Electoral rules, mobilization and turnout: A review

by

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Abstract:
In this essay, I review recent models of strategic mobilization, focusing in particular on how electoral rules affect elite mobilizational incentives. I argue that a natural next step for such models is to pay more explicit attention to the effort-to-votes mapping in general and to secondary mobilization (conducted by interest groups, activists and ordinary voters) and mobilizational spillovers (both across parties and across candidates within a given party) in particular.
Electoral rules, mobilization and turnout

Many of the most abrupt, durable and large changes in turnout coincide with changes in electoral rules. For example, the 20% increase in Swiss turnout after 1919 came right after a switch from plurality rule to PR (Gosnell 1930, p. 126); and the double-digit decline in non-southern US turnout rates after 1890 followed introduction of the secret ballot and a substantial disaggregation of the electoral calendar (Engstrom 2012; Engstrom and Kernell n.d.; Cox and Kousser 1981). These and other examples motivate investigating how different electoral rules affect turnout rates.

In this paper, I focus on rules that affect turnout indirectly—by changing the incentives of candidates, interest groups, and parties to exert mobilizational effort. In the process, I review strategic models of mobilization. I argue that a natural next step for such models is to pay more explicit attention to the effort-to-votes mapping in general and to secondary mobilization (conducted by interest groups, activists and ordinary voters) and mobilizational spillovers (both across parties and across candidates within a given party) in particular.

Strategic theories of mobilization

Avoiding the paradox of voting

After the realization that pivotal voter theories of turnout predict vanishingly small turnout rates in large electorates (Palfrey and Rosenthal 1985), a number of scholars—beginning with Morton (1987, 1991) and Uhlaner (1989)—sought to resolve the “paradox of voting” by highlighting the mobilizational efforts of politicians and interest groups. The gist of the argument was that elite actors might rationally decide to invest in mobilizing voters, while those voters might rationally

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1 Somewhat later, a series of articles explored conditions under which an atomistic pivotal voter model could sustain high turnout in equilibrium; see Medina (2013).
respond to such mobilization by turning out to vote. Early studies marshaled substantial evidence favoring such an argument. For example, elite mobilizational effort is systematically higher in closer electoral contests, and mobilizational effort is demonstrably effective in boosting turnout. Thus, it appeared that the paradox of voting could be resolved simply by changing the analytical focus from pivotal voters to pivotal elites.

The main theoretical critique of elite mobilization models has been that they lack micro-foundations. That is, they do not explain precisely what elites do and why their followers respond by bearing the costs of participation. To clarify this problem, I begin by articulating a model, broadly similar to Shachar and Nalebuff’s (1999), in which two parties, A and B, compete by mobilizing their supporters.

**Effort, votes and seats in a single contest**

Let $e_P$ denote the mobilizational effort exerted by party $P$; $V_P(e_P, e_{-P})$ denote $P$’s vote share, given efforts $e_P$ and $e_{-P}$; and $S_P(V_P)$ denote $P$’s expected seat share, given vote share $V_P$. Assume that party $P$ chooses its effort level to maximize the expected value of the seats it will win, net of the costs of mobilization:

$$\max_{e_P} S_P[V_P(e_P, e_{-P})]b - c_P(e_P)$$

Here, $b$ is the value of a seat and $c_P$ is a convex increasing function.

Electoral rules governing the mapping of votes into seats within a given electoral district are said to be more _disproportional_ when they confer a larger bonus on the plurality winner. In the case of two-party competition, one can write

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2 For evidence on the US case, see e.g. Cox and Munger (1989), Rosenstone and Hansen (1993), Aldrich (1995), and Shachar and Nalebuff (1999). Regarding the UK case, see e.g. Taylor (1972), Denver and Hands (1974, 1985, 1997), and Fieldhouse, Pattie and Johnston (1996). For other cases, see the review in Cox (1999).

3 Regarding the US case, observational evidence is provided by e.g. Key (1950), Dawson and Zinser (1976), Copeland (1983), Cox and Munger (1989), and Jackson (1996), while field experimental evidence is provided by e.g. Gerber and Green (1999) and Gerber, Green and Larrimer (2008). In the UK case, observational evidence is provided by the studies cited in footnote 2 and field experimental evidence is provided by e.g. Bochel and Denver (1971). For other cases, see the review in Cox (1999).

4 If there is more than one seat at stake in the contest, then this notation assumes they are all of equal value. This would be true, for example, in a closed-list contest in a multi-member district in which all the seats awarded were seats in a legislature.

5 In principle, electoral rules can over-represent second-place parties (as in Chile after 1980) or even small parties (as would happen if, for example, Jefferson’s method of apportioning seats in the US
the mapping of votes into expected seat shares using either the standard
generalization of the “cube law” used in the redistricting literature (e.g. Kendall and
Stuart 1950, King 1990, Cox and Katz 2002); or a contest success function (e.g.
Herrera, Morelli and Palfrey 2013). The latter can be written as follows (for a case
in which there is no “bias” in the translation of votes to seats):

\[
S_p(V_p) = \frac{V_p^\gamma}{V_p^\gamma + (1-V_p)^\gamma}
\]

Here, the parameter \( \gamma \geq 1 \) indexes the winner’s bonus. If \( \gamma = 1 \), seat shares equal
vote shares. As \( \gamma \) grows without bound, the rule more and more closely
approximates winner-take-all.

What about the effort-to-votes mapping, \( V_p(e_p, e_{-p}) \)? Many mobilization
theorists, such as Uhlaner (1989), Schram and van Winden (1991) and Cox,
Rosenbluth and Thies (1998), argue that a key tactic party leaders employ to get out
the vote is the orchestration of social pressure to vote. As Shachar and Nalebuff
(1999, p. 535) put it: “We believe the social pressure is very important. There is a
contagion effect. The more people in a social network that encourage a person to
vote, the more likely that person is to vote and to encourage others to do the same.”

Despite the prevalence of allusions to social pressure, state-of-the-art
mobilization models—such as Shachar and Nalebuff (1999) and Herrera, Morelli
and Palfrey (2013)—employ an assumption that implicitly ignores, or severely
restricts, secondary mobilization. In particular, these models assume that parties
mobilize all and only supporters whose costs of participation fall below a chosen
cost threshold. The most natural interpretation of this assumption is that there is
no secondary mobilization at all: party leaders compensate each of their followers
for their respective private costs of participation; all and only compensated voters
turn out. An alternative interpretation is that parties mobilize supporters who, in

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House to states were used as an electoral rule). In practice, however, electoral rules vary mostly in
terms of how large a bonus they give to the largest party.
turn, pressure only friends with costs of participation below the party’s chosen threshold.

My view is that the latter interpretation is untenable, because it assumes common knowledge of voters’ private costs of participation. Those who pressure must know whom to pressure. Thus, my view is that mobilization models (and, even more clearly, ethical voter models) simply ignore secondary mobilization in their formal mechanics.

Ignoring secondary mobilization does not seem justified, however. Both simulations (Fowler 2005) and randomized field experiments (Bond et al. 2012) suggest that secondary mobilization effects are 3-5 times larger than primary effects. Thus, just as marketing specialists often develop advertising campaigns with an eye to sparking word-of-mouth communications, so we might expect parties to design their get-out-the-vote campaigns with secondary effects in mind.

In what follows, I assume the effort-to-votes mapping takes the following, dual-track, form:

\[
V_p(e_p, e_{-p}) = V_p^{(0)} + V_p^{(1)}(e_p, e_{-p}; K_p^{(1)}) + V_p^{(2)}(e_p, e_{-p}; K_p^{(2)})
\]  

(2)

Here, \(V_p^{(0)}\) denotes the vote share \(P\) would receive if \(e_p = 0\); \(V_p^{(1)}(e_p, e_{-p}; K_p^{(1)})\) denotes the increment to P’s vote share due to the primary mobilization fueled by effort \(e_p\); and \(V_p^{(2)}(e_p, e_{-p}; K_p^{(2)})\) denotes the increment to P’s vote share due to secondary mobilization sparked by effort \(e_p\).

The intuition behind equation (2), diagrammed in Figure 1, is that each party directly contacts some number of its supporters. These directly contacted individuals increase their own probability of turning out; call this primary mobilization. Contacted individuals also send the party’s mobilizational message through their respective social networks or otherwise influence the turnout rate of their family and friends; call this secondary mobilization.

Mobilizational effort can be thought of as a kind of labor and, as in other contexts, labor combines with capital to produce its intended effects. In the present
context, each kind of mobilization—primary and secondary—depends on somewhat different kinds of mobilizational capital.

**Figure 1: Effort, votes and seats in a single contest**

The efficacy of primary mobilization depends on capital assets such as databases indicating whom to contact, how to contact them and what inducements to offer. I indicate party P’s endowment of such assets by \( K^{(1)}_P \).

The efficacy of secondary mobilization depends on features of the social networks that party P’s primary contacts might activate. For example, the vote yield of secondary mobilization depends on the degree to which the social networks of P’s supporters are contained within the district; call this the *district-network overlap*. Vote yields also depend on whether P’s supporters are formally organized into groups to which P can sub-contract mobilizational duties in exchange for policy benefits. The term \( K^{(2)}_P \) in Figure 1 represents P’s endowment of capital assets that help produce a bigger secondary-mobilization bang for the mobilizational-effort buck.

**The marginal benefit of effort**

The main purpose of the “all and only” assumption employed in current models is to ensure (weakly, globally) diminishing marginal returns to effort. When the return to effort (in vote share) is monotonically diminishing, it is easier to
expose how different votes-to-seats mappings affect mobilization and turnout, which is the main analytic focus of current models.

However, the main tactics that political parties use to mobilize votes all entail important returns to scale. To illustrate this point, consider three examples: transportation subsidies, the provision of social benefits tied to the act of voting, and the sub-contracting of mobilization to affiliated interest groups.

Parties that provide transportation subsidies to their followers must often face increasing returns to scale. In 19th century America, for example, the price to hire a fleet of stage-coaches would be less per passenger than the price to arrange a horse for each person. Relatedly, transportation subsidies plausibly violate the assumption that all and only supporters with costs below a fixed threshold will participate. For, voters with high private costs in areas where it was cheap to organize transportation might vote, while those with low private costs in areas where it was costly to arrange transportation might abstain.

Parties can manipulate, not just the costs of participation, but also the act-contingent benefits. In 19th century America, co-partisans in a given county would often be entertained at the polling place with sporting events, pot-luck meals, pole-raisings, and so forth (cf. Cox and Kousser 1981). Such social events imposed minimal costs on the parties. Moreover, the more supporters who planned to attend polling-place festivities, the more valuable the anticipated business and social networking opportunities became. Indeed, to the extent that social events were network goods, several conclusions follow: (a) the effort-to-votes mapping would exhibit increasing returns to scale; (b) high turnout could become a self-fulfilling prophecy; and (c) another possible violation of the “all and only” assumption would arise (high-cost social butterflies vote, low-cost social misfits abstain).

Parties can also effectively pay affiliated interest groups to mobilize their own members. I call this sub-contracting. Powell (1980) views sub-contracting (which he calls “linkage”) as the key to why turnout is higher in PR than SMD systems. His account might be reconstructed as follows. First, a political party will pay a sub-contractor only if the group’s mobilized members have a sufficiently high probability of voting for the party. Second, if the group’s partisan loyalty is high
enough, then sub-contracting is more efficient than direct mobilization by party personnel. Third, the probability that any given interest group’s members will have high loyalty to a particular party is higher under PR than SMD. If one accepts these premises, one expects more sub-contracting and higher turnout in PR systems than in SMD systems.

The third premise, which holds that interest groups tend to “nest” within parties more completely in PR systems than in SMD systems, seems defensible (cf. Poguntke 2006). However, here I simply note that standard models of mobilization exclude such a possibility by fiat. In these models (and the one sketched above), voters come in pure types wholly loyal to a particular party. Thus, no party need worry that its mobilizational effort will turn out a citizen who will then vote for a competitor. In other words, the standard models assume zero mobilizational spillovers; and hold this feature constant when comparing different electoral systems.

If we think sub-contracts require some minimum effort to arrange, then they too imply a violation of diminishing marginal returns to effort. Relatedly, sub-contracts can violate the “all and only” assumption, if high-cost members of affiliated groups vote, while low-cost supporters who are not members of any affiliated group abstain.

**Why voters respond to mobilizational effort**

As to why it is rational for voters to respond to mobilizational effort by turning out, I will just briefly list some plausible reasons. Participating in elections might be rational for individual voters because their transportation costs are subsidized; they anticipate act-contingent benefits derived from social networking; and they anticipate being pivotal in attaining party-provided club goods. Abrams, Iversen and Soskice (2010) formally develop an argument of the second kind. In their analysis, turning out is a requirement for maintaining “good standing” in some social networks, and network participants are sometimes willing to impose costly penalties on one another. In their high-turnout equilibrium, the incurred costs of sanctioning non-voting are small, because relatively few members of the network
choose not to vote. Although Abrams, Iversen and Soskice focus on informal social networks, the basic logic of their model works *a fortiori* for organized interest groups.

Another mobilizational tactic to which voters might rationally respond is represented by the common 19th century American practice of awarding prizes to “banner districts”—that is, those turning out the biggest vote for a particular party. Such schemes offered club goods to geographically defined groups, rather than private goods to individuals. Schwartz (1987) and Smith and Bueno de Mesquita (2012) have explored such incentives formally, arguing that they can cost-effectively generate high levels of turnout.

**Effort, votes and seats when there are multiple contests**

General elections consist of a number of distinct electoral contests held on the same day. Parties’ mobilizational incentives in general elections depend on how mobilization in one contest affects other contests; and on partisan organization to internalize those externalities.

Figure 2 illustrates a general election. It looks much like Figure 1, except that a single vote share and a single seat share are replaced by a vector of vote shares and a vector of seat shares.

**Figure 2: Effort, votes and seats in multiple contests**
Rules

Electoral rules can affect many of the features displayed in Figures 1 and 2. First, rules can affect a party’s endowments of both primary ($K^{(1)}$) and secondary ($K^{(2)}$) mobilizational capital. For example, as the geographic size of districts declines, district-network overlap weakly declines (reducing $K^{(2)}$). Second, rules can strongly affect the external benefits of mobilization. For example, how many separate contests are held concurrently—how “general” or “decisive” general elections are—affects such benefits. Third, rules can determine the disproportionality of the votes-to-seats mapping. For example, plurality rule in single-member districts (with no upper tiers) is one way to produce a winner-take-all system.

In the rest of the paper, I focus mainly on how different levels of disproportionality (a votes-to-seats feature) affect mobilization and turnout. I begin with models that employ the “all and only” assumption (simplifying the effort-to-votes mapping) but then suggest various consequences of relaxing that assumption. I also continue to assume zero mobilizational spillovers but consider the consequences of relaxing that assumption as well.

Disproportionality Increases the Variance of Turnout

Gosnell (1930) long ago noticed that turnout varied more substantially across single-member districts in majoritarian electoral systems than it did across multi-member districts in PR systems. Cox (1999) sketched a decision-theoretic explanation of Gosnell’s observation, arguing that mobilizational effort should be high in closely contested single-seat districts, intermediate in multi-seat districts operating under PR, and low in lopsided single-seat districts. The logic behind this conjecture (p. 398) hinged on the value of a marginal vote in increasing a party’s expected seat share. In closely contested winner-take-all elections, an additional vote can make the difference between losing and winning. In lopsided winner-take-
all elections, in contrast, an additional vote has almost no chance of affecting the outcome. Finally, in perfectly proportional elections, each additional vote slightly increases a party’s expected seat share. Thus, one expects mobilization levels in PR districts to be intermediate between those in close and lopsided majoritarian districts.

Herrera, Morelli and Palfrey (2013) have formally derived Cox’s conjecture within a game-theoretic model of elite mobilization in a two-party polity. From a game-theoretic perspective, the analyst has to consider whether smaller parties will face less daunting free rider problems than larger ones and thus be able to mobilize a higher fraction of their supporters in equilibrium. Cox’s conjecture implicitly relies on such “underdog compensation” effects being small enough.

To explain Herrera, Morelli and Palfrey’s model—which generalizes both strategic mobilization (e.g., Shachar and Nalebuff 1999) and ethical voter (e.g., Feddersen and Sandroni 2006) models—suppose that voters come in two types, with a proportion $q$ supporting party A and $1-q$ supporting party B. Each individual voter bears a non-negative private cost of participation. Party A (resp., B), however, can mobilize all its supporters whose cost of participation falls below a chosen threshold, $c_\alpha$ (resp., $c_\beta$). The cost of such mobilization is given by a convex increasing function $\lambda(c_\alpha)$ (resp., $\lambda(c_\beta)$). If a share $\alpha$ of party A’s supporters and a share $\beta$ of party B’s supporters participate in the election, then the turnout rate will be $T = q\alpha + (1-q)\beta$.

Holding the cost-of-mobilization curve ($\lambda$) and the partisan breakdown of the electorate ($q$) constant, consider two different ways of conducting an election: one in which the winner takes all; and one in which seats are allocated in perfect proportion to votes. In the winner-take-all case, if $q = \frac{1}{2}$, then (in the limit) the marginal benefit to party A (resp., B) of raising the threshold $c_\alpha$ (resp., $c_\beta$) is “high.”

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6 Herrera, Morelli and Palfrey consider the case in which voters’ payoffs depend only on which party wins the office(s) at stake. In effect, they limit parties to the provision of public or club goods that are similarly valued by all their supporters. Parties that can provide private goods, or offer contingent prizes to subsets of supporters (as in Smith and Bueno de Mesquita 2012), are not considered.

7 The total number of eligible voters is a Poisson random variable with mean $N$. The limit is taken with respect to $N$. 
However, if \( q \neq \frac{1}{2} \), then (in the limit) the marginal benefit is nil. In the perfect PR case, the marginal benefit of raising the level of mobilization depends less on \( q \).

Regardless of the breakdown of the electorate, a marginal vote yields a positive finite increment in expected seats. Putting these results together, Herrera, Morelli and Palfrey show that turnout is highest in winner-take-all elections in which the two parties are evenly matched \( (q = \frac{1}{2}) \), intermediate in proportional elections (regardless of \( q \)), and lowest in winner-take-all elections in which the two parties are not evenly matched \( (q \neq \frac{1}{2}) \).

**Cross-sectional variance**

With some additional notation, one can use Herrera, Morelli and Palfrey's results to say how turnout should vary cross-sectionally in different electoral systems. In particular, consider an electoral system with \( n \) districts, each of magnitude \( m \), all operating under the d'Hondt method of PR. The proportion supporting party A in district \( j \) is \( q_j \), with the remaining \( 1-q_j \) supporting B. If a share \( \alpha_j \) of party A's supporters and a share \( \beta_j \) of party B's supporters participate in the election in district \( j \), then the turnout rate in district \( j \) will be \( T_j = q_j \alpha_j + (1-q_j) \beta_j \).

Assuming all districts have equal numbers of registered voters, the nationwide turnout rate will be \( T = \frac{1}{n} \sum_j T_j \).

Holding fixed the number of districts \( n \), the electoral rule (d'Hondt), the distribution of partisan support \( (q = (q_1,\ldots,q_n)) \), and each party's cost-of-mobilization function \( (\lambda) \), let us compare turnout rates in two polar cases. At one extreme, \( m = 1 \). In this case, d'Hondt is equivalent to winner-take-all. At another extreme, \( m = \bar{m} \), where \( \bar{m} \) is defined to be such that, whenever \( m \geq \bar{m} \), the translation of votes into expected seats by the d'Hondt rule deviates negligibly from perfect proportionality.

Let the marginal benefit of mobilizing a vote in district \( j \), for given \( m \) and \( q_j \), be denoted \( MB(m,q_j) \). From Herrera, Morelli and Palfrey, we know that (for large enough electorates) \( MB(1,\frac{1}{2}) > MB(\bar{m},k) > MB(1,h) \) for all \( (k,h) \in (0,1) \) such that \( h \)

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As for the underdog compensation effect, Herrera, Morelli and Palfrey show that it is nil under the assumptions stated.
≠ ½. Denote the cross-district variance in the marginal benefit, given m, by
\[ \text{Var}_{MB}(m) = \text{var}\{MB(m,q_j): 1 \leq j \leq n}\]. Similarly, let the cross-district variance in
mobilization be \( \text{Var}_M(m) = \text{var}\{M(m,q_j): 1 \leq j \leq n}\) and the cross-district variance in
turnout be \( \text{Var}_T(m) = \text{var}\{T(m,q_j): 1 \leq j \leq n}\). Here, \( M(m,q_j) \) stands for the
equilibrium mobilization rate, given m and \( q_j \); and \( T(m,q_j) \) stands for the equilibrium
turnout rate, given m and \( q_j \).

With this notation, one can state the following

**Cross-Sectional Variance Hypothesis**: Suppose there exist both “swing”
districts (\( q_j = \frac{1}{2} \)) and “safe” districts (\( q_j \neq \frac{1}{2} \)). Then
(a) \( 0 = \text{Var}_{MB}(\bar{m}) < \text{Var}_{MB}(1) \);
(b) \( 0 = \text{Var}_M(\bar{m}) < \text{Var}_M(1) \); and
(c) \( 0 = \text{Var}_T(\bar{m}) < \text{Var}_T(1) \).

In words, the cross-district variances in the marginal benefit of mobilizing a vote,
mobilization and turnout are all nil in a pure PR system but positive in a
majoritarian system in which both swing and safe districts exist. Results (b) and (c)
support Cox’s conjecture that “the cross-sectional variance in mobilization and
turnout should be higher in single-member plurality systems than in multimember
PR systems” (1999, p. 398).

Countries adopting more proportional rules typically keep the size of their
assemblies roughly constant and reduce the number of districts. Thus, the
comparison above (which held the number of districts constant and allowed
assembly size to increase) is not necessarily the most natural one to make.
However, if we compare a majoritarian electoral system with n one-seat districts to
a PR electoral system with one n-seat district, the same conclusions about variance
emerge (when \( n \geq \bar{m} \)).
Cross-temporal variance

As far as I know, no one has explicitly discussed how turnout should vary across time, as a function of electoral rules. With some additional notation, one can apply Herrera, Morelli and Palfrey’s results to this issue as well.

Continuing to consider two parties competing in an electoral system with n m-seat districts operating under the d’Hondt method of PR, let the proportion supporting party A in district j at time t be \( q_{jt} \), and assume \( \{q_{jt}: t = 1,2,...\} \) are independent draws from a fixed district-specific distribution. Let \( \kappa_j = \Pr[q_{jt} = ½] \) be the probability that district j experiences a close contest. If \( \kappa_j \in (0,1) \) and \( \tau \geq 2 \), then

\[
E[\text{var}(M(1,q_{jt}), 1 \leq t \leq \tau)] > E[\text{var}(M(m,q_{jt}), 1 \leq t \leq \tau)].
\]

That is, for a given district, the expected variance in mobilization across a sample of \( \tau \) elections is higher when the electoral rules are more disproportional. A similar result holds both for the marginal benefit of a vote and for turnout.

Scope limitations of the variance hypothesis

The Variance Hypothesis assumes that the district elections held in SMD systems are truly district-specific. Two important violations of this assumption are upper tiers and concurrent executive elections.

To illustrate the first violation, suppose that votes cast in a set of primary electoral districts are counted in an upper tier encompassing them all, with seat allocations occurring at both levels. In this case, the marginal benefit of mobilizing a bloc of votes in any given district will have two components. The mobilized bloc may prove decisive in winning a marginal seat within the district (yielding a district-specific benefit) but it may also prove decisive in winning a marginal seat within the upper tier (yielding a tier-specific benefit). Thus, upper tiers tend to equalize the marginal value of mobilization across all the districts they contain (and the equalization is more complete as the share of seats allocated in the upper tier increases).\(^9\)

Concurrent competition for executive office can induce a similar equalization of marginal benefits across districts. In the US, for example, the value of

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\(^9\) Definitions and examples of upper tiers are provided in Cox (1997).
mobilization is partially equalized across the legislative districts within a given state, if that state is itself closely contested at the presidential level and most voters cast straight party tickets. For, in this case, the presidential candidates may push mobilization and turnout up throughout the state, thereby lessening the cross-district variability that would otherwise have been observed.

Another obvious scope limit of the variance hypothesis concerns compulsory voting. If voting is compulsory, one should expect little turnout variance across districts, regardless of how disproportional the electoral rules are.

Relaxing “all and only”

The “all and only” assumption does not seem essential to establish the Variance Hypothesis. Intuitively, all one needs is that the marginal return in vote share to effort is not too different under PR and SMD systems (in equilibrium). This would allow the clear differences between the two systems’ votes-to-seats mappings to drive the result. In other words, were one to augment the model in equations (0)-(2) with an appropriate “not-too-different” assumption, the Variance Hypothesis would still hold.

Does disproportionality increase cross-district turnout variance?

Most empirical studies of the Variance Hypothesis rely on cross-sectional data. For example, Cox, Rosenbluth and Thies (1998) report that the cross-district variance of turnout decreased monotonically with district magnitude in Japanese Diet elections over the period 1955-93. Similar within-country results have been reported for Switzerland and Spain (Grofman and Selb 2009, 2011).

Selb (2009), using data on “3,194 electoral districts observed in 31 national elections in 20 countries” (all but five from western Europe), documents several patterns. First, district-level deviations from the national mean turnout rate increase with disproportionality (as measured by the district-specific threshold of exclusion). Second, in a heteroscedastic regression model which allowed each of the

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10 A few consider before and after evidence. For example, Gosnell (1930, p. 183) noted that the variability of turnout rates evened out in Germany, after it transitioned from a majoritarian to PR electoral system.
first two moments of district-specific turnout to be a function of disproportionality, he finds significant effects on both counts. Districts operating under more disproportional rules had lower expected turnout and higher turnout variance.

A series of recent laboratory experiments have also explored the relationship between disproportionality and turnout. See Herrera, Morelli and Palfrey (2013) for a review. These experiments deal with small enough sets of voters (lab subjects) that they can and do ignore mobilization by pivotal elites, in order to focus on strategic participation by pivotal voters. Collectively, they lend substantial support to parts (a) and (c) of a pivotal voters version of the Variance Hypothesis.

**Does disproportionality increase over-time turnout variance?**

I am not aware of studies that address this issue. One approach is to examine the absolute change in national turnout rates from election to election in different systems. Let $\Delta T_{jt} = |\text{Turnout}_{jt} - \text{Turnout}_{j,t-1}|$, where $j$ indexes countries and $t$ indexes elections in each country. Let $\text{PR}_{jt} = 1$ if election $jt$ was held under PR rules; $\text{Compulsory}_{jt} = 1$ if voting was compulsory in election $jt$; and $\text{UpperTier}_{jt} = 1$ if election $jt$ featured an upper tier. Table 1 shows the results of regressing $\Delta T_{jt}$ on $\text{PR}_{jt}$, Compulsory$_{jt}$, and UpperTier$_{jt}$ for the sample of countries covered in the International IDEA dataset.\(^{11}\)

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient (standard error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>9.5*** (.94)</td>
</tr>
<tr>
<td>PR</td>
<td>-2.5*** (.77)</td>
</tr>
<tr>
<td>Upper Tier</td>
<td>-1.4* (.76)</td>
</tr>
<tr>
<td>Compulsory Voting</td>
<td>-1.4* (.72)</td>
</tr>
</tbody>
</table>

**Table 1: Cross-temporal variance in turnout and electoral rules**

\(^{11}\)See www.idea.int.
The analysis focuses on 48 countries that IDEA classifies as either PR or plurality/majority over the postwar era. As can be seen, turnout fluctuations are 9.5 percentage points on average in the plurality/majority countries but 2.5 points (over 26%) smaller in PR systems. Upper tiers (which occur only in the PR systems) further reduce turnout fluctuations, as does compulsory voting. At a descriptive level, at least, these patterns are consistent with the expectation that turnout should fluctuate more in more disproportional systems.

**Disproportionality and expected turnout**

Most scholars have claimed that disproportionality depresses expected turnout. In this section, I first review the main rationale offered for this claim, before offering some others.

**Higher cross-sectional variance lowers turnout**

Some (e.g., Powell 1986; Blais and Dobrzynska 1998; Selb 2009) have argued that the greater cross-sectional variability of mobilization and turnout in SMD systems should lower the expected levels of mobilization and turnout. Powell (1986, p. 21), for example, argues that nationwide districts should enhance turnout because “parties...have equal incentive to get voters to the polls in all parts of the country.” If we denote expected mobilization (turnout) in a nation using single-member districts and plurality rule by \( M_{SMD} (T_{SMD}) \) and expected mobilization in a nation using PR in a single nationwide district by \( M_{PR} (T_{PR}) \), then Powell’s claim can be stated as follows:

**The Mean Hypothesis:** (a) \( M_{SMD} < M_{PR} \); (b) \( T_{SMD} < T_{PR} \).

This hypothesis, it should be noted, requires assuming that safe districts are sufficiently common in SMD systems. For, turnout in SMD systems is a weighted average of turnout in safe and close districts: \( T_{SMD} = \kappa T_{SMD}^{safe} + (1-\kappa) T_{SMD}^{close} \), where \( \kappa \)
is the proportion of close districts. If we let \( \bar{\kappa} \) be a share of close districts high enough to equate the overall turnout rates in SMD and PR systems (i.e., \( \bar{\kappa} \) is such that \( T_{PR} = \bar{\kappa}T_{SMD}^{close} + (1 - \bar{\kappa})T_{SMD}^{non-close} \)), then the (implicit) assumption made by those who predict higher mobilization and turnout in PR systems is that close districts are sufficiently rare, in the sense that \( \kappa < \bar{\kappa} \). Since the proportion of close districts can vary (due, e.g., to residential segregation and gerrymandering) and the precise values of \( T_{SMD}^{close}, T_{PR} \), and \( T_{SMD}^{non-close} \) depend on non-institutional parameters, it is not clear that the higher variance in SMD systems allows us to conclude that all SMD systems will have lower turnout than all PR systems.

**Higher cross-temporal variance lowers turnout**

PR systems also encourage parties and their interest group allies to invest in more mobilizational capital than would be profitable in SMD systems. Consider, for example, whether it makes sense to establish and maintain a phone bank. Such an investment is pointless in a safe SMD. In a district that is competitive in a particular election (\( q_{it} = \frac{1}{2} \)), a phone bank might be constructed from the ground up but then allowed to atrophy after the campaign ends. Only in single-member districts that will foreseeably be closely contested for several election cycles would it make sense to establish and maintain a phone bank (or other capital asset). In contrast, PR systems promise stable marginal returns from mobilization into the indefinite future. They thus motivate investment in more mobilizational capital.

I am not aware of any systematic empirical explorations of this hypothesis. One kind of “capital asset” in which parties might invest are its members. Recruiting them takes effort; and party leaders must hope recruits will remain members—paying dues and providing campaign assistance—for a long time.

If we view total dues-paying membership as a kind of capital asset, then Figure 3 (based on data from 14 European and settler countries) suggests that investments in this asset respond to the structure of the electoral system. The box-and-whisker plots show that party membership (from Webb, Farrell and Holliday...
is lowest in the four countries with single-member districts; intermediate in the four countries with district magnitudes between 1 and 10; and highest in the six countries with district magnitudes above 10.

A party’s relationships with allied interest groups constitute another kind of capital asset in which it might invest. It has long been said that parties in PR systems more often develop durable alliances with interest groups, with those groups then mobilizing their own members (Janda 1980; Powell 1986, pp. 22-23; Radcliff and Davis 2000). That said, quantitative measures of the prevalence of such alliances have proved elusive (Poguntke 2006).

**Geographically small districts lower turnout**

Parties operating in systems with geographically small districts should be less willing to mobilize groups with geographically dispersed memberships. To illustrate the point, consider a closely contested district and two groups, G1 and G2, identical in all respects except that the latter is more dispersed. In this case, a larger proportion of G2’s secondary mobilization will occur outside the focal district. Thus,
the value of mobilizing G2 will be less than the value of mobilizing the more concentrated group, G1. In contrast, parties operating in a system with a nationwide district (or upper tier) will have no electoral incentive to discriminate among groups based on the geographic location of their members.\textsuperscript{13} To put it another way, geographically larger districts encourage parties to mobilize a wider array of groups.

A similar point can be made about individual voters. Parties in single-member districts have relatively poor incentives to invest in learning about and mobilizing either newly arrived or transient persons. For, the social networks of new and transient persons lie more outside the district and, thus, the within-district secondary mobilization sparked by contacting them is on average smaller. Consistent with this observation, turnout in the US is substantially lower for newly arrived persons; and also for various categories of foreseeably transient persons—e.g., college students and unmarried persons (Rosenstone and Hansen 1993; Brady, Verba and Schlozman 1994). In contrast, in systems with nationwide districts (or upper tiers), parties’ payoffs from mobilizing new or transient residents are little different than their payoffs from mobilizing long-time residents.

**Summary**

The discussion above suggests three distinct reasons that turnout should be higher in PR than SMD systems. First, most districts in SMD systems are un-competitive (for unspecified reasons) and turnout in such districts is usually low (because parties have little incentive to mobilize). Second, parties have poorer incentives to invest in mobilizational capital in SMD systems (because the marginal benefit of a vote varies across time). Third, parties have poorer incentives to invest in mobilizing persons and groups with geographically dispersed social networks in SMD systems.

\textsuperscript{13} I assume the entire network lies within a given country. If not, then parties in PR systems may choose which groups to mobilized based in part on how much of each group's social network extends beyond the country's borders.
Does disproportionality reduce mean mobilization and turnout?

The most common research strategy in empirical studies focusing on the Mean Hypothesis has been to compare turnout rates in SMD and PR systems in a cross-section of nations (e.g., Powell 1980; Blais and Carty 1990; Blais and Dobrzynska 1998; Franklin 2004). Geys (2006), in a meta-analysis of 14 such studies, reports that 70% of the estimated correlations between turnout and proportionality are significantly positive.¹⁴

Several authors have undertaken before-and-after studies at the national level. For example, Gosnell (1930, p. 126) reports that Swiss turnout rose by 20% after a switch from plurality to PR in 1919, Tingsten (1937, p. 224-5) cites Norway as another country showing markedly increased turnout after adopting PR (in 1921), and Vowles, Banducci and Karp (2006) report very little effect on turnout after New Zealand’s conversion from plurality rule to a mixed-member proportional system. Surprisingly, there does not appear to be a systematic review of before-and-after studies. Nor am I aware of attempts to use a difference-in-differences approach at the national level to estimate the turnout effects of electoral reforms (although sub-national studies of this kind certainly exist).

Another vein of studies examines whether PR boosts turnout in sub-national elections. For example, two recent studies (Sanz 2013; Eggers 2013) take advantage of national laws that mandate different electoral systems for local elections, depending on whether municipalities exceed a stipulated population threshold. Such laws, which appear to be common in Europe and its settler colonies, enable regression discontinuity studies that focus on turnout rates in a window centered on the population threshold. Sanz (2013) and Eggers (2013) find that turnout is higher in municipalities using more proportional electoral systems, echoing findings

¹⁴ Most of the studies surveyed by Geys focus on a relatively small sample of industrialized democracies (two focus on sub-national units, a few include larger samples of countries). Within the set of industrialized democracies, the most widely acknowledged exceptions to the general trend are Switzerland (low turnout, despite PR) and pre-reform New Zealand (high turnout, despite plurality rule). These exceptions suggest the importance of other variables—for example, the disaggregation of the electoral calendar (high in Switzerland, low in pre-reform New Zealand). In any event, it should be noted that the studies Geys surveys suffer from all the threats to causal inference that usually beset cross-sectional analyses.
in earlier correlational studies (e.g., Ladner and Milner 1999; Bowler, Brockington and Donovan 2001).

None of the studies cited in this section seek to identify the causal mechanism by which SMD systems reduce turnout. Are there lots of uncompetitive districts, due to residential segregation, leading to low mobilization? Are there few long-term mobilizational sub-contracts with allied interest groups, because the marginal benefit of mobilization varies over time and/or groups’ members do not fit efficiently within the boundaries of competitive electoral districts?

Sour notes

Some seemingly contradictory findings are presented by Karp, Banducci and Bowler (2007). They report that party contacts are far more common in candidate-centered electoral systems than in PR systems; and conclude that “party mobilization…cannot explain the higher rates of turnout observed in PR systems” (p. 1). Their conclusion does not necessarily follow from the evidence they present, however. They rely on survey questions asking “whether respondents reported being visited or telephoned by a political party [italics added].” If a respondent was lobbied by a friend or neighbor, who had previously been contacted by a party, this secondary mobilization would be missed. So, too, would any mobilization conducted by interest groups affiliated with a particular political party.

But secondary and interest-group-mediated mobilizational tactics are central components of many parties’ overall strategies. Moreover, such tactics may vary systematically with the electoral system. Powell (1980, 1986) observed that PR seems to encourage parties to form stronger linkages with groups in civil society, with those affiliated groups doing most of the heavy lifting in boosting turnout. If Powell’s conjecture is correct, then parties in PR systems may “sub-contract” most of their mobilization to affiliated groups. This would mean that total mobilization—direct contacts by parties, contacts by affiliated interest groups, and secondary contacts—might be substantially greater in PR systems, even though direct partisan mobilization is (per Karp, Banducci and Bowler) lower.
Another set of seemingly inconsistent findings are presented in studies that report substantial support for the Mean Hypothesis in western Europe but little support in developing democracies (cf. Stockemer 2013). Concurrent elections of presidents may help explain these findings. Most countries included in empirical studies of turnout in developing countries are presidential (or semi-presidential) systems in which the presidential campaign dominates all others and straight-ticket votes are common (and sometimes even institutionally mandated). Thus, we may fail to find support for the Mean Hypothesis in developing countries, simply because they more often fall afoul of one of the scope limits of the hypothesis noted above.

**Disproportionality, number of parties and turnout**

Grofman and Selb (2009, 2011) have recently documented an interesting empirical pattern. In their samples of multi-member districts (and also in samples of PR-based countries), turnout tends to decline with the (effective) number of parties.

This result does not gibe with standard models relying on the “all and only” assumption. As Herrera, Morelli and Palfrey (2013, pp. 28-30) remark, in their model turnout should increase in the number of (symmetric) parties in PR systems. This is because the smaller a party's vote share is, the more a marginal vote will increase its vote (hence, seat) share.

As parties proliferate, however, their willingness to pay any given group to mobilize its members must eventually decline—and this effort-to-votes effect will surely swamp the votes-to-seats effect just noted. To illustrate, consider a group G the vast bulk of whose members currently vote for party A. In this situation, A has a good incentive to pay G for its mobilizational services. Now imagine that A splits into two ideologically proximal parties, A’ and A”. In this new situation, neither party has as good an incentive to pay G to mobilize, since mobilized members of G will split their votes between the two (ideologically similar) parties. In other words, in PR systems turnout should decline with the effective number of parties, because fewer groups will have memberships that tilt heavily toward any one party, thus
reducing the incentive of any one party to pay that group to mobilize. This observation suggests that relaxing the zero mobilizational spillovers assumption would be fruitful.

**Mobilizational spillover among co-partisan candidates**

In this section, I consider another important claim linking electoral rules to mobilization and turnout. Roughly put, the claim is that mobilization and turnout will increase when electoral rules ensure larger mobilizational spillovers among co-partisan candidates running for different offices. The relevant rules are mostly those that regulate the electoral calendar (which offices are elected when) and voters’ options on the ballot (whether they can partially abstain or split their tickets).

**Single-member simple plurality elections**

To state the claim about mobilizational spillovers more concretely, consider again a country with two parties, A and B. Voters come in two types—either preferring A or B.

There are J offices at stake in the election, each elected in a single-member district by plurality rule. Each party, P = A, B, nominates a single candidate for each office, j = 1,…,J.

Suppose that candidate j of Party P mobilizes \( t_{Pj} \geq 0 \) voters who prefer party P at a cost \( c_{Pj}(t_{Pj}) \); and let \( t_P = (t_{P1},...,t_{PJ}) \). One can interpret \( t_{Pj} \) as the total number of type P voters mobilized as a consequence of Pj’s efforts, including any higher-order mobilization that may occur through social networks.\(^{15}\)

What will the payoff to candidate Pj be from the mobilization undertaken by all of party P’s candidates? To explore this issue, let \( v_{Pj}(t_P) \) denote Pj’s expected vote total, as a function of \( t_P \). We can write \( v_{Pj}(t_P) = v_{Pj}(0) + \sum_k \alpha_{kj}^P t_{P_k} \), where 0 denotes a vector of zeroes of length J and \( \alpha_{kj}^P \) denotes the expected fraction of the \( t_{P_k} \) voters mobilized by candidate Pk that will “spill over” to (i.e., vote for) candidate Pj. All

\(^{15}\)I ignore the possibility that Pj’s efforts mobilize some type –P voters. Allowing for such a possibility would not be too difficult and would not change any of the conclusions reached.
told, Pj’s vote total equals what it would be, were no mobilization to occur \((v_{Pj}(0))\), plus the sum of mobilizational spillovers that benefit Pj \((\sum_k \alpha_{jk} t_{jk})\).

The probability that a voter mobilized by Pj will actually vote for Pj, \(\alpha_{jj}^p\), need not be unity for two reasons. First, even if Pj succeeds in mobilizing only type P voters who reside in Pj’s district, some of these voters may support Pj’s opponent. The loyalty of type P voters may not be perfect. Second, Pj’s mobilizational efforts may mobilize type P voters who reside in other districts and are not eligible to vote for Pj.\(^{16}\)

The probability that a voter mobilized by candidate Pj will vote for a co-partisan candidate Pk, \(\alpha_{jk}^p\), can be decomposed as follows. Let \(Q_{jk}^p\) be the probability that a voter mobilized by j will participate in k’s election; and let \(L_{jk}^p\) be the probability that the voter will vote for k, conditional on participation. Then we have

\[
\alpha_{jk}^p = Q_{jk}^p L_{jk}^p.
\]

In other words, the rate at which voters mobilized by one candidate benefit a co-partisan depends both on the mobilized voter’s participation and partisan loyalty.

The electoral rules that most powerfully affect spillover rates are those regulating the “fusion” of votes across different contests. At one extreme, some presidential systems employ a “fused” vote: the voter selecting a presidential candidate is thereby forced to support all the congressional candidates affiliated with that candidate (e.g., the Dominican Republic) or forced to support the affiliated vice presidential candidate (e.g., the US). Uruguay’s lemas similarly fuse presidential with congressional votes but allow multiple groups to support any given presidential candidate, providing voters with more choices. The nineteenth-century US’s party strip ballots, while not forcing voters to support the same party

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\(^{16}\) In a more general analysis, it would also be possible that Pj’s efforts mobilize type \(\neg P\) voters, either those who reside in Pj’s district and vote against him; or those who reside in other districts.
in multiple contests, strongly encouraged such behavior. At the opposite extreme, the “office bloc” ballot lists each contest on its own part of the ballot paper and requires that the voter indicate a separate choice for each office. This opens the door to both what is called “roll-off” (neglecting to vote in particular races) and “split-ticket voting” (voting for candidates from different parties in different offices).

Much the same spectrum of vote “fusion” possibilities arises in list systems. At one end are closed lists, which disallow both partial abstention and split ticket voting. At the opposite end are systems that give voters as many votes to cast as there are seats to be filled but allow both partial abstention and panachage.

**Mobilizational spillover and mobilizational incentives**

Depending on the “spillover rates,” \( \{ \alpha_{kj} \} \), gains from trade in mobilizational effort exist among politicians seeking distinct offices under the same party banner. If the candidates of party \( P \) make separate decisions about mobilization, then they will “undersupply” it, because each candidate will fail to account for the external benefits that his own mobilization confers on his co-partisans. The collective welfare of the candidates of party \( P \) would be enhanced if the mobilization levels of each candidate, \( t = (t_{P1}, \ldots, t_{PJ}) \), were chosen by some central agent to solve the following problem:

\[
\max_j \sum_j [S_j(t) - S_j(0)]b_j - c_j(t_j)
\]

Here, \( S_j(t) \) represents the expected share of the seats at stake in contest \( j \) that party \( P \) wins, given mobilization \( t \), which implicitly depends on \( \{ \alpha_{kj}^P : k = 1, \ldots, J \} \); \( b_j \) represents the value of the offices at stake in contest \( j \); and \( c_j(t_j) \) is the cost of mobilizing \( t_j \) voters in contest \( j \).

Because \( S_j(t) \) depends on how likely it is that voters mobilized by one candidate will vote for that candidate’s co-partisans, the optimal mobilizational target for \( k \) increases, as any of the \( \alpha_{kj}^P, j \neq k \), increase. In other words, the larger the
external benefits that h’s mobilizational efforts confer on his co-partisans, the larger k’s assigned target will be.

More generally, if parties operate as mobilizational alliances that manage to internalize the benefits and costs of mobilization, then total mobilization will increase with the number and value of the offices at stake, along with the efficiency of vote transfers among co-partisans. In the empirical literature, evidence of these effects has mostly hinged on observational studies of the electoral calendar (which affects the number and value of offices at stake) and ballot structure (which affects transfer efficiency).

**Disaggregating the electoral calendar reduces turnout**

Various empirical papers have studied the effect of how “general” or “decisive” elections are. For example, Blais and Dobrzynska (1998), in a study of 324 elections held in 91 countries, contrasted turnout rates under three conditions: (1) the lower house election is concurrent with all of the following: subnational elections, upper house elections (if there is an upper house) and presidential elections (if there is an elective president); (2) the lower house election is held separately from exactly one of the above elections; and (3) the lower house election is held separately from at least two of the above elections. They find that turnout rates are higher, the more decisive the election.

The importance of decisiveness has also been argued in a series of studies of the US, which collectively cover American electoral history from the early 19th century to the present. As of 1840, roughly three-fourths of the American states held non-concurrent elections for the US House and president. By the mid-1880s, however, all but a few states held concurrent elections. As Engstrom (2012, p. 376) notes, “The historical peaks of turnout [in the US] were reached precisely in the period after the bulk of states synchronized their electoral calendars yet before the widespread adoption of the secret ballot.”

Complementing this macro-historical correlation, Engstrom (2012, p. 381) also shows that, at any given time, turnout was 4.47% lower in non-concurrent than in concurrent states. Looking across time, he finds (p. 382) that “there is a larger
'surge and decline' in synchronized states. For [concurrent] states, the difference in turnout between presidential and midterm years was 11.42%. For [non-concurrent] states the difference in turnout ...was a smaller 6.95%.”

After the mid-1880s, there is very little change in the proportion of states holding concurrent House and presidential elections, yet turnout declines substantially over the period 1890-1920. This turn-of-the-century decline in turnout can, according to Engstrom (2012) and Engstrom and Kernell (N.d.), be attributed partly to the separation of state and local elections from national elections.

Considering the period after Engstrom and Kernell’s study ends, Boyd (1981) argues that further disaggregation of the electoral calendar explains a good part of the US’s turnout decline after 1960. Consistent with this view, others attribute the US’s unusually low turnout rates among contemporary democracies to its high frequency of non-concurrent elections (Jackman and Miller 1995, 482-83; Cox 1999, 407-11).

**Fusing votes increases turnout**

Even when separate officers are elected concurrently, voters mobilized for one race may or may not vote for co-partisans running in other races. In the US case, Engstrom and Kernell (N.d.) provide an extensive study of how vote fusion—via the device of the party-strip ballot—affected US turnout rates. Turnout rates increased substantially when the party-strip ballot was adopted, and declined substantially after its replacement by the Australian ballot. Moreover, Engstrom (2012, p. 381) shows that what kind of Australian ballot a state adopted correlated with its turnout decline: “The office bloc reduced turnout by 8.56%, while the party column reduced turnout by a smaller 3.72%. This difference was significant.” Engstrom’s finding makes sense in that the party column ballot offered voters an easier way to vote a straight party ticket than did the office-bloc ballot.
Future research

Electoral rules can directly affect the net costs voters must bear to participate in elections—by poll taxes, fines for non-voting, and other means. Electoral rules can also influence parties’ mobilizational efforts and thus indirectly affect turnout. In this paper, I have reviewed the latter sort of effects, as illuminated by state-of-the-art mobilization models.

My view is that such models are the most promising way forward for thinking about how electoral rules affect turnout. My main suggestion for improvement is that such models need to better reflect secondary mobilization. Mobilizational effort translates into votes, not just via primary mobilization (increased turnout among those initially contacted) but also via secondary mobilization (increased turnout among the friends of those initially contacted). The more important one thinks secondary mobilization is, the more the problem of turnout looks like a vast sub-contracting problem. Each party must sub-contract the bulk of its mobilization activities to (1) organized interest groups affiliated with the party; (2) candidates nominated by the party; and (3) their activists’ and voters’ informal social networks. Depending on the electoral system, different sub-contractors look like better bets.

In electoral systems with a single nationwide district operating under PR, labor unions, ethnic minorities and churches may be particularly efficient sub-contractors. Such groups can invest in long-term voter mobilization efforts, confident that they will get a stable return on their investment in future years. They need not worry about any geographical mismatch between where the party needs votes and where their members reside. Nor need they worry about how long their members will remain in any given geographic location.

In contrast, in electoral systems with many single-member districts operating under plurality rule, things look different. Local parties will prefer sub-contractors with geographically stable memberships concentrated in the district. Groups whose members live in multiple districts will be less attractive. Moreover, all groups—locally concentrated or not—will invest less in long-term mobilization,
because the payoff in expected seats for any given increment of votes varies with the district’s competitiveness in each year.

In order to better illuminate the sub-contracting of mobilization, I have suggested relaxing two assumptions in extant models. First, relaxing the “all and only” assumption makes it easier to accommodate qualitative accounts of what parties actually do when they mobilize; and to explain why turnout declines with the number of parties in PR systems. Second, relaxing the “zero mobilizational spillovers” assumption may be essential to explain why the organization of mobilization differs so markedly between PR and SMD systems; and overtime within SMD systems.

References


