The veto as electoral stunt: EITM and test with subnational comparative data*

Eric Magar Instituto Tecnológico Autónomo de México emagar@itam.mx

June 3, 2014

Abstract

The paper extends Romer and Rosenthal's approach to separation of power to account for the variable use of vetoes and veto overrides without sacrifice in the canonical model's explanatory power of policy. Vetoes in the proposed model are treated as deliberate acts of position taking in executive-legislative negotiation. Comparative statics results yield seven falsifiable hypotheses on veto and override incidence. Five are tested with data from American state governments between 1979 and 1999. Substantial evidence is found for the specific predictions of the model, including the hypothesis that assemblies controlled by parties with enough seats to override are associated with more, not less executive vetoes. The comparative research design offers advantages over single-case studies commonly found.

1 Ploys and stunts

Veto gates of one sort or another are found in democracies worldwide (Lijphart 1999). Combined with periodic elections, they remain the cornerstone protection of citizen rights against encroachments by government authority, promoting compromise in distributive conflict (Madison 1961). This paper argues that the veto may also be

^{*}Presented at the Executive Politics Conference, Washington University, St. Louis, June 12–13, 2014. I am grateful to Neal Beck, Gary Cox, Federico Estévez, Burt Monroe, and David Rohde for useful comments and critiques; to Luis Estrada, Juan Antonio Rodríguez Cepeda, and Fernando Rodríguez Doval for research assistance; and to the Asociación Mexicana de Cultura A.C. and the Sistema Nacional de Investigadores for financing parts of this research.

employed (and is often employed) to get the attention of distracted voters, easing mobilization in the competition for electoral survival.

The veto has received attention from historians and political observers of the Roman Republic (Polybius 1922), Papal conclaves (Chadwick 2003:337), and Antebellum America (Tocqueville 1988:122), among many others. Yet centuries of interest have given no commonly accepted theory of the veto. As Hicks (1957) explained in the context of labor economics, the main obstacle is that, armed with a theory predicting when a veto will occur and what the outcome will be, the parties can agree to this outcome in advance, and so avoid the costs of a veto.

Two explanations of such failure in bargaining have been proposed (Cameron and McCarty 2004 review this literature). Both share the notion that, far from a failure, the veto is bargaining of a different sort. By one account, vetoes are bargaining ploys devised by shortsighted politicians in their quest for influence. Negotiators often cannot foresee where each other's limits of acceptable policy lie, and discover that a proposal is beyond limit the hard way, by triggering a veto. In Cameron's (2000) Sequential Veto Bargaining game one party exploits asymmetric information, using threats and actual vetoes to deceive by conveying a false image of recalcitrance eliciting larger concessions (see also McCarty 1997; Roth 1995:292). By another, vetoes are publicity stunts devised to communicate with constituents. The veto and its kabuki drama represent a form of inter-temporal bargaining, an attempt to remove an obstinate adversary at the polls. Elections offer periodic opportunities to let voters settle undecided political disputes. In Groseclose and McCarty's (2001) Blame Game, Congress corners the President to veto expensive proposals popular among

constituents. Fiscally responsible presidents pay an electoral penalty for deploying the veto (see also Indridason 2000).

The paper joins the debate developing the second line of argument further. It starts by proposing a formal model of vetoes as electoral stunts. The model is coined in terms of executive-legislative relations, but the theory should easily extend to any actor with veto power (overrideable or not) who needs to communicate with core constituents. Next, analysis draws empirical implications of the theoretical model. Seven testable hypotheses about vetoes, overrides, and their variable incidence are produced. Veto predictions are then tested with data from a panel of American state governments spanning the 1979–99 period. The comparative research design identifies scores of cases where a legislative party controls enough seats to override executive vetoes, offering variance to test elements of the theory that single-case studies—the well-studied case of the U.S. federal government, at least—cannot. Four of five hypotheses are borne out by the data. The relevance of the findings and justification for another model of position-taking vetoes closes the paper.

2 Formal model of vetoes and veto overrides

A standard monopoly agenda setter model (Romer and Rosenthal 1978), adapted for the study of inter-branch bargaining (Kiewiet and McCubbins 1988), and with motivational structure modified slightly, generates the results. All other premises remain intact. Stunts is a game of strategy for three players: the legislator (l), the executive (e), and the veto override pivot (v). Unlike Cameron's, it is a full

Nature:
$$\pi \longrightarrow l$$

$$v_{o_t}$$

Figure 1: The stunts game

information game.¹ At stake is one-dimensional policy, measured in a unit segment of the real line. Key results can be extended to N-dimensional space but not the comparative statics and tests derived below. The game's extended form appears in Figure 1. Players have asymmetric powers. The legislator moves first, making a proposal $x \in [0,1]$ or not. If no proposal is made, the game ends with the status quo ante x_0 unchanged. Otherwise the executive moves next, choosing to accept or veto the proposal. Acceptance ends the game with policy x replacing the status quo. A veto, on the other hand, lets the override pivot move last, choosing whether to end the game at the status quo, by sustaining the veto, or at the proposal. The game's outcome ω therefore takes one of two values: the legislator's proposal ($\omega = x$) or the status quo ($\omega = x_0$).

 π is a random position-taking weight. Nature reveals the value of $0 \le \pi \le 1$ at the outset, determining how the game is actually played. Player i's goal is to maximize $\mathbf{u}_i(\omega \mid a)$, the utility from outcome ω given players' combined actions a. Function \mathbf{u}_i is a linear combination of of dual motivation, policy gain and the position taken:

¹Full information is perfect, symmetric, certain, and complete (Rasmusen 1989:45–8).

Symbol	meaning
i = l, e, v	a player, abbreviated by her ideal point
$x, x_0 \in [0, 1]$	the proposal, the status quo in space
i_0	player i's indifference point vis-à-vis x_0
$a = (a_l, a_e, a_v)$	a game's actions
$a_i \in A_i$	one action from player i 's action set
$\omega = x, x_0$	the game's outcome
$0 \le \pi \le 1$	position-taking weight
$0 \le \tau \le 1$	mode of play threshold
$\epsilon > 0$	infinitesimal value

Table 1: Summary of notation

$$\mathbf{u}_i(\omega \mid a) \ = \ (1-\pi) \times \mathtt{PolicyGain}_i(\omega) + \pi \times \mathtt{Position}_i(a) \tag{1}$$

$$= (1-\pi) \times (\operatorname{Policy}_i(\omega) - \operatorname{Policy}_i(x_0)) + \pi \times \operatorname{Position}_i(a)$$
 (2)

$$= (1 - \pi) \times (-|\omega - i| + |x_0 - i|) + \pi \times (-|a - i|). \tag{3}$$

Both Policy and Position are Euclidian functions of the form $f_i(x) = -|x - i|$, mapping, respectively, *outcomes* and *actions* to payoffs. PolicyGain is the status quo to outcome utility differential. Receiving act-contingent payoffs on top of the standard outcome-contingent type has tangible consequences in players' optimization.

The equilibrium concept is sub-game perfection, and it can be expressed in terms of actions, which are virtually identical to strategies in the game² and feature prominently in the model. Note in Figure 1 that one element in every player's action set indicates support for l's proposal (these are "propose x", "accept", and "override"), the other for the status quo ("do not propose", "veto", and "sustain"). Con-

 $^{^2}$ The sole difference is that executive and pivot strategies are actions conditional on a proposal, eg. "veto given proposal x".

veniently, action sets can be formalized by the position taken through each action: $A_l = A_e = A_v = \{x, x_0\}$, making them amenable to Euclidian evaluation in the Position_i(a) component of utility of eqs. (1–3).

The distinction of three mutually-exclusive, exhaustive modes of play simplifies analysis: the standard or setter mode ($\pi = 0$), the lexicographic or campaign mode ($0 < \pi < \tau$), and the tradeoff/stunts-only mode ($\tau \le \pi \le 1$). The on-line appendix derives the equilibrium for all three modes. The text discusses the "small- π condition", or $\pi < \tau$, covering the standard and lexicographic modes only. Small- π turns position-taking into a secondary choice criterion, making players primarily policy seekers, thus virtually identical to standard Setter model players. I show below that the Small- π condition is not as restrictive as it seems, while delivering several advantages.

2.1 The standard mode of play

Note that when $\pi=0$, Position cancels out and $\mathbf{u}_i(\omega\mid a)=\operatorname{PolicyGain}_i(\omega)$. Setter is, in fact, a special case of Stunts. The standard mode effects no change in the game's unique and well-known equilibrium (Cameron 2000; Kiewiet and McCubbins 1988). The intuition of the standard result sets the stage up for electoral stunts. In the role of agenda setter, the legislator's proposal is necessary for policy change. Under the stylized separation of power rules, however, it is insufficient. Proposals necessitate support of at least one other player to succeed. Policy concessions are the price the legislator may pay for this support, moving the proposal towards a partner's ideal point in order to render it acceptable. When judging opportunity, three general

situations stand out: when the price tag to buy support for change is prohibitive; when it is affordable; and when it is zero.

Figure 2a illustrates an instance of the first. With players' ideal policies at l < e < v, the status quo's location intermediate to l and e guarantees that others find legislator-wished leftward change unacceptable. Therefore in standard equilibrium, unable to please adversaries, the legislator makes no proposal (the figure is meant to illustrate the stunts equilibrium, so for now ignore the x^* -labeled arrow). Open conflict is averted through the mechanism of strategic anticipation.

Figure 2b illustrates affordable change, a status quo lending room to negotiate. The legislator must ascertain whose support is cheaper—who can be made status quoindifferent with least concessions. Pivot support is cheaper in the illustration. Label e_0 indicates executive tolerance: while she would rather be offered policy at her ideal
point, threats to veto proposals $x \in (e_0, x_0)$ (on the base of the small triangle, vertices
excluded) are cheap talk: no change at all leaves her worse off. The same is true for
the pivot regarding segment $x \in (v_0, x_0)$ (the base of the large triangle). It follows
that any proposal $x \in (e_0, x_0) \cup (v_0, x_0)$ is veto-proof: either the executive accepts
or the pivot overrides. Here $x = v_0 + \epsilon$ ($\epsilon > 0$ is infinitessimally small) maximizes
legislator gain. The executive's strategic predicament is noteworthy. The proposal
is beyond her tolerance, but a veto is futile. In standard equilibrium, she accepts in
anticipation of the ugly proposal's inevitability. This sort of strategic anticipation
makes vetoes off-equilibrium-path events (Corollary ?? in the appendix shows this).
Stunts builds upon this.

Figure 2c illustrates free support, a special case of affordable support. The legis-

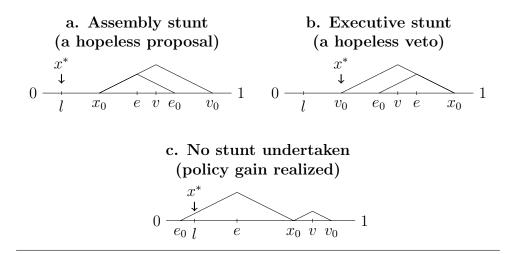


Figure 2: When to expect stunts (when $0 < \pi < \tau$). l, e, and v are players' ideal points, x_0 is the status quo. The executive is indifferent between outcomes e_0 and x_0 , the override pivot between outcomes v_0 and x_0 .

lator achieves maximal policy gain without concessions because the executive, in the illustration, finds the status quo uglier than proposal x = l.

2.2 The lexicographic mode

Dual motivation kicks in when $0 < \pi < 1$. Unlike PolicyGain, which by evaluating outcomes forces players to rely on strategic foresight, Position evaluates actions per se, the position taken without further consideration. Trade-offs cannot be ruled out when choice relies on two criteria and not just one.

Figure 2b illustrates. Proposal $x = v_0 + \epsilon$, we have seen, is veto-proof. The legislator can realize policy gain, but only through concessions. While unfeasible, proposal x = l signals the legislator's true preferences accurately, which may be valuable in representation relations. Resolving the ensuing trade-off requires knowledge of how many units of policy a player is willing to sacrifice for a unit of position-taking. Parame-

ter π governs the trade-off in the model, larger values favoring acts, smaller favoring outcomes. Formally the tension between proposing $x = v_0 + \epsilon$ (with outcome $\omega = x$) and proposing x = l (with outcome $\omega = x_0$) surfaces by comparing the first utility component: PolicyGain $_l(\omega = v_0 + \epsilon) = 2 \times |v - x_0| - \epsilon > 0 = \text{PolicyGain}_l(\omega = x_0)$ (policy gain under the status quo is nil by definition); and the second: Position $_l(x = v_0 + \epsilon) = -|l - v_0 - \epsilon| < 0 = \text{Position}_l(x = l)$ (posturing gain is nil and maximal at your ideal point). PolicyGain tilts choice towards concessions, Position towards recalcitrance.

Parameter π can be constrained—as the model in the text does—to always be small enough (given x_0 , l, e, and v) to make the contribution of any Position in Eq. 1 systematically smaller than that of PolicyGain. A constraint of this sort simlifies analysis considerably by removing trade-offs. Threshold τ will denote the limit between π s that are small enough in this sense and those that are not. Formally, $\pi < \tau$ implies that $\forall \omega, \forall a : (1-\pi) \times |\text{PolicyGain}(\omega)| > \pi \times |\text{Position}(a)|$, resolving tensions, if any, always in favor of PolicyGain. The small- π condition that results and hypotheses fulfill constrains Nature to sample $\pi < \tau$.

With $0 < \pi < \tau$ lexicographic preferences ensue (Fishburn 1974), Position a secondary criterion of import if, and only if, PolicyGain_i(x) = PolicyGain_i(x₀). In other words, it is only when both player i's actions achieve the same policy gain that choice in the constrained stunts game is driven by position taking. The implication is simple but extreme: players in campaign mode never sacrifice policy gain, even if tiny, for the sake of position-taking. Games in this mode rely on a nimble of position-taking motivation, yet enough to explain veto and override incidence in equilibrium.

A veto can be expected in two general circumstances. One is when the pivot joins the legislator to impose policy the executive dislikes, as in Figure 2a. The veto does not prevent new policy (it is overridden) yet signals executive phobia for change. The other is when the pivot joins the executive to prevent change wished by the legislator, as in Figure 2b. The legislator cannot produce desired outcomes (to the left of x_0) but can instead send a hopeless proposal $x^* = l$ at her ideal to signal will for change, even if the status quo remains. The circumstances are observationally equivalent—both produce a veto. The expected fate of an override attempt, however, separates them in two types of vetoes: assembly stunts (sustained vetoes) and executive stunts (overridden). Models uninterested in the veto override overlook the difference.³

3 Results

Small- π game results are derived here. Specific features of the stunts equilibrium across different preference profiles are of interest: the equilibrium proposal, the equilibrium outcome, the equilibrium path of play in the game tree, and the equilibrium threshold τ . Special attention is paid to paths of play involving a veto only; a veto and override; or none. Analysis tracks how varying the status quo affects these features.

Assuming without loss of generality that the legislator is to the left of the executive (results are symmetric otherwise), three preference profiles deserve consideration: (I) $v \leq l \leq e$; (II) l < v < e; and (III) $l \leq e \leq v$. Figure 3 summarizes results by

³Assembly stunts correspond to Conley and Kreppel's (2001) type I vetoes (on bills originally passed by partisan votes, bound to be sustained) while executive stunts correspond to their type III vetoes (on bills passed by large bipartisan coalitions, bound to be overridden). They only consider type IIIs to signal a position-taking motivation, but not type Is, as here.

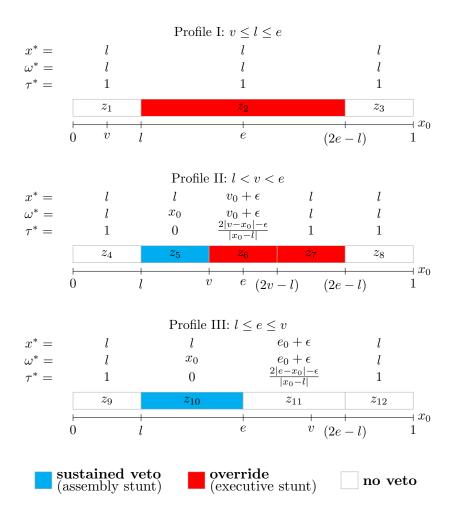


Figure 3: Vetoes, overrides, and the status quo. Equilibrium assumes $0 < \pi < \tau$ in three preference profiles. Panels reveal discrete zones where a given $x_0 \in [0,1]$ prompts a specific equilibrium proposal x^* , outcome ω^* , threshold τ^* , and path of play (color-coded).

breaking the policy space, one profile at a time, into mutually exclusive and exhaustive segments or **zones** labeled z_1, z_2, \ldots, z_{12} . Key for our purpose, status quos within each zone trigger a distinctive set of equilibrium features of interest, different from contiguous zones'. Consider z_1 . When $x_0 \in z_1$ then $x_0 < l < e$ must be true. So proposal x = l, by shifting policy rightward and toward the executive's ideal point, in fact brings her $\texttt{PolicyGain}_e > 0$. In equilibrium, she accepts it. Equilibrium

features for z_1 include the following triad: proposal $x^* = l$; outcome $\omega^* = l$; and path propose–accept (I discuss threshold τ^* in a while). The same equilibrium path is followed when $x_0 \in z_3$: the status quo is, again, so far from the executive that she is better-off letting the legislator impose policy at will. Repeating the analysis for the remaining two preference profiles produces the first result.

Result 1 (The no-veto zone) For $0 < \pi < \tau$ (games in campaign mode) with $l \le e$, the no-veto zone for profile I is $z_1 \cup z_3$; for II it is $z_4 \cup z_8$; and for III it is $z_9 \cup z_{11} \cup z_{12}$.

See Corollary 2 (the formal version of Result 1) in the on-line appendix for a proof.

Any status quo in the no-veto zone elicits a proposal that is invariably accepted.

It follows trivially (Corollary 2 is an if-and-only-if statement) that status quos not belonging in the no-veto zone involve the use of the veto:

Result 2 (The veto zone) For $0 < \pi < \tau$ with $l \le e$, the veto zone for profile I is z_2 ; for II it is $z_5 \cup z_6 \cup z_7$; and for III it is z_{10} .

Expect a veto whenever x_0 belongs in a colored zones of Figure 3 (see Corollary 3).

Prediction refinement distinguishes executive from assembly stunts. Consider $x_0 \in z_5$, when $l < x_0 < v < e$ must be true and both executive and pivot support are prohibitive. The situation is analogous to Figure 2a's: the legislator takes a position by proposing her hopeless ideal that is, in fact, killed. The associated equilibrium path is propose-veto-sustain, so z_5 is the **sustained veto zone** of profile II. (That $x_0 \in z_{10}$ has the same equilibrium path is easy to verify.) Consider now $x_0 \in z_7$, when $(2v - l) < x_0$ must be true and, therefore, the pivot accepts proposal x = l,

thus making it veto-proof. Since $x_0 < (2e - l)$ is also true, the executive dislikes the equilibrium proposal, as in Figure 2b. It is the executive's turn to show that she prefers the status quo to the unpreventable proposal, pushing the game onto path propose-veto-override. The equilibrium path of play when $x_0 \in z_6$ is the same, leaving $z_6 \cup z_7$ as profile II's **override zone**. Generalizing to other profiles yields two more results (see Corollaries 3 and 4).

Result 3 (The override zone) For $0 < \pi < \tau$ with $l \le e$, the override zone for profile I is z_2 ; for II it is $z_6 \cup z_7$; for III it is empty.

Result 4 (The sustained veto zones) For $0 < \pi < \tau$ with $l \leq e$, the sustained veto zone for profile I is empty; for II it is z_5 ; for III it is z_{10} .

Together, results 1–4 supply point predictions of vetoes given relative locations of players and status quo in a stylized system of separation of powers. And by offering an explanation of why vetoes occur, the theory of electoral stunts also predicts whether or not an override will accompany the veto, something other theories are not suited to address. The next section sets the field for theory testing. Before doing so, I find it important to show that the small- π condition is not terribly restrictive.

What is the maximum τ that condition $0 < \pi < \tau$ can support before the above results collapse? Figure 3 reports the equilibrium value of τ (computed with Eq. ?? in the on-line appendix). The threshold adopts the upper limit $\tau^* = 1$ in eight zones, implying that any π short of unit (when PolicyGain cancels out of Eq. 1) is small enough to make players outcome-oriented.⁴ In two more zones $\tau^* = 0$, implying that

⁴When $\omega = l$ is within reach because all find it preferable to the status quo (e.g. $x_0 \in z_4$), the executive is not tempted to forgo the policy gain in pursuit of position-taking because that would emit the wrong signal: the veto speaks of preference for x_0 over x = l, which is objectively false.

all players remain act-oriented unless $\pi=0$ (when Position cancels out of Eq. 1) and choice is indetermined. If so, no tensions in choice arise regardless of $\pi>0$, and the constraint changes nothing. It is only in the remaining two zones $(x_0 \in z_6 \cup z_{11})$ that an unconstrained π might change equilibrium behavior. When $\omega=l$ is beyond reach but some PolicyGain_l > 0 can be got through compromise, the legislator could dump the deal, propose x=l, and maximize Position_l. Only by pushing π below the reported τ^* can PolicyGain_l predominate and compromise be guaranteed. In sum, the small- π constraint is retrictive in two of twelve zones and for the agenda-setter only. Its removal effects no change in executive and pivot behavior, and does so for the legislator only when she is veto-proofing a proposal with concessions.⁵

And the small- π constraint is warranted. Setter owes its canonical status to explanatory power, parsimony, and generalizability (Bawn 1999; Cohen and Spitzer 1996; Cox and McCubbins 2005; Den Hartog and Monroe 2011; Gely and Spiller 1990; Gerber 1996; Huber 1996; Kiewiet and McCubbins 1988; Krehbiel 1991; Shepsle and Weingast 1987; Weingast and Moran 1983 are just some of its applications). One of the most-tested rational actor models, it holds an impressive empirical record (Cox 1999). Preserving policy predictions intact, as the small- π stunts does, seems only appropriate.

Due to limitations in executive (and pivot) ability for position taking—acts show relative preference for one (x) or the other (x_0) alternative on the table, an asymmetry with the agenda setter holding across zones—Position reinforces Policy under any $0 < \pi < 1$, and therefore $\tau = 1$.

⁵Threshold τ is a linear function of $x_0 \in z_6 \cup z_{11}$, tends to zero in each zone's left limit, and tends to one in the right limits. So rightward status quo shifts within both zones loosen the constraint's tightness. When $x_0 \in z_6$, a sustained instead of overridden veto ensues when $\pi > \tau$; when $x_0 \in z_{11}$ a veto will be sustained instead of a proposal accepted. The removal of the small- π therefore shrinks the override zone while leaving the veto zone unaffected in profile II and swells the sustained-veto zone in profile III. Dispensing with small- π makes vetoes more frequent and overrides less so.

4 Empirical implications

Direct tests of the results require measures of players' ideal points and the status quo. Over two decades of methodological refinements have produced ideal point estimates for a growing number of assemblies across time and space (Bonica 2010; Cantú, Desposato and Magar 2014; Jackman 2000; Jones and Hwang 2005; Londregan 2000; Poole and Rosenthal 1985). But the status quo poses a more formidable measurement challenge (Poole 2005). Recent developments in this area (Peress 2013; Richman 2011) open venues for future research.

This section proposes an indirect test instead. It proceeds by treating the status quo as a random variable, yielding comparative statics that are then turned into falsifiable propositions. As Cox and McCubbins (2002), Nature will be assumed to deal a common-knowledge random shock at the start of legislatures that upset the status quo inherited from last legislature: $x_{0,t} = x_{0,t-1} + \text{shock}$. The most sensible approach has time t's status quo fall closer to last period's with higher likelihood than further away (shock could be zero-mean normally distributed with small variance, for instance). Since comparative statics remain unchanged with any continuous probability density with positive support in [0,1], a uniform is assumed for parsimony.

With this auxiliary premise, the status quo at the start of the stunts game can be anywhere in space with equal probability and Results 1–4 extend into precise predictions of veto and override probabilities. Figure 3 illustrates. A veto takes place when $x_0 \in z_2$, but does not when $x_0 \in z_1 \cup z_3$. The likelihood of a veto in profile I is simply the probability that the status quo belongs in z_2 . By the uniformity premise, $Pr[y^*(x^*) = x_0 \mid v \leq l \leq e] = Pr[x_0 \in z_2] = 2e - l - l = 2(e - l)$. Veto and override probabilities can be computed likewise for other profiles.

Note that, in profiles I and II, ideal point l limits the veto zone on the left and 2e-l on the right; and that, in profile III, the limits are l on the left and e on the right. In all cases, the veto zone's size (which is proportional to veto probability) depends directly on the distance ||l,e||. So a veto becomes more (less) probable as e is farther from (closer to) l. Note next how shifts in ideal point v have a more complex effect, depending on preference profiles. Ideal point v shifts have no effect on the veto zone's size so long as v remains confined, in its drift, to the bounds of a given preference profile—in other words, if v does not "jump over" any other player's ideal point. Refer to Figure 3. In profile I, v is outside (to the left of) the corresponding veto zone, whose size remains unaffected by shifting v closer to or farther from its left bound l. When v jumps over that left bound, it brings us into profile II—from $v \leq l \leq e$ into l < v < e. In profile II, v lies inside the veto zone, splitting it into the sustained-veto and override zones. Pulling v towards l increases the share of overrides, pulling v towards e decreases it; in any case, the outer bounds of the veto zone itself remain unchanged. Lastly, any v in profile III lies outside (to the right of) the veto zone, again leaving its size unaffected.

On the other hand, v has a substantial effect on the veto zone when it changes from any slot to the right of e to any slot to the left of e—when v jumps over e, changing from profile III to profile II or from profile III to profile I. This effect is visible in Figure 3: holding l and e fixed, the veto zone in profiles I and II is twice the size of the veto zone in profile III. In profiles I and II the agenda setter makes necessary concessions to the pivot, whose preferences are more congenial than the executive's, making the proposal veto-proof (but pushing the executive to perform stunts). The situation is different in profile III, where the agenda setter targets the executive with necessary concessions, offering her policy gain that she does not refuse (regardless of π , as discussed above).

The effect of v shifts on the veto probability therefore involves a discontinuity. It remains constant so long as v does not jump over e in its slide along [0,1]. It experiences a substantial, discrete drop (hike) in size when v jumps over e to its right (left). One implication of this, somewhat complex, effect is that the veto zone never shrinks in size as v gets closer to l. The following hypothesis puts together the comparative statics uncovered so far.

Hypothesis 1 (The incidence of vetoes) When the game is in campaign mode and $l \leq e$, the probability of a veto is inversely proportional to l, directly proportional to e, and never directly proportional to v. Formally, letting r stand for the incidence rate of vetoes over N proposals:

$$\frac{\delta r}{\delta l} < 0; \frac{\delta r}{\delta e} > 0; \text{ and } \frac{\delta r}{\delta v} \leq 0.$$

Inequalities reverse when l > e.

When studying individual proposals, a higher veto incidence rate implies a higher probability that a randomly chosen proposal is vetoed; when studying aggregate proposals, it implies a larger number of vetoes.

With overrides, all three ideal points (not just v) interact with the preference profile to produce effects. Under profile I, the override zone shrinks as l moves rightward; it grows as e shifts rightward; and it is unaffected by v. Under profile II, it is unaffected by l; it grows as e slides rightward; and it shrinks as v moves rightward. Under profile III, the override zone is empty, hence remains unaffected by l, e, and v. Finally, when v jumps over to e's right there is a discrete drop in the size of the override zone, as in the previous paragraph. The next hypothesis puts together this second set of comparative statics.

Hypothesis 2 (The incidence of overrides) When players are in campaign mode and $l \leq e$, the probability of an override is never directly proportional to l, is never inversely proportional to e, and is never directly proportional to v. Formally, letting s stand for the incidence rate of overrides over M vetoes:

$$\frac{\delta s}{\delta l} \le 0; \frac{\delta s}{\delta e} \ge 0; \text{ and } \frac{\delta s}{\delta v} \le 0.$$

Inequalities reverse when l > e.

An alternative operationalization of results relies on discrete indicators of preference shifts—i.e, when l and e or l and v grow further apart. Partisan theory (Cox and McCubbins 1993; Cox and Kernell 1991) suggests one common and straightforward mapping of the party status of government branches to a dichotomous indicator. The auxiliary assumption in this case is that distance ||l,e|| is never smaller under divided government than under unified government. This yields the following hypotheses on veto and override incidence.

Hypothesis 3 (The Divided Government Surge) All else equal, (a) veto incidence is higher and (b) override incidence is never lower when government is divided than when it is unified. Formally, if d is a binary variable (equal to 1 when the executive's party lacks majority status in the assembly; 0 otherwise), then

(a)
$$\frac{\delta r}{\delta d} > 0$$
 and (b) $\frac{\delta s}{\delta d} \ge 0$.

Hypothesis 3b's non-strict inequality (inherited from Hypothesis 2) is absent from 3a) and implies that d = 1 is a sufficient condition for veto surge but not for override surge. All else equal, variables d and r should associate more strongly than d and s.

Variance in majority party size offers another test opportunity, approximating the degree of likeness between l and v. With differences across time and space, legislative parties are known for their capacity to increase rank-and-file discipline significantly, especially in votes that party leaders care the most for (Cox 1987; Cox and Poole 2002; Morgenstern 2004). If the stunts game legislator is taken to be the majority party leader, she should be likelier to exert influence on the pivot when both belong to the same party than when not. Referring to a party with enough seats to override a veto as one above override level, another auxiliary assumption is that the distance ||l,v|| is never smaller when the party is below than above override level.

Hypothesis 4 (The Supermajority Thrust) All else equal, (a) veto incidence and (b) override incidence are never lower when the majority party in the assembly is above override level than when it is not. Formally, if o is a binary variable (equal to 1 when the majority party's share of seats is at or above that required to override; 0 otherwise), then

(a)
$$\frac{\delta r}{\delta o} \ge 0$$
 and (b) $\frac{\delta s}{\delta o} \ge 0$.

The next hypothesis originates in the interactive effect of v's location and the preference profile. With divided government pushing e and l farther apart, and parties above override level pulling v and l closer to each other, the thrust effect of supermajorities is likelier to kick-in when government is divided than when not. To see why, Figure 4 portrays the move from a party below to one above override level as a shift from v to v'. With unified government (and e closer to l than to v) the jump to

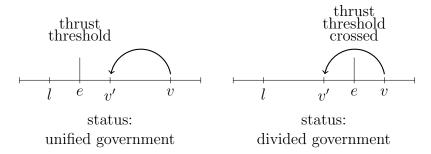


Figure 4: The size-and-status interaction

v' needed to pass over the "thrust threshold" (i.e., ideal point e) is quite long. With divided government (and e closer to v than to l) a shorter jump suffices, thereby further increasing veto incidence.

Hypothesis 5 (The Size-and-Status Interaction) All else equal, (a) the Supermajority Thrust on veto incidence (from Hypothesis 4a) and (b) on override incidence (from Hypothesis 4b) are likelier under divided than under unified government. Formally,

(a)
$$\frac{\delta(r \mid d=0)}{\delta o} \leq \frac{\delta(r \mid d=1)}{\delta o}$$
 and (b) $\frac{\delta(s \mid d=0)}{\delta o} \leq \frac{\delta(s \mid d=1)}{\delta o}$.

Two more hypotheses follow from auxiliary assumptions adding detail to unmodeled elements of the small- π stunts game. To the extent that act-orientation has an electoral component, Nature can be thought of sampling $\pi \neq 0$ with more likelihood in games more proximal to the next election than in those less proximal, increasing veto and override probability along.

Hypothesis 6 (The Electoral Pulse) All else equal, (a) the incidence of vetoes increases and (b) the incidence of overrides has an inverted u-shape as the next election qets closer. Formally, if p measures the Proximity to the next election, then

(a)
$$\frac{\delta r}{\delta p} > 0$$
 and (b) $\frac{\delta^2 s}{\delta p^2} \le 0$.

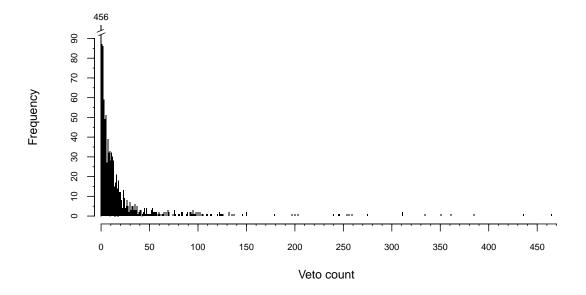


Figure 5: Veto frequency in 1,365 state legislative sessions

And controlling for bicameralism affects predictions as well. When an upper legislative chamber can veto proposals before the executive gets a chance to do so, split partisan control of the chambers of a bicameral assembly depresses legislative productivity, the legislator choosing to 'retain x_0 ' more often.

Hypothesis 7 (The Divided Assembly Slump) All else equal, when a party does not have majority status in both chambers of a bicameral assembly (a) the incidence of executive vetoes and (b) of overrides decreases relative to situations where a party does (or unicameral assemblies). Formally, if c is a binary variable (equal to 1 when the same party controls both houses; 0 otherwise), then

(a)
$$\frac{\delta r}{\delta c} > 0$$
 and (b) $\frac{\delta s}{\delta c} > 0$.

5 Veto incidence in state governments

The model is tested in American state governments. Sub-national data has advantages. The veto is well-investigated in the U.S. at the federal level, with fairly good

understanding of its determinants (Magar 2007 reviews the empirical literature). A systematic study of inter-branch relations in state governments therefore offers a new angle. More important, the comparative perspective lets factors of interest vary among otherwise similar units. Variance in state institutions and party systems buys a test not on offer at the national level.

The units of observation are legislative sessions in 49 state governments between 1979 and 1999.⁶ In total, 1,365 sessions are analyzed. The dependent variable is $veto.count_j$, the number of bills the governor vetoed in legislative session j. Because sessions differ in length and legislative productivity, the number of $bills.passed_j$ is included among other controls. An event count model is specified in search of veto correlates (Cameron and Trivedi 1998). Vetoes are rare events, as the acute right-skewedness of the observed distribution in Figure 5 attests. Data have a single mode in zero veto per session, frequency dropping sharply afterwards. With mean 16 and standard deviation 40, overdispersion in the data is extremely likely. Negative binomial regression was therefore chosen to add flexibility to the estimation.

Table 2 summarizes the regression model of session j's expected vetoes given systematic characteristics, also relating key regressors to hypotheses and results. (Variable definitions, summary statistics, and robustness-verifying alternative model specifications are elaborated in the on-line appendix.) The right side includes, among other regressors, non-standard government status indicators. To test hypotheses, three breeds of divided and two of unified government are distinguished in stead of the standard unified/divided dichotomy. Dummy div.assembly indicates sessions

 $^{^6\}mathrm{Nebraska}$ is excluded because formally non-partisan elections prevented coding key regressors.

Estimated model:

 $E(\texttt{veto.count}_j) = \exp(\beta_0 + \beta_1 \texttt{super.dg}_j + \beta_2 \texttt{plain.dg}_j + \beta_3 \texttt{div.assembly}_j + \beta_4 \texttt{super.ug}_i + \beta_5 \ln(\texttt{election.proximity}_i) + \dots + \texttt{error}_i)$

				(d)	(e)	(f)
	(a)	(b)	(c)	ML test	MCMC	Uncertainty
Hypothesis	Coefficients	Prediction	Result	$level^a$	test^b	prediction
	β_1	+	+	.001	100	_
3. Divided govt. surge	eta_2	+	+	<.001	100	+
	$\beta_1 \& \beta_2$	+	+	<.001		?
	$ \bar{\beta}_1$ $ -$	+	+	.001	100	
4. Supermajority thrust	eta_4	+	+	.067	95.3	_
	$\beta_1 \& \beta_4$	+	+	.003		_
5. Size and status	$-\beta_{1} - \beta_{4}$	+	+	.012	99.7	? ?
6. Electoral pulse	$ \overline{\beta}_5$ $ \overline{\beta}_5$	+	+	.001	99.5	
7. Div. assembly slump	$ \overline{\beta}_3$ $ \overline{\beta}_3$		+	.228	$-\bar{2}.\bar{0}$	

Notes: (a) One-tailed test, Wald for joint tests. (b) Percent of posterior sample with right sign.

Table 2: Model, hypotheses, and test summary

with the chambers of bicameral assemblies controlled by different parties. Dummies plain.dg and plain.ug indicate, for divided and unified government respectively, sessions with the same party in control of both chambers yet below override level in one at least. Dummies super.dg and super.ug do the same for sessions with majority party above override level in both chambers. The five indicators are mutually-exclusive and exhaustive, so plain.ug is dropped from the equation to avoid the dummy trap and, therefore, is the baseline for coefficient interpretation.

A rare bird in the U.S. Congress, a party above override level is remarkably common in state assemblies, owing to differences in override rules and party systems.⁷ Veto override was by majority rule in six states in the period, so the majority party was perforce above override level in those sessions. But higher bars were still within majority party reach in other states, as Table 3 reveals. Overall, in one-third (8+26%)

⁷After 1829, parties above override level are found in the 39th Congress (1865–67, during the Lincoln-Johnson administration), the 43rd (1873–75, Grant), the 74th and 75th (1935–39, Roosevelt), and the 89th (1965–67, Johnson). In all but the first, government was unified.

		Share required for veto override							
Government		$\frac{1}{2}$		3/5		$^{2}/_{3}$		All sessions	
status		%	N	%	N	%	N	%	N
Divided gov. above override	super.dg	32	55	6	8	5	48	8	111
Divided gov. below override	plain.dg	_	_	17	22	34	365	28	387
Divided Assembly	div.assembly	5	8	38	48	19	205	19	261
Unified gov. below override	plain.ug	_		5	7	23	249	19	256
Unified gov. above override	super.ug	63	107	34	43	19	200	26	350
Total		100	170	100	128	100	1,067	100	1,365

Table 3: Institution—party interactions in observed sessions

of sessions the party controlling the unified assembly was above override level. The figure for the U.S. Congress since 1945 is 3 percent.

The right side also includes election.proximity, a measure days (logged) separating the next legislative election and the session's end date. It is intended to capture the electoral component of the veto. Controls for the number of bills.passed in the session (the exposure variable), indicators for governors with item.veto and pocket.veto powers and for special.sessions are also included.

Two sets of results were obtained.⁸ One, estimated with maximum-likelihood (ML), supports classic hypothesis tests, still standard in the discipline. Another, estimated with Markov Chain Monte Carlo (MCMC), is convenient to gauge the conjugate effect of regression coefficients, predict quantities of interest, and measure precision (see Gelman and Hill 2007). Both approaches yield similar coefficient estimates—the on-line appendix reports and compares full results. The text concen-

 $^{^8{\}rm R}$ (R Dev. Core Team 2011) and jags (Plummer 2003) used for estimation and post-estimation analysis, relying on packages MASS (Venables and Ripley 2002), lmtest (Zeileis and Hothorn 2002), and R2jags (Su and Yajima 2012).

trates on testing the stunts model.

Column b of Table 2 translates hypotheses into operational coefficient sign predictions. Hypothesis 3 is the claim relating veto incidence increases and divided government. With two divided government indicators included in the model (super.dg and plain.dg), three tests are carried: that $\beta_1 > 0$; that $\beta_2 > 0$; and, quite literally with the argument above, that $\beta_1 > 0 \& \beta_2 > 0$ —the effect should be felt regardless of supermajority status. The same goes for hypothesis 4 on the effect of majorities above override level regardless of the partisan status of government. And hypothesis 5 is the claim that veto incidence is substatially more sensitive to majorities above override when the government is divided than otherwise. It translates into the expectation that $\beta_1 > \beta_4$, or that their difference should be positive.

Column c reports test results. All but hypothesis 7's conform to prediction. And the pair of columns that follows judges test confidence with classic and Bayesian approaches, respectively. As per column d, with the exceptions of β_4 , and especially β_3 , the power of classical tests is quite below the conventional .05-level. And yet the .067-level offers statistical evidence to claim that β_4 did not get a positive sign by pure chance alone—we would wrongly reject a true null less than 7 in 100 times. ¹⁰ Another defense of the hypothesis is the joint test, reaching the .003 level. With less confidence than for divided government, there is systematic evidence that majorities

⁹Wald tests are performed for joint coefficient hypotheses (see Ramanathan 1992).

 $^{^{10}}$ The model does not control for party factions, which may interfere to push β_4 towards negative values. A significant number of states with supermajorities have little real party competition, where parties tend to be factious, fractionated, and weaker. Wright and Schaffner (2002) can be read as indicating that one-party/non-partisan chambers tend towards greater dimensionality of the issue space, making it easier for the governor to extract a majority coalition despite being in the wrong party (so fewer vetoes). I thank one anonymous referee for pointing this out.

above override level are associated with more vetoes, other things contant. The Bayesian approach corroborates. Column e reports the proportion of the posterior sample of estimated coefficients with the predicted sign. More than 95 percent of β_4 's turned out positive. The proportion is higher for β_1 , β_2 , their difference, and β_5 (it includes the full posterior sample in the first two cases).¹¹

Supermajority effect should be larger, other things equal, under divided than unified government (hypotesis 5). A Wald test rejects the null at the .012 level. And sessions ending closer to election Tuesday should, ceteris paribus, manifest higher veto averages than those ending earlier (hypothesis 6). Because election.proximity is coded to take negative values (-1 is the value for maximum closeness), the operational prediction is that β_5 should be positive. The null is rejected at the .001 level. Simulations will reveal this and other effects on veto incidence more eloquently. Finally, the prediction that β_3 is negative fails. 98 percent of the posterior sample is, in fact, positive—divided assembly sessions do not depress veto incidence as expected (hypothesis 7).

Overall, predictions are borne out quite successfully. Of five hypotheses on veto as stunts tested, one was clearly rejected. Another, related to majorities above override level, is borderline by the .05-level convention. The other three are confirmed with great confidence. The stunts model has empirical content.

¹¹***How is the sign of two coefficients evaluated jointly in Bayesian statistics, any suggestion? Should I simply report the % of both posterior samples above zero?

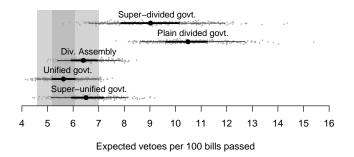


Figure 6: The partisan status of government, the override status of the majority, and vetoes. Grey points portray the simulated posterior distribution. Horizontal lines are 50 and 90% intervals of the posterior expected veto distribution, larger black points indicate the median. Sessions simulated under different partisan configurations had the following features in common: the assembly adjourned one month ahead of the next election having passed 100 bills, the session was regular, and the governor had item but no pocket veto.

6 Simulations

MCMC simulations illustrate vetoes as electoral stunts well. The sessions simulated here all share control characteristics: in each the governor has item, but not pocket veto power; the session is regular; the exposure is set to bills.passed = 100. This is convenient because expected vetoes can thus be read as percentages of bills sent to the governor. Simulations in Figure 6 also set the session's ending date one month ahead of the legislative election (election.proximity = -30). Only the partisan status of government and the presence of a majority above override are allowed to change in order to reveal their effects, other things constant.

Expect 5.5 vetoes on average per 100 bills passed in a session under plain unified government, the baseline. As seen in Figure 6, plus or minus .5 veto roughly contains half of Monte Carlo simulations (the thick, horizontal black line is the interquartile

range). A fair amount of noise remians in the simulations, the interdecile range (the lighter line) span from 4.5 to 7 expected vetoes. This density serves as baseline to compare the change in signal caused by varying the status dummies. Super-unified government raises this to about 6.5 vetoes per 100 bills. But the posterior overlaps to such extent with the baseline—interquartile ranges touch at the hip—that insufficient statistical evidence backs the supermajority thrust hypothesis. The hypotesis fares somewhat better with super divided government. This reinstates the borderline status of Hypothesis 4, differences may be due to chance alone. Divided government, on the other hand, nearly doubles the expectation in both its "plain" and "super" variants. Spreads also grow, yet the overlap of super divided government with the baseline is not terrible. Executives systematically veto bills even when an override is highly likely.

Another set of simulations lets election.proximity vary from minimum to maximum to reveal the electoral pulse of vetoes other things constant. Figure 7 compares a session held under plain unified government to another held under plain divided government. Lines simulate expected vetoes per 100 bills for sessions ending as early as 4 years before election Tuesday and as late as 1 day before. Dark lines report the median simulation, lighter lines are a random sample of posterior simulations. Note the upward-sloping trend in nearly all simulations. Under plain divided government, predicted vetoed bills are in the vincinity of 8 per 100 bills in sessions ending 2 years before the election, 8.5 per 100 for sessions ending 1 year before election, and of 10 per 100 for those ending on election week (all plus or minus 1.5 vetoes). The growth is substantial. For a session with average productivity (296 bills) under plain divided

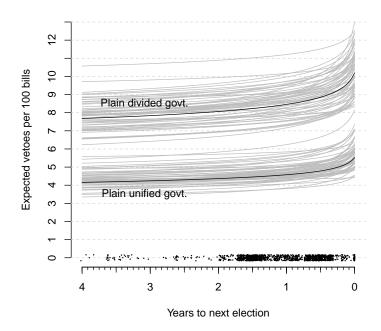


Figure 7: The electoral pulse of the veto. Lighter curves drawn with a random sample of posterior simulations, heavier ones with the median posterior. Other than variable election.proximity and government status, simulated sessions are identical to Figure 6's. Dots at the bottom are sessions' actual ending dates (y-jittered for visibility). Clustered at the right limit of election.proximity are many sessions that ended shortly after the election, see text for details.

government, expect between 6 and 10 additional vetoes on average, attributable to the electoral cycle from beginning to end and independent of other factors in the model. The effect is more modest for a session under unified government (bottom set of bars), but 2 to 4 extra vetoes remain distinguishable from beginning to end of the cycle. Position taking plays a systematic role in inter-branch relations of separation of power systems.

7 Discussion

Several points deserve elaboration.

7.1 Overrides

Why another position taking model of the veto? It is no redundancy. The stunts model differs from Groseclose and McCarty (2001) in three significant ways. Most important, the blame game lets legislators only engage in position taking (when they force the executive to veto popular legislation). The stunts game also lets executives do it (veto proposals disliked by constituents despite certain overrides). Removal of this asymmetry allows richer interactions between the branches of government, and conforms to reality. This increases explanatory power, the stunts game explains overrides which remain anomalous in the blame game. By this account, the stunts game formalizes Conley and Kreppel's (2001) veto typology, proposing conditions for

¹²This asymmetry drives Groseclose and McCarty's (2001:111) conclusion that a consequence of any veto is a drop in presidential approval (see also Prediction 18 from Cameron and McCarty 2004). Anecdotal evidence from the U.S., their case, provides a notable counterexample. In the 1995–96 budget standoffs, President Clinton's emphatic vetoes against the Republican majority's cuts are generally accepted as paving the way for his 1996 reelection (LeLoup and Shull 1999).

two types of vetoes or stunts. And in their model both the assembly and the executive appeal to the same median voter, who then allocates rewards and penalties. Here the assembly represents one set of interests while the executive represents another, possibly different, set of interests. The more distinct are the rules by which legislators and executives are elected, the more important it may be to allow them to serve different electoral masters.

Neither model offers conditions to cash electoral rewards when players position take. In the blame game's asymmetry, presidential approval suffers systematically from vetoes (see Prediction 18 from Cameron and McCarty 2004). If anecdotal, Franklyn D. Roosevelt's famous "find me legislation I can veto" and the outcome of President Clinton's 1995 standoff with congressional Republicans (LeLoup and Shull 1999) are notable counterexamples. In the present model, executive stunts should improve the odds of presidential reelection, assembly stunts the majority party's. Yet the ultimate electoral effects of such confrontation seem highly risky, and formal elaboration of mechanisms will give conditions to actually win.

7.2 Ploys v. Stunts re-examined

Predictions can be pitted to those from the theory of vetoes as bargaining ploys. A rigorous comparison of the theories, with a more complete set of predictions is in order, but some initial steps are offered. Of nine predictions drawn from five stunts hypotheses, two are shared with Cameron's theory, the last column of Table 2 speculates. Both theories predict that the likelihood of a veto augments with plain divided

government (Cameron 2000:152-77; also Prediction 5 of Cameron and McCarty 2004). This intuitive prediction is in line with the empirical literature (eg. Lee 1975). And since both theories treat the assembly as a unicameral body, the divided assembly control extends likewise.¹³

Theories make opposite predictions on the effect of a majority above override level. The causal mechanism in models of vetoes as bargaining ploys is incomplete information on the exact location of other players' ideal points. In one version of Cameron's model (the Override game) the exact location of the pivot is unknown. In such circumstances, the executive has a dominant strategy to veto legislation she dislikes (see Cameron 2000:99)—there is a non-zero probability that the proposal made insufficient concessions to the pivot and the veto will in fact be sustained. Based on the discussion above, it seems reasonable to expect an override with higher certainty when the majority party in the assembly is above override level than otherwise, diluting executive incentives to veto. The implication from Cameron's perspective is that veto incidence should be depressed under such circumstances, contrary to the stunts prediction (see Prediction 6 in Cameron and McCarty 2004).

Predictions on the effect of a proximal election also seem contrary. In another version of Cameron's model (the Sequential Veto Bargaining game), the legislator cannot draw a precise line between bills the executive finds acceptable and unacceptable (106). Information asymmetry gives the executive strategic advantage. By vetoing otherwise acceptable policy, she can cultivate a reputation for toughness and,

¹³In the postwar Congress that Cameron invetigates, divided government is tantamount to plain divided government. Cameron (2000:138) predicts that split assemblies increase override incidence but remains silent about veto incidence.

with some probability, harvest bigger concessions in future bargaining. The less the assembly knows about the executive's preferences, the more attractive sequential veto bargaining becomes. Upon inauguration of a new executive, or immediately after new assembly members are sworn in, the legislator has the least experience contrasting the branches' relative preferences. The start of a session would therefore seem to provide the most fertile soil for reputation-building vetoes. Experience then takes care of eroding information asymmetries, leaving less and less room for such breed of bargaining as the next election also approaches. It therefore seems reasonable to speculate that veto incidence should drop as elections draw closer (contrary to my prediction). The executive's diminishing need to build a reputation as the session draws to an end (Prediction 13 in Cameron and McCarty 2004) should reinforce this.

7.3 EITM

This paper has attempted to implement the principles of the Empirical Implications of Theoretical models agenda. Conscious of the drawbacks of specialization—formal modelers uninterested by or with little knowledge of the substance of politics; empiricists unwilling or unable to take distance from the richness of their case studies for theoretical generalization—the EITM program has aimed at bridge-building. This paper has derived falsifiable predictions from a formal model of the veto, subsequently carrying a systematic test with subnational data.

Whether or not a piece sticking to this agenda can be published remains an open question. There are many concerns. In order to fulfill journals' extension limits, much of the detail has been left out of the text. The reader with interest is referred to a dual, and lengthy, appendix. This appendix develops the full formal model, results, and hypotheses that the text only describes. And it develops the empirical model at length, discussing many challenges raised by the study of the veto in a cross-section of state government along two decades. The internet offers the possibility of hosting the appendix on-line, where any reader can access it easily. Yet I wonder what the strategy to get acceptance by referees might look like. Unless sympathetic to the EITM philosophy, the non-standard format might put off referees well reduce their willingness to recommend publication.

References

- Bawn, Kathleen. 1999. "Money and majorities in the Federal Republic of Germany: Evidence for a veto players model of government spending." American Journal of Political Science 43(3):707–36.
- Bonica, Adam. 2010. "A day by day measure of legislator ideology: Non-parametric smoothing of legislator ideal points with Optimal Classification." PhD. Dissertation, NYU.
- Cameron, A. Colin and Pravin K. Trivedi. 1998. Regression Analysis of Count Data. New York: Cambridge University Press.
- Cameron, Charles M. 2000. Veto Bargaining: Presidents and the Politics of Negative Power. New York: Cambridge University Press.
- Cameron, Charles and Nolan McCarty. 2004. "Models of Vetoes and Veto Bargaining." Annual Review of Political Science 7:409–35.
- Cantú, Francisco, Scott Desposato and Eric Magar. 2014. "Consideraciones metodológicas para estudiantes de política legislativa mexicana: sesgo por selección en votaciones nominales." *Política y Gobierno* 21(1):25–54.
- Chadwick, Owen. 2003. A history of the Popes: 1830–1914. Oxford: Oxford University Press.

- Cohen, Linda R. and Matthew L. Spitzer. 1996. "Judicial deference to agency action: A rational choice theory and an empirical test." *Southern California Law Review* 68:431–76.
- Conley, Richard S. and Amie Kreppel. 2001. "Toward a New Typology of Vetoes and Overrides." *Political Research Quarterly* 54(4):831–52.
- Cox, Gary W. 1987. The Efficient Secret: The Cabinet and the Development of Political Parties in Victorian England. New York: Cambridge University Press.
- Cox, Gary W. 1999. "The Empirical Content of Rational Choice Theory: A Reply to Green and Shapiro." *Journal of Theoretical Politics* 11(2):147–69.
- Cox, Gary W. and Keith T. Poole. 2002. "On measuring partisanship in roll call voting: The U.S. House of Representatives, 1877–1999." *American Journal of Political Science* 46(3):477–89.
- Cox, Gary W. and Mathew D. McCubbins. 1993. Legislative Leviathan: Party Government in the House. Berkeley: University of California Press.
- Cox, Gary W. and Mathew D. McCubbins. 2002. Agenda Power in the US House of Representatives, 1877–1986. In *Party, Process, and Political Change in Congress: New Perspectives on the History of Congress*, ed. David W. Brady and Mathew D. McCubbins. Palo Alto: Stanford University Press.
- Cox, Gary W. and Mathew D. McCubbins. 2005. Setting the Agenda: Responsible Party Government in the US House of Representatives. New York: Cambridge University Press.
- Cox, Gary W. and Samuel Kernell, eds. 1991. The Politics of Divided Government. Boulder: Westview Press.
- Den Hartog, Chris and Nathan W. Monroe. 2011. Agenda setting in the U.S. Senate: Costly consideration and majority party advantage. New York: Cambridge University Press.
- Fishburn, Peter C. 1974. "Lexicographic orders, utilities, and decision rules: A survey." Management Science 20(11):1442–71.
- Gelman, Andrew and Jennifer Hill. 2007. Data Analysis Using Regression and Multilevel/Hierarchical Models. Cambridge University Press.
- Gely, Rafael and Pablo T. Spiller. 1990. "A Rational Choice Theory of Supreme Court Statutory Decisions with Applications to the *State Farm* and *Grove City* Cases." *Journal of Law, Economics, & Organization* 6(2):263–300.
- Gerber, Elisabeth R. 1996. "Legislative Responses to the Threat of Popular Initiatives." American Journal of Political Science 40(1):99–128.

- Groseclose, Tim and Nolan McCarty. 2001. "The Politics of Blame: Bargaining Before an Audience." *American Journal of Political Science* 45(1):100–19.
- Hicks, John R. (sir). 1957. The Theory of Wages. Gloucester, MA: Peter Smith.
- Huber, John D. 1996. "The Vote of Confidence in Parliamentary Democracies." *American Political Science Review* 90(2):269–82.
- Indridason, Indridi H. 2000. Process, Politics and Institutions: Three Essays in Positive Political Theory Ph.D. dissertation University of Rochester.
- Jackman, Simon. 2000. "Estimation and Inference via Bayesian Simulation: An Introduction to Markov Chain Monte Carlo." *American Journal of Political Science* 44(2):375–404.
- Jones, Mark P. and Wonjae Hwang. 2005. "Party government in presidential democracies: Extending cartel and CPG theory beyond the U.S. Congress." *American Journal of Political Science* 49(2):267–82.
- Kiewiet, D. Roderick and Mathew D. McCubbins. 1988. "Presidential Influence on Congressional Appropriations." American Journal of Political Science 32:713–36.
- Krehbiel, Keith. 1991. *Information and Legislative Organization*. Ann Arbor: Michigan University Press.
- Lee, Jong R. 1975. "Presidential Vetoes from Washington to Nixon." *The Journal of Politics* 37(2):522–46.
- LeLoup, Lance T. and Steven A. Shull. 1999. The President and Congress: Collaboration and Combat in National Policymaking. Boston: Allyn and Bacon.
- Lijphart, Arend. 1999. Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries. New Haven: Yale University Press.
- Londregan, John B. 2000. Legislative Institutions and Ideology in Chile's Democratic Transition. New York: Cambridge University Press.
- Madison, James. 1961. The Federalist Li. In *The Federalist Papers: Hamilton, Madison, Jay*, ed. Clinton Rossiter. New York: Penguin pp. 320–25.
- Magar, Eric. 2007. "The Incidence of Executive Vetoes in Comparative Perspective: The Case of American State Governments, 1979-1999." SSRN eLibrary http://ssrn.com/abstract=1491112.
- McCarty, Nolan M. 1997. "Presidential Reputation and the Veto." *Economics and Politics* 9(1):1–26.
- Morgenstern, Scott. 2004. Patterns of legislative politics: Roll call voting in Latin America and the United States. Cambridge University Press.

- Neustadt, Richard E. 1990. Presidential Power and the Modern Presidents: The Politics of Leadership from Roosevelt to Reagan. New York: The Free Press.
- Peress, Michael. 2013. "Estimating Proposal and Status Quo Locations using Voting and Cosponsorship Data." The Journal of Politics 75(3).
- Plummer, Martyn. 2003. JAGS: A Program for Analysis of Bayesian Graphical Models Using Gibbs Sampling. In *Proceedings of the 3rd International Workshop on Distributed Statistical Computing*. Vienna, Austria: .
 - URL: http://www.ci.tuwien.ac.at/Conferences/DSC-2003
- Polybius. 1922. The histories of Polybius (book VI) / English translation by W.R. Paton. Cambridge, MA: Harvard University Press http://penelope.uchicago.edu/Thayer/E/Roman/Texts/Polybius/.
- Poole, Keith T. 2005. Spatial models of parliamentary voting. New York: Cambridge University Press.
- Poole, Keith T. and Howard Rosenthal. 1985. "A spatial model for legislative roll call analysis." *American Journal of Political Science* 29(2):357–84.
- R Dev. Core Team. 2011. "R: A Language and Environment for Statistical Computing." R Foundation for Statistical Computing http://www.R-project.org.
- Ramanathan, Ramu. 1992. Introductory Econometrics with Applications. 2nd ed. Fort Worth: Dryden Press.
- Rasmusen, Eric. 1989. Games and Information: An Introduction to Game Theory. 2^{nd} ed. Cambridge: Blackwell.
- Richman, Jesse. 2011. "Parties, pivots, and policies: The status quo test." *American Political Science Review* 105(1):151–65.
- Romer, Thomas and Howard Rosenthal. 1978. "Political resource allocation, controlled agendas, and the status quo." *Public Choice* 33:27–44.
- Roth, Alvin E. 1995. Bargaining Experiments. In *The Handbook of Experimental Economics*, ed. John H. Kagel and Alvin E. Roth. Princeton: Princeton University Press pp. 253–348.
- Shepsle, Kenneth A. and Barry R. Weingast. 1987. "The Institutional Foundations of Committee Power." *American Political Science Review* 81(1):85–104.
- Su, Yu-Sung and Masanao Yajima. 2012. R2jags: A Package for Running jags from R. R package version 0.03-08.
 - **URL:** http://CRAN.R-project.org/package=R2jags
- Tocqueville, Alexis de. 1988. Democracy in America. New York: Harper Perennial.

- Venables, W. N. and B. D. Ripley. 2002. *Modern Applied Statistics with S.* Fourth ed. New York: Springer http://www.stats.ox.ac.uk/pub/MASS4. ISBN 0-387-95457-0.
- Weingast, Barry R. and Mark J. Moran. 1983. "Bureaucratic discretion or Congressional control? Regulatory policymaking by the Federal Trade Commission." Journal of Political Economy 91(5):765—.
- Wright, Gerald C. and Brian F. Schaffner. 2002. "The Influence of Party: Evidence from the State Legislatures." *American Political Science Review* 96(2):367–79.
- Zeileis, Achim and Torsten Hothorn. 2002. "Diagnostic Checking in Regression Relationships." R News http://CRAN. R-project. org/doc/Rnews/ 2(3):7-10.