Voting and sincerity. Ideal point drift and strategy in a regulatory board*

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Abstract

We use a dynamic item response theory model (Martin and Quinn 2002) to investigate ideal point stability in Mexico's IFE, an election regulatory board. Results indicate that stability is not predominant, that most board members moved considerably a good deal of the time. We discuss how theories of representation view movement and show that some of the drift we detected is in fact associated with systematic factors. Evidence suggests that movement and strategic considerations associated with representation correlate, contradicting the standard assumption of sincere voting.

The life tenure of Supreme Court Justices that is key to judicial independence (Hamilton 1961) also makes the Court a singular voting body. Unlike members of assemblies whose careers depend upon securing and renewing the sympathy of others, Justices are free to follow their sincere preferences when ruling, regardless of whether others like the ruling or not. Recent developments in the field of ideal point estimation (Clinton, Jackman and Rivers 2004, Martin and Quinn 2002) have provided a method to measure temporal shifts in the voting records of Supreme Court members. Estimates reveal that, in fact, many Justices have changed voting criteria, often substantially, relative to other members over the course of their careers.

Members of other assemblies not formally insulated from external political pressure are not as lucky. Members of Congress (Mayhew 1974), of congressional committees (Weingast and Marshall 1988), of regulatory boards (McCubbins, Noll and Weingast 1987), of lower courts (Gely and Spiller 1990), all are primarily moved by those they represent. Scholarship has showed that if personal beliefs matter at all in how

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members of representative bodies vote, they are relegated by much more important and systematic forces. Representatives' votes are driven by the will and preferences of constituents, mediated by relevant institutions. If follows that if neither the will of constituents nor mediating circumstances change, representatives' voting record should remain unchanged, reflecting an equilibrium of forces supporting it.

We seek evidence of stability in representative bodies by using Martin and Quinn's (2002) dynamic estimation method for ideal points in a regulatory board. The case study is Mexico's Federal Election Institute (IFE), whose Council General decides all aspects of election regulation and oversaw Mexico's transition to a system of competitive elections. We argued in our previous work (Estévez, Magar and Rosas 2008) that IFE is an agent of the congressional parties who appoint and can impeach the council's nine members. To our surprise, members' voting records shift as much as those in the U.S. Supreme Court, a finding we discuss in section 1 of the paper. Movement in many cases consists of continuous monotonic drift in ideal points over time, not simple shocks followed by a return to a central tendency.

We have been careful to write 'voting record' and not 'preference' or even 'ideology' because, as we discuss in section 2, ideal points recovered by scaling techniques are valid measures of personal beliefs in quite stringent conditions only. Otherwise it is more prudent to take them for what they are, a statistic of a member's voting record. Even if not read as ideology, this record remains useful for many reasons. Section 3 offers a discussion of strategic factors that should be behind ideal point movement in representative bodies. These factors are associated with constituent representation, with the structure and process of decision-making, and with vote trading. Factor identification sets the stage to formulate a model accounting for ideal point drift that can also be estimated in our future research. Section 4 analyzes movement patterns finding evidence that they are associated with these factors, some at least. Section 5 concludes.

1 Dynamic ideal point estimation

Scaling techniques to infer ideal points rely on a standard spatial model of voting (Black 1958, Poole and Rosenthal 1997). The approach assumes that policy and preferences can be mapped in the same space — as points in a line or plane — while distance determines utility and voting. Voters in this context differ from one another in their locations in the policy space, each choosing the alternative closer to his or her ideal point. The aim is to use observed votes to estimate voters' ideal points and other parameters of interest.

We specified a one-dimensional version of the model. In accordance with the spatial approach, voting 'aye' ($y = 1$) or 'nay' ($y = 0$) on an issue depends on the relative locations of policy outcomes vis-à-vis voter j's ideal point x_j in space. Voting is sincere—we revisit this assumption in section 3. If $x^{(A)}, x^{(N)} \in \mathbb{R}$ denote the outcomes of the aye and the nay votes, respectively, it is their midpoint $m =$

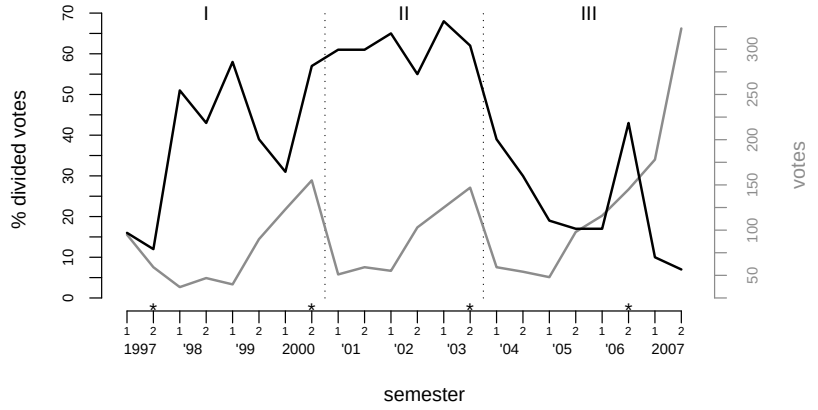


Figure 1: *Universe of roll-call votes and analyzed subset.* Left dotted line marks a partial Council renewal, the right one a full renewal. Stars on x-axis mark federal election semesters.

$(x^{(A)} + x^{(N)})/2$ that matters for analysis. The voter will prefer the alternative falling on the same side of m as his or her ideal point. Formally, j's vote propensity is $y_j^* = \delta(x_j - m) + \text{error}$,[1] where $x_j - m$ is the deterministic part of voting, error is random noise, and $\delta \in \mathbb{R}$ is a discriminator. The δ's sign fixes issue polarity (so that conservatives can also vote nay) while its size in absolute value weighs the importance of the systematic part of the vote relative to the random part. In the extreme $\delta = 0$ voting is entirely determined by the random disturbance. The voting rule is $y_j = 1 \iff y_j^* \geq 0$, otherwise $y_j = 0$.

We analyze all contested roll call votes held at IFE's Council General between October 1996 and December 2007. A vote qualifies as divided when, ignoring abstentions and absences, at least one councilor voted contrary to the rest. This filter removed 1,641 unanimous votes failing to distinguish councilors from one another from the dataset, leaving our empirical base with 770 roll call votes, 35 percent of all.

The Council General, a nine-member board, was newly appointed at the start of the period we scrutinize, and suffered a partial renewal in December 2000, when two members quit early to assume executive appointments, and a mandatory full replacement in October 2003; replacements appear as vertical dotted lines in Figure

[1]Item response theory models designed to infer a latent trait (eg. intellectual ability or ideology) from allegedly related subjects' traits (eg. answers to items in the GRE test or roll call votes) are routinely used in ideal point estimation. In IRT context, m is the item difficulty parameter and x_j the ability parameter. When relying on quadratic utility functions, as we do, $\delta = -2(x^{(A)} - x^{(N)})$. Estimation does not recover the coordinates of the aye and nay policy alternatives, only their midpoint. As the distance between them increases, their choice becomes likelier to arouse passions between judges, which is precisely what δ is intended to capture.

1 distinguishing three periods. Period III ends with the resignation of then Councilor president Ugalde in the aftermath of the 2006 presidential election contestation. Semester variations in non-unanimous tendencies in the Council are patent, ranging from a minimum of 7 percent divided votes (in the second semester 2007, also having an outlying number of total votes) to a maximum of 68 percent (in the first of 2003).

We specified a version of Martin and Quinn's (2002) dynamic IRT model to estimate members' semestral ideal points from contested roll calls. At the core of their model is the assumption that a member's ideal point may not be constant in the course of a study, as standard IRT models assume. Estimating the model separately for different discrete time periods (semesters in our case) would be an obvious alternative, but one assuming that a member's ideal point at time t is independent from her ideal point at time $t-1$. Instead, the dynamic model posits a temporal dependency for member j's ideal point x in semester t, such that $x_{j,t} \sim \mathrm{N}(x_{j,t-1}, S)$ where S, the slack, governs how much past determines present: $S = 0$ makes the model equivalent to the classic (static), while $S \to \infty$ assumes time independence. We ran the model with different slack values, opting for $S = .02$ in the results we present, the standard deviation of which is one-fourteenth of the full left-right spectrum we define below. We detect drift in ideal points even with this small slack values.[2]

A separate model was estimated for period III because it shares no members with earlier periods; periods I and II, sharing 7 out of 11 members, were estimated jointly. Small committees raise complications for model estimation (Londregan 2000). With $J = 9$ councilors and $I = 148$ items (all votes in period III), $J \times I = 1332$ data points are used to estimate $2 \times I + J = 305$ parameters. With only slightly more than 4 observations per parameter, likelihood-based estimation becomes problematic for a case such as IFE. Bayesian methods, implemented via MCMC simulation (Clinton, Jackman and Rivers 2004), can overcome such problems.[3]

The Bayesian approach requires prior probabilities for un-modeled parameters to be estimated: $x_{j,0}$ (the start, of ideal point series at $t = 0$), m_i and δ_i ($i = 1 \cdots I$ and $j = 1 \cdots J$). We adopted non-informative priors — ie. a zero-mean normal distribution with variance one — for all parameters except two councilors' starting ideal points. These — inferring from Estévez, Magar and Rosas (2008)[4] — were

[2]Using larger values for S did not change the direction nor magnitude of changes in the full periods covered, but allowed for high one-semester volatility. Our choice of $S = .02$ smoothes the short-term trends.

[3]Three chains were updated 200 thousand times each, preserving every 100th observation from the second half. We thus obtained a sample of $3 \times 1000 = 3000$ posterior simulations to derive our results. Gelman and Hill's (2007) $\hat{R} \approx 1$, suggesting that the chains had converged towards a steady state. WinBUGS (Lunn, Thomas, Best and Spiegelhalter 2000) was used for model estimation, invoking it from R (Team 2006), also used for post-analysis. The appendix to the paper provides a sample of our code.

[4]In periods I and II, Cárdenas anchors one end with $x_j \sim N(-2, .25)$ while Barragán the other with $x_j \sim N(2, .25)$; in period III González Luna and Gómez Alcántar assume the extremes. We avoid speaking of 'left' and 'right' because the policy scale is IFE-specific and these are misleading terms.

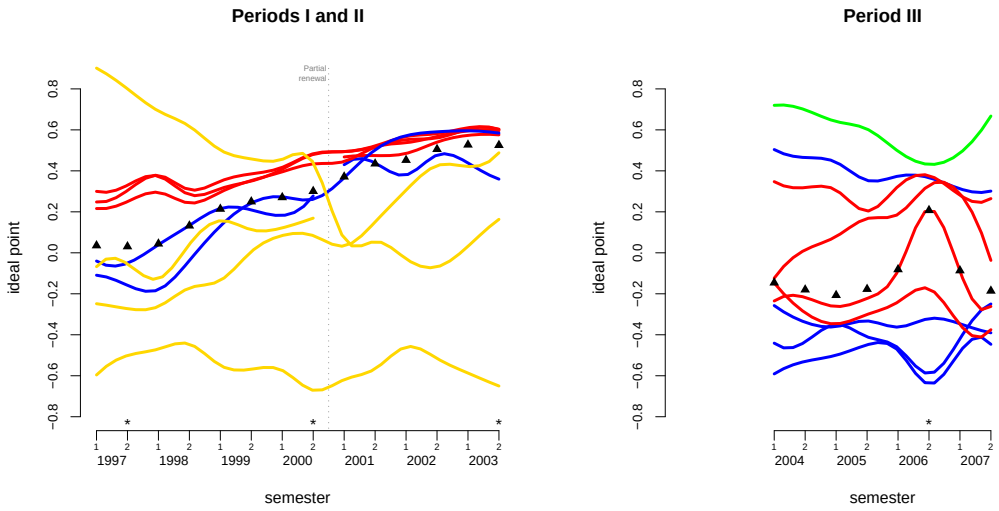


Figure 2: *Councilors' ideal points in two Councils.* Lines report the median of the councilor's posterior density, colors indicating councilor's sponsoring party: blue = PAN, red = PRI, gold = PRD, green = Green. Triangles report expected Council median. Stars in x-axis mark federal election semesters.

instead given semi-informative priors to give the arbitrary scale on which estimates are mapped a unit and a sense of what 'North' and 'South' actually mean.

2 Drift in a regulatory council

Figure 2 reports the central tendency of the posterior $x_{j,t}$ density, our dynamic estimate of ideal points. (For member-by-member results, including a measure of uncertainty, see Appendix 2.) Color identifies members' sponsoring parties, a key variable driving voting at IFE (Estévez, Magar and Rosas 2008). A good degree of drift in ideal points is always evident at IFE, although periods are different in important ways.

Only two members can be said to have something like flat lines in periods I and II — the southernmost yellow and the blue present in II only. Changes in one semester were followed by readjustment in the next few, so they ended more or less where each had started. This is presumably the pattern expected for ideal point stability, short deviations caused by idiosyncratic or in any case short-term shocks. All other members experienced, in different degrees, monotonic change in the location of ideal points throughout all or nearly all their tenure. This is less acute among red members: after a slight readjustment in course in the first semester 1998, they began drifting slowly, but constantly northward. Both councilors who quit early had slightly steeper

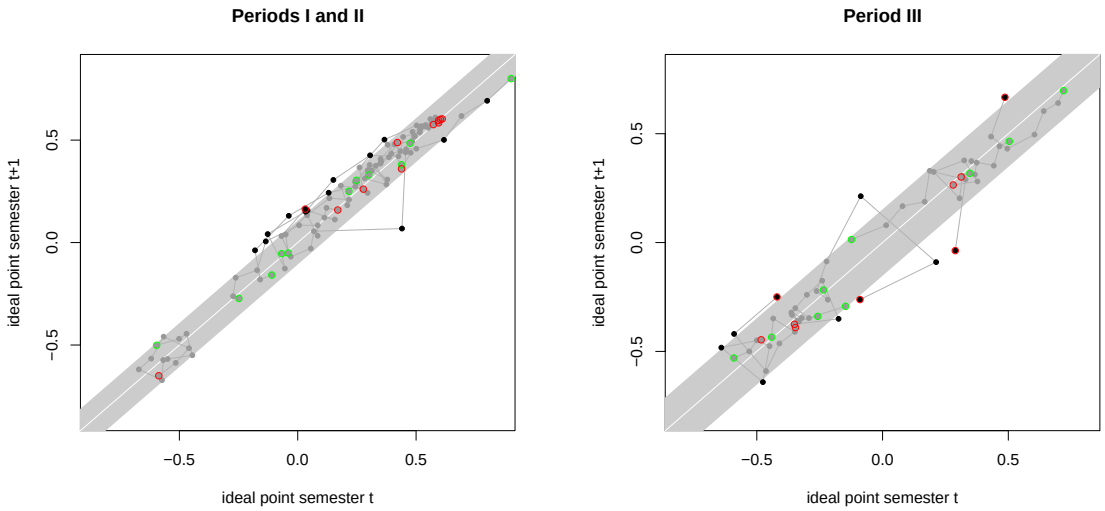


Figure 3: *Ideal point drift patterns.* Grey bands indicate, to each side of white 45° line, mean absolute drift in period plus one standard deviation; black points fall beyond. Green circles start drift trajectory for one councilor, red ones end it.

drift trajectories, also in north direction. But it was the remainder three councilors who experienced the most pronounced change in ideal points: the only member with a southward path went from the extreme to about the center of the spectrum, the most spectacular change; the other two (blue and yellow) abandoned south-of-center positions nearly monotonically to distinctly join the red crowd in in the second half of their tenure.

While drift or monotonic change in ideal points was also present in period III, it was more exceptional than before. The green councilor drifted constantly until it reversed gears in the last two semesters. It is important to note that the last semester in period III was frankly anomalous because congressional parties were openly negotiating the premature removal of several Councilors after the 2006 post-election dispute. So movement in the last semester of the series, if not the last year, is subject to unusual noise, discernible in the erratic moves by many members. Dropping the last year leaves the green member unadjusted after a distinct drift. The same is true for the second red from top to bottom, and less so for the bottom red when the full period III is considered. The rest had mild drift and/or experienced readjustments.

Figure 3 conveys different perspective on drift, plotting members' $x_{j,t}$ against $x_{j,t+1}$. Any semester movement will pull the point away from the white, and light dark lines connect points for the same member to give a picture of individual movement patterns. The width of the grey band covers the mean absolute change in the period covered by the chart plus one standard deviation, black colored points falling beyond. Green and red contours indicate the start and end of a member's trajectory,

information we elaborate on below. Charts show differences between the councils. Note that in periods I and II two, three, or even black points are connected, indicating repeated abnormal drift by the same people, all but one above the 45° line (the northward general trend seen in figure 2). Note also that bigger inter-semester moves in period III widen the grey bar, and that some black points are connected, but these tend to be on both sides of the grey bar — abnormal returns after abnormal shifts. Movement in periods I and II appears more indicative of ideal point drift. The next section elaborates some possible explanations of such movement in a representative voting body.

3 Explaining ideal point drift

What is behind ideal point movement and what does it mean? We now turn to the literature on voting in committees large and small in searh for answers. Ideal points reflect members' "operational preferences" (Cox 2001), in turn theorized as a mix of four general factors: personal belief; constituents' pressure; side payments; and structure and process.

3.1 Personal belief

Poole and Rosenthal (1997) explicitly interpret the scores recovered by their WNominate algorithm as estimates of members' ideology. Their work was received with such enthusiasm that the interpretation of scores as cardinal translations of the 'liberal-conservative' divide is accepted by many with little discussion. But the interpretation remains questionable. The translation of legislative scaling scores into degrees of ideology will be valid when personal belief is the sole determinant of voting. And this occurs if, and only if, the other three vote-influencing factors are absent or their effect negligible: when constituents are unwilling or unable to exert pressure; and vote buying is precluded or unfeasible; and committee institutions are neutral. The fulfilment of this triad boils down to the condition of *sincere voting* — a standard assumption of voting models that remains quite stringent a condition.

Another way of looking at the problem at hand is by posing that strategic behavior invalidates sincere voting. Positive political theory has shown the near ubiquity and the many guises of strategy in politics, how strategic actors very often fail to choose the best-liked alternatives if that will produce a better outcome down the game tree. All determinants of voting in committees except personal belief are incarnations of strategic behavior.

3.2 Representation and constituents' pressure

The first incarnation is grounded in relations of representation and delegation in politics and other domains. Legislators constantly delegate policy-making power to

experts (Kiewiet and McCubbins 1991). The primary advantage of this type of delegation is that legislators may rely on agents to formulate policies they themselves would have if they had the time to do it. The primary drawback is that agents can act against the interest of legislators, leaving them worse than if they had not delegated powers. The classic solution to cut agency costs combines careful screening of candidates and sanctions to non-compliant agents. In appointing agents, legislators — more generally principals or constituents — will stack the deck in favor of compliance since before the contract begins by choosing types with policy predispositions similar to their own (McCubbins, Noll and Weingast 1987). And principals usually retain the powers to penalize agents acting against their interests, such as budget cuts or even the removal of wrongdoers. To the extent that agents value their job, threats to use this "big club behind the door" (Weingast 1984) ought to reduce the gap remaining between agent's and principal's goals.

All this renders tensions between an agent's personal beliefs and principal's interests minimal or at least workable: if screening fails to sufficiently align the two *ex-ante*, credible *ex-post* sanctions ensure the that the latter prevail in the end. This view is encapsulated in Mayhew's (1974) seminal model of representatives as automatons concerned only in keeping constituents pleased. A member's operational preferences in the Mayhewvian mold will shift only in response to changes in constituency interests. Redistricting, or sharp changes in the social-demographic profile of the district, or the organization of a latent interest group with resources to harm the agent, all are examples of potential shocks to members' ideal points.

3.3 Structure and process

The second incarnation of strategic behavior is grounded in agenda setting. Early models of voting in assemblies (eg. McKelvey 1976) consisted of a bare majority rule with no institutional structure such as leaders, specialized committees or parties. Cox and McCubbins (2005) have argued that democratic legislatures in their infancy conformed well to that picture, but legislative institutions redistributing agenda power evolved as responses to several collective dilemmas: "even though voting power in democratic legislatures is everywhere equal, proposal and veto power are everywhere unequal" (p. 9).

With closed agendas giving members a sequence of specific alternatives to vote on with no chance of proposing amendments, incentives for sophisticated voting appear inevitably (Satterthwaite 1975). Sophisticated voting consists of supporting the alternative you rank second (or some middle preference) when you expect your favorite will lose. More specifically, it happens in a sequence of paired votes when, in each step, voters choose an optimal strategy in light of what others will do in the game. The classic example (Enelow and Koehler 1980) involves a relatively extreme proposal P, such as the one IFE discussed on 16 December 1997 for the Council president to have the power to name and remove key bureaucratic agents dealing with the me-

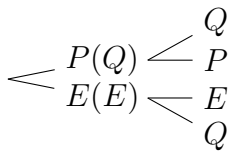


Figure 4: *A voting agenda and sophisticated voting.* See text.

dia, international affairs, and internal oversight. Although creating such units was desirable for the majority, it was also anticipated that, giving appointing an removal power to the president only, P would be defeated by the status quo Q. In an attempt to save the issue, an amendment E more attractive to moderates was offered. The motion established that agents be named and removed by the Council general from a slate of candidates proposed by the president. In spatial terms, the left-to-right ordering of the alternatives was Q–E–P, the right favoring a stronger presidency, the left Council supremacy.

We illustrate with an agenda portrayed in figure 4 pitting first P against E, then the winner against Q (ignore terms in parentheses for now).[5] Assuming that the initial result with sincere voting is that E wins, all members to the right of $(E+P)/2$ (the midpoint of E against P) would have voted for P first, and would do it for E in the second stage; moderates with ideal points between $(Q+E)/2$ and $(P+E)/2$ would have voted for E first and would do the same second; and all to the left of $(Q+E)/2$ would have voted for E first then for Q. The sincere outcome would be E. With this agenda, however, voting sincerely is not optimal for the left. Since E beats Q but Q beats P in the possible second stage votes, the first stage vote should be seen, from the strategic perspective, not as P against E but as Q against E (parenthesized in figure 4, Schwartz 1987). Leftists do better voting for radical proposal P in the first stage because, if the right votes sincerely, that guarantees the triumph of Q. And if the right also espouses sophisticated behavior, it would opt for E in the first stage to avoid the victory of its worse alternative later.

The effect on voting from the left, moderates, and right is quite straightforward: if sincerely they respectively choose E, E, and P in the first vote, they sophisticatedly do it for P, E, and E, respectively. The vote switch of extremists will have no effect in ideal point estimation because they still vote against each other and the method is agnostic to polarity (it flips the sign of the model's δ parameter). But the moderates' change from a sincere alliance with the left to a sophisticated one with the right will affect their ideal point estimation. If we had a combination of sincere and sophisticated votes in the same body (which would happen, for instance, if some

[5]The agenda that was actually followed for the referred case was Q against P then, if the latter won, P against E. It also illustrates sophisticated voting, but does so less eloquently than the example in the text.

simple and some elaborate agendas are put to vote) it will augment the error of middle of the spectrum estimates.

A simpler case of agenda power is classic gatekeeping, or negative agenda power. A member may dislike a motion but expect to be on the losing side when and if the issue comes to a vote. But if that member has the power to keep motions off the table, she can prevent the vote altogether, avoiding a defeat with a moderating effect on vote profiles—ideal points will be brought closer than they would be if voting on all matters were allowed. Majority parties cartelize the legislative process in order to centralize such negative power among their leaders (Cox and McCubbins 2005). Docket control allows the Supreme Court to collectively keep divisive or otherwise undesirable rulings unheard (Baum 2007). Other committees, like IFE, have less perfect agenda control. If we had some measure of variations in agenda control we could anticipate moments when the distortions of sophisticated voting become more prevalent, a route we explore in section 4.

A final consideration is that, once the agenda has been established, leaders who concocted it often exert pressure on the rank and file to vote the same way. Such pressure will have no effect in ideal point estimation among those already liking the whipped alternative more than the other . But it will for 'rebel' members. If the opposition votes against the majority regardless of the proposal's merits (business as usual in parliamentary democracies) then estimating ideal points becomes very problematic (see McLean and Spirling 2007).

3.4 Vote trading and side payments

The third incarnation of strategy is grounded in vote trading (Riker and Brams 1973). A member's vote alone being insufficient to deliver, achieving things requires cooperation with other members. When the status quo is distant it is easy to have a majority in favor of a new proposal. But in cases of Pareto efficiency, realizing gains from trade is one way to go (Weingast and Marshall 1988).

If the left in the example given above gave more importance to media than internal oversight (two of the new departments created) it could perhaps agree to get the right's vote for Council supremacy over the media department in return for conceding the appointment and removal of the oversight department to the president. If the right accepts, we will then observe members with contrary preferences voting together, affecting ideal point estimation. And if moderates were kept off the deal we could even see an unconnected coalition of extremists versus moderates. Unconnected coalitions of this sort should be exceptional because vote trading is more efficient between ideological neighbors than between extremists—it should be moderates who exchange votes with either extreme; their ideal points veering one way or the other depending on which extreme they trade more often with.

4 Testing propositions

It is also possible that ideal points drift after genuine change in personal belief, especially over the long haul. But we have argued that in representative bodies most movements will be driven by changes in factors causing actors to act strategically. This section derives some testable propositions from the discussion subjecting them to empirical scrutiny. The patterns we uncover should shed light on fertile directions that our research could undertake in the near future.

We begin with one source of movement associated with the notion of representation: a possible freshman effect. By law, the pool of candidates from which congressional parties can pick appointees excludes party members, who would make the most trustworthy agents. This restriction complicates the screening process. In the worse scenario, a party can pick a flagrantly bad type — this is probably the case with the blue member in period III who systematically voted with the reds and not with the rest of his contingent. In a friendlier scenario, a screening problem may be corrected with ex-post pressure from principals, forcing councilors to correct the route. Movements between the first and second semesters in the council could for this reason be more pronounced than others. Figure 3 offers evidence to reject this: no green-contoured circle (the first movement in a member's tenure) falls off normal bounds, and most are in fact quite close to the 45° line, indicating small starting movement. Two members appointed as replacements in period II in fact aligned themselves pretty closely in figure 2 with other members sponsored by the same party as them since the very start.

We can also isolate two movement sources associated with constituent pressure. If congressional parties are the principal, then a newly elected Congress in fact removes the original enacting coalition from the stage. IFE terms last seven years, more than doubling Deputies' three years in office with a single-term limit, making councilors outlive the coalition that enacted them. While new deputies will not have named councilors, they retain the power to impeach them. Therefore councilors are forced to adapt to the changing circumstances, something likely to transpire in their voting record. A comparison of inter-semester movement in ideal points following congressional renewals and the rest appears in Table 1. To compute these statistics, we performed absolute first-differences (AFDs, losing the first semester of each Council, 1997s1 and 2004s1) in members' posterior ideal point sample and divided twenty semesters of the pooled series into those following a Congress renewal (1998s1, 2001s1, and 2007s1) and those not (the rest). Rows a and b of the table show the mean and standard deviation of the marginal posterior distribution of this statistic, and it can be seen that AFDs after a new Congress tended to be larger that the rest, although standard deviations were larger. Even so, a Wilcoxon difference-of-medians test that posterior AFDs are larger for a than b semesters rejects the null with very high probability, as reported in row c of the table. There is evidence of bigger movement in semesters with a new Congress than the rest.

		Mean	Std. dev.
	Posterior $\lvert x_{j,t+1} - x_{j,t} \rvert$		
a	New Congress semesters	.140	.115
b	Rest	.108	.084
c	Test a>b (Wilcoxon)	$p < .0001$	
	Posterior $\lvert \delta_i \rvert$		
d	Electoral semesters	2.802	1.652
e	Rest	2.484	1.628
f	Electoral semesters (incl. inaugural)	2.736	1.655
g	Rest (incl. inaugural)	2.520	1.632
h	Test d>e (Wilcoxon)	$p < .0001$	
	Posterior δ_is with .95 credible ranges off zero		
i	Percentage electoral semesters	64%	
j	Percentage rest	46%	
	Abstention rates		
k	PAN electoral semester	0.039	0.054
l	PAN rest	0.046	0.067
m	PRI electoral semester	0.016	0.021
n	PRI rest	0.024	0.012
o	PRD electoral semester	0.072	0.031
p	PRD rest	0.153	0.050

Table 1: *Statistics and tests.* See text.

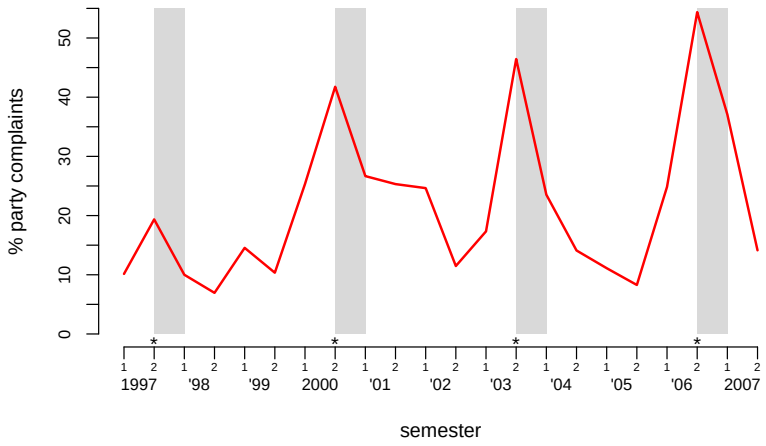


Figure 5: *Variation in agenda control.* Party complaints filed at Council General as percentage of all issues voted. Grey bars cover electoral semesters and immediate next.

Constituent pressure may explain another movement pattern in period III. The new council that inaugurated period III was appointed by a congressional coalition including the PRI, the PAN, and the Green party. The PRI's congressional contingent, however, was split in two rival factions, each of which proposed two of the four members the party sponsored in October 2003. And only a few weeks after the new Council was inaugurated, in-fighting between the congressional factions openly erupted: a rebelion succeeded in removing the party leader, expelling her from the party for "treason" along with key members of the rival faction. If such changes in congressional alliances permeate to IFE behavior — likely if appointees follow cues from their sponsor — then a rift should have opened since the very start in the PRI contingent. Such a split is in fact clearly visible among red councilors in Figure 2, the former leader's appointees remaining towards the South most of the time, the others veering North.

Movements may also be associated with agenda control. Unlike modern legislatures or the Supreme Court, IFE has poor control of its agenda. In particular, parties have standing to file complaints at IFE which cannot be ignored, diluting members' gatekeeping power. But there are temporal variations in how well members control their agenda because the percentage of party complaints filed for the Council General follows the electoral cycle, as shown in Figure 5. Defining electoral semesters as those when a federal election took place and the next (because many complaints are filed in the immediate aftermath and take some time to be decided), party complaints as a percentage of all matters voted at IFE are nearly two-and-a-half times higher

in election semesters than in non-election semesters.[6] The percentage fluctuates between 20 and 50% in the former, between 10 and 20% in the latter, a differential we exploit in search of agenda-control effects in voting patterns. Consistent with our previous discussion, we speculate that the interaction between principals and agents is different in electoral than in non-electoral periods. Principals (ie., parties) not only register more complaints in IFE during electoral periods, but we also expect that these complaints will more likely reveal operational preferences and cleavages segmenting IFE's Council-general. The intuition behind this conjecture is easier to explain by considering non-electoral semesters. If better gatekeeping reduces conflict, as discussed above, then most decisions that the council-general makes during non-electoral periods concern routine administrative matters that do not necessarily map into the north-south dimension that divides party sponsors and, consequently, IFE councilors. In contrast, we believe that electoral times should bring a flurry of activity that increase the number of politically-consequential matters considered by the council-general. To test this, we show the distribution of the absolute value of discrimination parameters across electoral and non-electoral semesters. If our conjecture about the importance of increased agent restraint during non-electoral periods holds any water, we should see larger average values of discrimination parameters during electoral semesters. Rows d and e of Table 1 show the mean and standard deviation of the marginal posterior distribution of absolute discrimination parameters. We proceeded as before by dividing the pooled series into electoral semesters (those where elections are scheduled plus the next one, $n = 7$) and not ($n = 13$). We dropped the first semester of each Council, since these are heavily influenced by our informative priors on ideal points (but report differentials for the full sample in rows f and g). As can be seen from the table, discrimination parameters corresponding to cases in electoral semesters tend to be larger that those cases that are discussed and decided during non-electoral semesters. In fact, a comparison of how often the .95 credible interval for discriminator parameters δ does not include the zero value if the case was heard in an electoral or non-electoral semester (rows i and j of Table 1, respectively), provides more evidence that cases heard when it is more difficult to control the agenda are more politically consequential.

A second implication of agenda control concerns the distribution of revealed ideal points across electoral and non-electoral semesters. Because parties should bring more pressure to bear on their sponsored councilors during electoral periods, we expect same-sponsor contingents to be more cohesive (ie., their revealed ideal points to be closer) during electoral than non-electoral semesters. Because party divides should be more notable during electoral periods, we also expect between-party polarization to increase during electoral semesters. Finally, we believe that party pressure over councilors during electoral semesters should lead to a drop in abstentions during electoral periods, as principals expect from their sponsored councilors a fuller com-

[6] We relied on Omar Alejandre's data to produce this differential. We plan to add this information to our dataset in the immediate future in order to carry finer-grained analysis.

		Electoral semester		Non-electoral semester	
		Mean	Std. dev.	Mean	Std. dev.
Within-contingent cohesion					
PRI		0.462	0.422	0.324	0.287
PAN		0.650	0.310	0.679	0.330
PRD		0.979	0.183	1.120	0.230
Between-contingent polarization periods I and II					
PRI-PAN	medians	0.155	0.130	0.091	0.125
	means	0.140	0.128	0.085	0.129
PRI-PRD	medians	0.417	0.139	0.413	0.152
	means	0.441	0.141	0.434	0.161
PAN-PRD	medians	0.262	0.163	0.323	0.170
	means	0.301	0.173	0.348	0.168
Between-contingent polarization period III					
PRI-PAN	medians	0.639	0.140	0.369	0.160
	means	0.420	0.106	0.290	0.090

Table 2: *Partisan contingents within and between.* Posterior marginal mean (standard deviation) of within-contingent cohesion and between-contingent polarization. See text.

mitment to the defense of their interests. We estimate within-contingent cohesion by looking at the posterior marginal distribution of the distance between the most leftist and most rightist councilors in each partisan contingent.[7] We estimate between-party polarization by looking at the posterior marginal distribution of the distance between the centroids of all pairs of partisan contingents, where the centroids are alternatively defined as the median or average ideological position of the contingents. Abstention rates are the share of within-contingent abstentions in a given semester.

Table 2 displays within-contingent cohesion and between-contingent polarization statistics. As we did before, we drop the first semesters of each council before estimating the posterior marginal distribution of these statistics. A glance at the table shows that evidence supporting the hypothesis that within-party cohesion increases during electoral semesters is scant. For PAN- and PRD-sponsored contingents, within-party cohesion is barely higher (ie., we observe smaller posterior means) during electoral semesters, an effect that is not substantively important. In contrast, PRI-sponsored contingents actually become less cohesive during electoral semesters. In fact, we estimate the probability that cohesion within PRI-sponsored contingents decreases during

[7]For the sake of simplicity, we refer to PRI/Green-sponsored councilors as the PRI contingent. The Greens have been in electoral and legislative alliance with the PRI since 2001, and it is reasonable to view their lone IFE member as a case of co-sponsorship.

electoral semesters to approach 0.61. In short, we cannot substantiate the hypothesis that partisan contingents are more cohesive during electoral semesters.

In contrast, we find some evidence of increased between-contingent polarization during electoral semesters. To discuss these results, we actually distinguish between the two Councils-General, since lack of a PRD contingent during the second council means that the PRI-PAN dynamics of polarization are likely to be different across councils. Be this as it may, we do find that between-party polarization increases especially for the PRI-PAN dyad in both councils. When we consider the distance between the median within the PAN contingent and the median within the PRI contingent as the relevant indicator of polarization, we find that this distance increases about 70% in both councils. In short, the chances that the PRI-contingent will vote with the PAN-contingent during electoral semesters are much reduced in comparison with non-electoral semesters.

Finally, rows k to p of Table 1 present the breakdown of within-contingent abstention rates across electoral and non-electoral semesters. Consistent with our hypothesis that political parties will increase pressure on their contingents to actively defend their interests, we find that all contingents decrease their abstention rates during electoral semesters. This effect is relatively small for the PAN contingent, a difference of about 15% less abstentions during electoral semesters. In contrast, the contingents of PRI and PRD reduce quite drastically their abstention rates by about one-third and one-half, respectively, during electoral semesters. Admittedly, the job of IFE councilors is to organize elections, and therefore it is no surprise that their attendance records increase during electoral periods. However, if these statistics exclusively reflected a problem of job attendance, we would not expect to see significant cross-party differences. To further substantiate our interpretation, we notice that the overall abstention records of the different partisan contingents are consistent with our prior notions that the PRI is best at keeping its contingent in line, followed by the PAN, and the PRD. Thus, the abstention records of IFE councilors take on added significance when we consider the partisan contingents to which they belong.

To summarize, not all our testable implications receive empirical validation. With the exception of freshman effects and within-contingent cohesion scores, however, we find that evidence is largely consistent with hypotheses of strategic agent behavior.

5 Conclusion

We have used a model designed to estimate ideal point shifts to investigate voting patterns in a committee whose members represent the interests of others. Our study found that members' ideal points shifted significantly over the course of their tenure. If we assume that voting is sincere, as is standard in this strand of voting literature, the finding is appears to contradict received wisdom about principal-agent relations.

We questioned the sincerity of voting assumption. Strategy is likely to kick in in many different forms, and all invalidate sincere voting. Committee members need to

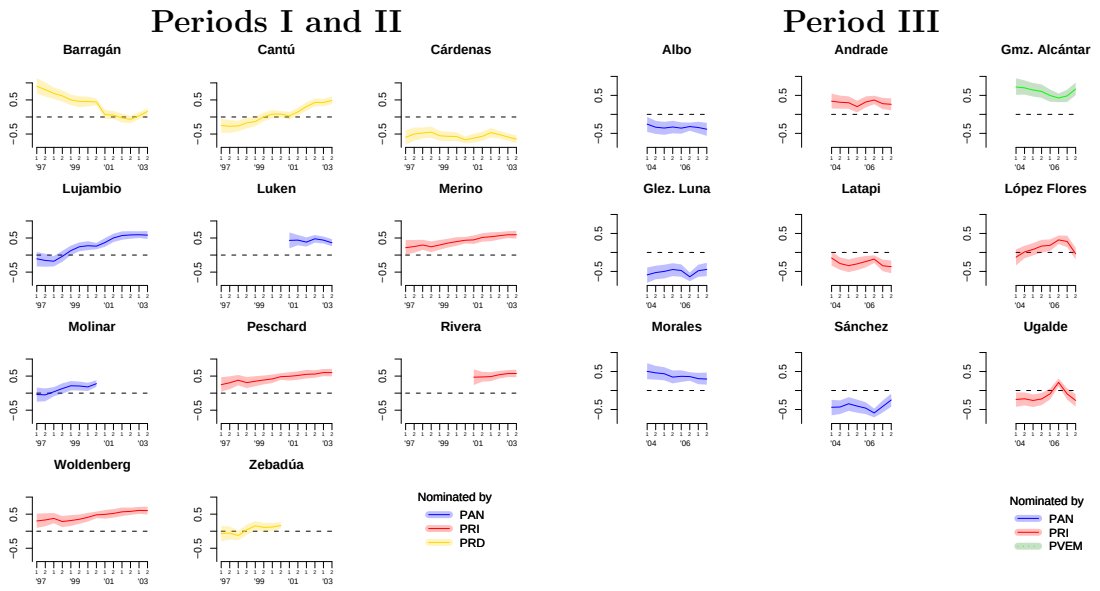
adapt to any changes in the wishes of their constituents in order to avoid sanctions. They can also anticipate what others will do later and decide to cast sophisticated votes in the early votes of complex agendas. And to the extent that they retain some control of their agenda, they should avoid entering political mine fields by removing thorny issues from the table. They can also trade votes to secure passage of pieces they deem valuable. All this strategy will push them away from simply picking the alternative most proximal to their personal beliefs. So the voting patterns that can be detected will reveal the working forces of strategic behavior.

We tested some implication of our discussion on the observed behavior of committee members. Evidence appears to indicate that drift in our representative council is associated with strategic considerations, perhaps not at all with changing personal beliefs of members. Our findings clearly indicate the need to think harder about the role of strategy in ideal point estimation, especially on ways to model and estimate its effects in voting.

Appendix 1: Code for four semesters

```
for (j in 1:J){                                                    ## loop over councilors
  for (i in 1:I){                                                  ## loop over items
    y.hat[j,i] ~ dbern(p[j,i]);                                    ## stochastic vote
    p[j,i] <- phi(y.star[j,i]);                                    ## 0<p<1 deterministic part
    y.star[j,i] ~ dnorm(mu[j,i],1)I(lower.y[j,i],upper.y[j,i]); ## truncated normal sampling
                                                                   ## cf. Jackman 2001
    mu[j,i] <- delta[i]*(x1[j]*d1[i] + x2[j]*d2[i]
                      + x3[j]*d3[i] + x4[j]*d4[i]) - n[i];
              ## utility differential: xt's recover t ideal points for member j        ##
              ## dt's are dummies=1 if item voted in semester t (exogenous definition) ##
                }
    x1[j] ~ dnorm (x0[j],50);              ## Slack S = 1/50 = .02 for all members ##
    x2[j] ~ dnorm (x1[j],50);
    x3[j] ~ dnorm (x2[j],50);
    x4[j] ~ dnorm (x3[j],50);
             }
for (i in 1:I){
   m[i] <- n[i] / delta[i];                                ## item i's mid-point      ##
             }
## priors: give scale and direction to recovered space, see Estévez et al. 2008 ##
    x0[1] ~ dnorm(0, 1);    #Woldenberg
    x0[2] ~ dnorm(2, 4);    #Barragán
    x0[3] ~ dnorm(0, 1);    #Cantú
    x0[4] ~ dnorm(-2, 4);   #Cárdenas
    x0[5] ~ dnorm(0, 1);    #Lujambio
    x0[6] ~ dnorm(0, 1);    #Merino
    x0[7] ~ dnorm(0, 1);    #Molinar
    x0[8] ~ dnorm(0, 1);    #Peschard
    x0[9] ~ dnorm(0, 1);    #Zebadúa
  for(i in 1:I){
      delta[i] ~ dnorm( 0, 0.1);
              }
  for(i in 1:I){
      n[i] ~ dnorm( 0, 0.25);
              }
```

Appendix 2: $x_{j,t}$ estimates with .80 credible ranges



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