (1.1%) 5. Lok Jan Shakti Party (0.4%) 6. Rashtriya Janata Dal (1.4%) 7. Rashtriya Lok Dal (0.1%) 8. Samajwadi Party (3.4%)
Congress splinters	1. All India Trinamool Congress (3.9%) 2. Haryana Janhit Congress (Bhajan Lal) (0.1%) 3. Nationalist Congress Party (1.6%) 4. YSR Congress Party (2.6%)
Left	1. All India Forward Bloc (0.2%) 2. Communist Party of India (0.8%) 3. Communist Party of India (Marxist) (3.3%) 4. Communist Party of India (Marxist-Leninist)(Liberation) (0.2%) 5. Revolutionary Socialist Party (0.3%)
Other Major	1. Apna Dal (0.2%) 2. All India Majlis-e-Ittehadul Muslimeen (0.1%) 3. All India United Democratic Front (0.4%) 4. Desiya Murpokku Dravida Kazhagam (0.4%) 5. Indian Union Muslim League (0.2%) 6. Jharkhand Vikas Morcha (Prajatantrik) (0.3%) 7. National People's Party (0.1%) 8. Pattali Makkal Katchi (0.3%) 9. Rashtriya Lok Samata Party (0.2%) 10. Swabhimani Paksha (0.2%) 11. Viduthalai Chiruthaigal Katchi (0.1%)
Micro-parties	See note below

Regional parties coded as micro-parties are regional parties winning less than 0.1% of the vote. In the 2014 national election, 464 parties competed. Table A8 above lists 40 regional parties. Additionally, there were eight parties coded as national (vote shares in parentheses): Aam Aadmi Party (2.1%), Bahujan Mukti Party (0.1%), Bahujan Samaj Party (4.2%), Bharatiya Janata Party (31.3%), Communist Party of India (Marxist-Leninist) Red Star (< 0.1%), Indian National Congress (19.5%), Republican Party of India (A) (< 0.1%), Socialist Unity Centre of India (Communist) (0.1%). The remaining 416 parties are regional parties coded as micro-parties.