

The Item Veto's Sting

Adam R. Brown

Dept of Political Science

Brigham Young University

Last update: March 22, 2011

Comments welcome: brown@byu.edu

<http://adambrown.info/>

Abstract

Despite lofty expectations from the item veto's proponents, formal models have generally shown that the item veto is unlikely to have much effect beyond what a full veto could render. However, different findings obtain when item vetoes are modeled as a dimensionality-reducing institution. I begin by developing a (full) veto bargaining model in a generalized multidimensional space. I then show how introducing the item veto changes the outcome by forcing veto bargaining into a unidimensional space. As a result, executives with an item veto or single subject rule are far more powerful in legislative bargaining than executives who lack these tools, other things being equal. I use simulations to demonstrate the model's main implications.

I thank Robert Richards for expert research assistance.

In the 1980s, Kiewiet and McCubbins changed the study of executive-legislative bargaining with the publication of their bilateral veto bargaining games, models inspired by Romer and Rosenthal's (1978) earlier "setter" model. Using spatial logic, Kiewiet and McCubbins (1985, 1988) found that the veto was a conditional tool; it enabled the executive to limit policy change, but it did little to help the executive advance it. Their work gave rise to a large literature on veto bargaining, discussed below.

Alongside this veto bargaining literature, another body of research has asked whether item vetoes can be expected to have a different effect than full vetoes. In a classic work, Carter and Schap (1990) argued that the item veto differs from the full veto only in rare "select settings." Even in those settings, they argued, the item veto's effect differs only slightly from the full veto's. This finding led to their memorable lament, "Line-item veto, where is thy sting?"—a lament that has yet to receive a satisfying response. Contrary to what the item veto's proponents might expect¹, then, existing research suggests that the item veto has little effect.

As will be shown below, however, these lackluster findings about the item veto arise as an artifact of an overly constraining modeling assumption about dimensionality. In dealing with full vetoes, the original Kiewiet-McCubbins model assumed that policy bargaining would occur in a unidimensional space—that is, along a single liberal-conservative ideological continuum. In dealing with item vetoes, the Carter-Schap model allowed only for a two-dimensional bargaining space. Subsequent work on full and item vetoes has continued to assume either a unidimensional (e.g. Cameron 2001; Matthews 1989; Kousser and Phillips 2008) or two-dimensional (e.g.

¹ De Figueiredo (2003) has documented that the item veto is generally proposed by fiscal conservatives hoping to rein in spending.

Duggan et al. 2008; Schap 1988) space.² This simplifying assumption has led to valuable insights, but it has also led to an underestimate of the item veto's importance. Executives endowed with an item veto have the power to force legislatures to break up a multidimensional omnibus bill into its constituent parts. The item veto's most important role, then, is to reduce dimensionality. To fully appreciate its effect, we must begin with a fully multidimensional model of veto bargaining and see how introducing the item veto changes it.

I begin by extending the standard unidimensional model of (full) veto bargaining into a multidimensional space in which an arbitrary number of unrelated issues are considered in a single omnibus bill. As dimensionality increases, the model shows that veto bargaining increasingly favors the legislature at the executive's expense. Legislatures get more of what they want—and executives get less of what they want—when legislatures can force executives to veto or accept several unrelated issues at once in an omnibus bill. I then show that introducing an item veto weakens the legislature by removing these advantages, producing the same end result as unidimensional bargaining. Like Carter and Schap, I find that the item veto's effect differs from the veto's only in certain circumstances—but I then present computer simulations showing that those circumstances arise frequently, rendering the item veto a potent weapon for the executive.

Traditional Models of the Full Veto

The basic conclusions of the Kiewiet-McCubbins veto models can be derived from five simple assumptions. First, a unitary legislature proposes a change to the status quo, which a veto-

² An important exception: Indridason (2011) presents a special multidimensional case where the first dimension resembles the liberal-conservative dimension and each additional dimension—one for each legislative district—represents pork for each individual district. Dearden and Husted (1993) also take a somewhat multidimensional view of the item veto; rather than ask whether it reduces aggregate spending, they instead suggest that it can cause spending to be reallocated among different spending categories.

wielding governor accepts or rejects. For convenience, I refer to these players as a feminine governor and a masculine legislature.³ Second, players have symmetrical, single-peaked (i.e. Euclidean) preferences contingent only on policy outcomes. Third, players have complete information about each other's preferences and the location of the status quo. Fourth, the game has only two steps (proposal and veto) and is non-repetitive. And fifth, all bargaining occurs within a unidimensional space.

When these conditions obtain, the three situations depicted in Figure 1 (and their redundant mirror images) capture all possible bargaining situations. For each issue i , G_i and L_i denote the locations of the governor's and legislature's respective ideal points, SQ_i denotes the status quo,⁴ and P_i denotes the legislature's optimal proposal. Nature assigns the locations of G_i , L_i , and SQ_i . Point G_i^* denotes the point that is exactly as far from G_i as SQ_i is but in the opposite direction. Given Euclidean preferences, the governor will veto any proposal that is further from G_i than SQ_i is; that is, she will veto any proposal outside the dashed line delimited by SQ_i and G_i^* . She will passively accept any proposal that is on or between SQ_i and G_i^* .

[Figure 1 about here]

With the governor's strategy known, we turn now to the legislature's equilibrium strategy. The legislature needs to position P_i such that (a) it is as close to L_i as possible (to ensure utility gain) and (b) it is no further from G_i than SQ_i is (to avoid a veto). With Issue 1, L_1 lies

³ The unitary legislature's ideal point may reflect the median legislator (Krehbiel 1998) or the median member of the majority party (Cox and McCubbins 1993, 2005). The specific identify of the pivotal legislator is irrelevant here.

⁴ The status quo is more accurately conceived of as the "reversion point," or the policy that will obtain if the legislature and governor fail to agree. When bargaining over a regulatory policy, failure by the governor and legislature to agree results in a continuation of the status quo. But when bargaining over a budget, failure to agree may result in a government shutdown instead of in a continuation of existing spending levels. The logic presented here works in either context, with the provision that Figure 1's "Issue 3" will never occur if the reversion point is a government shutdown.

beyond G_1^* . Rather than propose his ideal point and attract a veto, the legislature moderates his proposal so that the governor will be indifferent between it and the status quo. Thus, P_1 rests exactly at G_1^* . Call this situation “compromise.” With Issue 2, L_2 lies within the veto-proof range delimited by SQ_2 and G_2^* . The legislature can propose his exact ideal point without fear of a veto. Thus, P_2 rests exactly at L_2 . Call this “legislative dominance.” With Issue 3, L_3 and G_3 rest on opposite sides of SQ_3 , producing a stalemate. The legislature cannot move the status quo without either losing utility or attracting a veto. The legislature’s “proposal” is simply to keep things as they are.

Using unidimensional models like these, Kiewiet and McCubbins showed that the (full) veto is a conditional tool. It enables the governor to moderate the legislature’s excesses (under “compromise” and “stalemate”), but it does not enable the governor to push the legislature further than it wants to go (as in “legislative dominance”). Moreover, the veto can work its magic without ever being used; because of complete information, the legislature can always finesse its proposal so as to barely avoid a veto. The five assumptions listed above are sufficient to produce these findings, although later work has shown that not all five are necessary.⁵ Nevertheless, I will retain all these assumptions except unidimensionality to keep my model as simple and straightforward as possible.

⁵ Matthews (1989), for example, shows that costless rhetoric and veto threats can compensate for incomplete information. Ingberman and Yao (1991) added a third stage to the model by allowing the governor to make a public (costly) veto threat prior to the legislature’s proposal, which increases the governor’s return but leaves the basic conclusion about conditionality intact. Taking the opposite tack, Groseclose and McCarty (2001) argued that public pressures may lead a president to accept an otherwise objectionable bill to signal voters that he or she is moderate. Cameron (2001) made the game repetitive and added a third player, the veto override pivot, to show that governors might strategically veto an acceptable bill in an effort to get the legislature to propose an even better offer in the next round. In all these extensions, however, the basic insight remains: Vetoes are a conditional tool that can be used to limit the legislature more than to prod it.

The Problem with Unidimensionality

Like many assumptions employed in quality research, the unidimensionality assumption is useful but not realistic. Bills are unidimensional only if they make changes to a single discrete policy, such as the tobacco tax rate or the legality of partial-birth abortion. In reality, few interesting bills satisfy this condition. Consider President Gerald Ford's veto of H.R. 12384, which authorized \$3.3 billion for military purposes. Though Ford had no major qualms with the bill's authorization level or general aims, he vetoed it over a relatively minor provision that would have required advance notification to Congress of proposed military base closings. With this provision, the bill touched on at least two distinct policy dimensions: Military funding and the Congressional-executive balance of power. As Cameron (2001, 87) notes, "It was this provision, quite distinct from the dollar levels, that the president found objectionable." Responding to Ford's veto, Congress soon passed a nearly identical bill; spending levels remained unchanged, but the base closure clause was modified. Ford promptly signed it.

One can easily find other anecdotes where an executive considered vetoing an entire bill only because it included some relatively minor provisions unrelated to the bill's broader purposes. Like Ford, George W. Bush vetoed a defense authorization bill over a minor provision; like Ford, Bush later signed a nearly identical bill with the offending provision removed.⁶ Reagan famously vetoed a 1987 highway bill because of its 152 pork projects, saying, "I haven't seen so much lard since I handed out blue ribbons at the Iowa State Fair." In all these situations, a president vetoed an otherwise acceptable bill as a result of unrelated provisions.

⁶ Bush vetoed H.R. 1585, the "National Defense Authorization Act for Fiscal Year 2008," on December 28, 2007 over objections to section 1083, a 5-page portion of the 600-page bill. Congress soon passed a nearly identical bill (H.R. 4986) with the same title but a revised version of section 1083, which Bush signed on January 28, 2008.

If we were to consider Ford's decision in terms of Figure 1, it appears that Ford faced Issues 2 and 3 simultaneously. The overall military spending bill resembled Issue 2; Ford was happy to accept what Congress gave him for national defense, although he might have accepted even more. The base closure clause resembled Issue 3; Congress wanted to pull the legislative-executive balance of power in a direction that Ford found unacceptable. Because Ford confronted two distinct policy dimensions in the same bill, his veto bargaining with Congress occurred in a two-dimensional policy space, not a unidimensional one. Had Ford been endowed with an item veto, he could have handled each dimension separately.

At this point, it is worth clarifying what constitutes an issue "dimension." The fact that two issues appear unrelated—say, the tax rate on cigarettes versus funding to build a new freeway—does not necessarily mean that they represent different issue dimensions. In this example, both issues might provoke arguments about the appropriate size of government, whether on the taxation side or on the spending side. If so, then both issues are battles over the same underlying concern. But to the extent that they reflect different underlying concerns—concern about health (for tobacco taxes) versus concern about infrastructure and commerce (for the freeway)—then the two issues do represent distinct underlying policy dimensions. Issue dimensions commonly encountered in American politics include hawkish versus dovish foreign policy; passive versus active governmental involvement in the economy; moral regulation versus permissiveness (abortion, homosexuality); local versus centralized control (states' rights); passive versus active protection of the environment; punitive versus rehabilitative approaches to

crime; and so on.⁷ Being liberal on one of these dimensions does not logically require a person to also be liberal on the others.

When the simple unidimensional model is extended to the sort of multidimensional situation that Ford encountered, we find that legislatures can increase their influence over policy outcomes at the governor's expense by bundling issues together—especially if the governor lacks an item veto. To show that this is the case, we must consider two separate questions. First, we must consider each player's equilibrium strategies when any n issues are handled in a single (n -dimensional) bill. As this discussion will show, the item veto's effect differs from the full veto's only in certain circumstances, consistent with Carter and Schap's findings. This leads to the second question: How frequently do those circumstances arise? In contrast to Carter and Schap's hunch, I find that these circumstances actually arise frequently.

Equilibrium strategies in multidimensional bargaining

In the multidimensional game, G , L , SQ , and P have the same meaning as above, except they are now defined as coordinate vectors in n -dimensional space, with n chosen by nature. For example, G is located at $(g_1, g_2, g_3, \dots, g_n)$, L is located at $(l_1, l_2, l_3, \dots, l_n)$, and so on. As before, nature assigns the locations of G , L , and SQ ; the legislature chooses the n -dimensional coordinates of P , which the governor vetoes or accepts. Figure 2 shows the three general variants of this game. (Although the illustration uses only two dimensions, the logic given in text is general to arbitrary n .) Within each situation i , the governor is indifferent between SQ_i and any equidistant point, as represented by the circular indifference curve.

⁷ Among others, Roemer et al (2007) have recently discussed this sort of multidimensionality in politics.

[Figure 2 about here]

In each situation, the shaded rectangle shows the range of legislative proposals that the governor would accept under unidimensional bargaining. If issue X (the x-axis) and issue Y (the y-axis) were addressed separately, the governor would restrict movement on issue X to the range delimited by the rectangle's width, and she would restrict movement on issue Y to the range delimited by the rectangle's height. In Situation 1, P_{1U} shows the cumulative result of separate (unidimensional) bargaining over these two issues. Note that it lies on the edge of the shaded rectangle at the point closest to L_1 . In higher dimensionality, the rectangle would be replaced by an n -dimensional hyperrectangle. But even in higher dimensionality, the cumulative result of unidimensional bargaining over each of the n issues would still be the point along the hyperrectangle's surface that is closest to the legislature's ideal point.

When issues X and Y are addressed simultaneously rather than separately, however, the shaded rectangle becomes irrelevant. Because the governor is indifferent between the status quo and any equidistant point, the governor's indifference curve in each situation i is represented by the circle passing tangentially through SQ_i with G_i at the center. In higher dimensionality, the governor's indifference curve would be the surface of an n -sphere rather than the perimeter of a circle. A legislative proposal that is farther from G_i than SQ_i is—that is, a proposal outside this indifference curve—will attract a veto. A proposal within or along this curve will be allowed to pass into law.

With the governor's strategy known, the legislature's task in each situation i is to make a proposal as close to L_i as possible without provoking a veto. In Situation 1, L_1 lies just outside the governor's indifference curve. To prevent a veto, the legislature proposes P_{1M} , the closest

point to L_1 that lies along the governor's indifference curve.⁸ If the governor had an item veto, she could have vetoed portions of the proposal dealing with issue X, resulting in a new status quo barely south of P_{1U} . Of course, if the governor had an item veto, the legislature could have begun by proposing P_{1U} and ensuring his most favorable unidimensional outcome without attracting the governor's rebuke. The presence of an item veto, then, leads the legislature to produce the same proposal that sequential unidimensional bargaining would produce. By contrast, the absence of an item veto empowers the legislature at the governor's expense. The item veto's expense is depicted by the distance between P_{1M} and P_{1U} .

In Situation 2, L_2 lies entirely within the governor's indifference curve. Note, though, that L_2 lies outside the dashed rectangle. When issues X and Y are handled simultaneously, multidimensional bargaining enables the legislature to propose his exact ideal point, so that P_{2M} lies at L_2 . If issues X and Y were handled separately, however, the legislature and governor would stalemate on issue X while the legislature would get its exact ideal point on issue Y, eventually resulting in the cumulative unidimensional outcome P_{2U} . Once again, observe that the governor could induce the legislature to propose the same outcome in multidimensional bargaining if she were empowered with an item veto.

Situation 3 depicts a two-dimensional stalemate, which occurs because SQ_3 lies exactly between G_3 and L_3 —a configuration that becomes extremely improbable as dimensionality rises. When this configuration obtains, the governor's indifference curve will be exactly tangential to

⁸ To find the exact location of P_{1M} in n dimensions, let D equal the linear distance between G_1 and SQ_1 as calculated using the generalized Pythagorean Theorem. To avoid a veto, we know that P_{1M} will be at distance D from G_1 . To minimize the distance from L_1 , P_{1M} will lie along the straight line connecting G_1 and L_1 . Let E equal the linear distance between G_1 and L_1 . Then P_{1M} 's exact coordinates are given by $P_{1M} = L_1 \times (D/E) + G_1 \times (E-D)/E$. The simulations below use this formula to solve the multidimensional game in "compromise" situations—that is, when E is greater than D ; when E is less than D , we infer "legislative dominance" as in Situation 2.

the legislature's indifference curve at the status quo. Whether issues X and Y are handled in sequential unidimensional bargaining or in a single multidimensional bill, the result will be an unchanged status quo.

Like the unidimensional game, then, the multidimensional game takes three general forms: Compromise, legislative dominance, and stalemate. In Situation 3's stalemate, neither the full veto nor the item veto has any effect. In the other two situations, however, the item veto has clear potential to benefit the governor. In Situation 1's compromise, the full veto moderates the legislature's proposal to the edge of the governor's indifference curve (P_{1M}), but an item veto would moderate it further by forcing it to the edge of the dashed rectangle (P_{1U}). Meanwhile, the item veto's effect is conditional in Situation 2. If L_2 were inside the rectangle, then neither the item veto nor the full veto would have any effect. But because L_2 lies outside the dashed rectangle, then an item veto could force the legislature to settle for P_{2U} , whereas a full veto has no effect.

How select are the circumstances?

Using somewhat different terminology, Carter and Schap (1990) also produced the same basic finding given above: The item veto's effect differs from the full veto's only in certain circumstances. In each situation in Figure 2, the full veto will prevent policy from moving beyond the circle's perimeter and the item veto will prevent policy from moving beyond the dashed rectangle's perimeter. The potential effect of the item veto depends on two conditions, then:

- Condition 1: The circle must be much larger than the rectangle, so that there is a wide gap between the edge of the circle and the edge of the rectangle.

- Condition 2: L must be located well outside the rectangle, and in a direction that maximizes any gap between the rectangle's edge and the circle's.

The item veto's effect differs most from the full veto's when there is a large gap between the rectangle's edge and the circle's edge and when L is located outside the circle at a maximal distance from the rectangle's edge. I readily acknowledge that Situation 1 was contrived to show roughly this circumstance. After eyeballing their own two-dimensional model, which resembled Situation 1 in my Figure 2, Carter and Schap supposed that this particular circumstance would occur rarely at best. More often, they supposed, the gap between the rectangle's edge and the circle's would be small, or L would not be positioned in such a way as to exploit any gap that may exist. If their hunch were correct, then the item veto's potential impact would be small indeed.

However, their use of only two dimensions may have led them to misjudge things. In particular, it appears that Condition 1 becomes extremely common as dimensionality rises. (I will address Condition 2 in the simulations presented later in this paper.) In other words, as dimensionality rises it becomes increasingly common for the item veto and full veto to have very different effects—an insight that Carter and Schap were prevented from finding because of their decision to limit their model to only two dimensions.

Consider again Situation 1 from Figure 2. As noted earlier, the shaded rectangle shows the range of legislative proposals that the governor would accept if issues X and Y were handled separately. More generally, the governor's range of acceptable outcomes from handling any n issues separately (not simultaneously) can always be plotted as an n -dimensional hyperrectangle. Each edge of the hyperrectangle captures the range of movement that the governor would find

acceptable within that one isolated policy area. By contrast, the circle shows the range of proposals that the governor would be willing to accept if issues X and Y were bundled into a single bill. More generally, the governor's range of acceptable outcomes from handling any n issues simultaneously can always be plotted as an n -sphere centered at point G_1 with a radius equal to the distance between points G_1 and SQ_1 . Note that the n -sphere circumscribes the hyperrectangle, since both shapes share the same center (G_1) and both have their farthest point defined by SQ_1 .

Such an n -sphere's volume will always be larger than its bounded n -dimensional hyperrectangle, just as a two-dimensional circle will always be larger than its bounded rectangle. Because a hyperrectangle always has less volume than its bounding n -sphere, it must be true that the governor will accept a broader range of outcomes if any n issues are addressed simultaneously than if the same n issues are addressed separately. Crucially, however, the minimum ratio between a bounding n -sphere's volume and its bounded hyperrectangle grows with dimensionality, suggesting that the potential effect of an item veto likewise grows with dimensionality. In two dimensions, the minimum ratio between a rectangle's area and its bounding circle's area is 1:1.571, which occurs when the "rectangle" is a perfect square. As the rectangle becomes increasingly elongated, this ratio becomes more extreme. In three dimensions, the minimum ratio between a rectangular box's volume and its circumscribing sphere's is 1:2.721, which likewise occurs when the "box" is a perfect cube. More generally, any bounding n -sphere will have greater volume than the n -hyperrectangle it circumscribes—a point central to the definition of a "bounding" n -sphere—and the minimum ratio between their volumes will

climb sharply with n .⁹ Although this logic does not directly prove that Condition 1 becomes far more prevalent as dimensionality rises, it is certainly suggestive. If it is true that Condition 1 obtains more frequently as dimensionality rises, then Carter and Schap would have underestimated the item veto's importance by limiting their model to two dimensions.

Computer Simulations

Although I have attempted to show mathematically that item vetoes are likely to matter more often than previous work has supposed, formal models alone cannot answer this question. In particular, consider Condition 2, given above: Item vetoes will differ in their effect from full vetoes only when the players' ideal points fall into certain configurations. Formal models can show this conditionality to be true, but they do not help us understand how often this condition is met in real life.

To get a feel for how often item vetoes produce a different outcome than full vetoes, I programmed a computer simulation. In each iteration of the simulation, the governor's and legislature's ideal points and the location of the status quo were assigned an n -dimensional vector of coordinates; each coordinate was an integer randomly drawn from a normal distribution with mean 0 and standard deviation 100. In each iteration, the simulated legislature would attempt to propose a new policy that would maximize the legislature's utility gain while avoiding a veto by using the strategies derived above. I ran the simulation 100,000 times in one

⁹ As proof, note that a hypercube of width w has volume w^n . Its bounding n -sphere will have radius $(nw/4)^{1/2}$ by the Pythagorean Theorem. For even n , the minimum ratio between the n -sphere's volume and a hypercube it bounds is given by $1:(\pi n/4)^{n/2}/(n/2)!$, which increases without limit as n approaches infinity. For odd n , the minimum ratio is given by $1:(2^{(n+1)/2})(\pi^{(n-1)/2})(0.25n)^{n/2}/(n!)$, which also increases without limit in n .

dimension, 100,000 times in two dimensions, and so on up to ten dimensions, for a total of 1,000,000 distinct trials.

The results are reported in the top half of Table 1. In unidimensionality, 33.8% of the trials resulted in a stalemate situation where the legislature and governor could not agree on a new policy. Such stalemates almost did not occur in higher dimensionality.¹⁰ As noted earlier, stalemate can occur only if the three assigned points (that is, G, L, and SQ) lie in a perfectly straight line, with SQ in the middle. That alignment becomes extremely unlikely as dimensionality rises.

[Table 1 about here]

In unidimensionality, 49.7% of the trials found the legislature's ideal point within the governor's indifference curve, allowing the legislature to dominate the process and propose its exact ideal point. Although this outcome occurs at roughly the same frequency even as dimensionality rises, however, the legislature's utility gains from this outcome rise significantly with dimensionality. In unidimensionality, this outcome enabled the legislature to move the status quo an average of 113.9 utils closer to its ideal point¹¹; in two dimensions, the legislature moved the status quo an average of 177.4 utils closer; and with higher dimensionality, the legislature's utility gains continued to rise. By contrast, the governor's gains from bargaining in this situation were almost constant regardless of dimensionality. Clearly, increasing dimensionality benefits the legislature far more than the governor.

¹⁰ There were 2 stalemates in two dimensions, rounding down to 0.0%.

¹¹ To place these linear distances in perspective, recall that each ideal point is assigned coordinates drawn from a normal distribution with a standard deviation of 100.

In unidimensionality, 16.5% of the trials resulted in a compromise—that is, the legislature proposed a new status quo between the two players' ideal points. Compromise became far more common in multidimensionality, reflecting the drop in stalemates. The legislature's gains from compromise rise rapidly with dimensionality. In unidimensionality, these compromises brought policy an average of 91.4 points closer to the legislature's ideal point. This average remains roughly constant in two dimensions, but it rises sharply with higher dimensionality.¹² By contrast, the governor gains nothing from compromise. As shown in the model above, the legislature compromises by moderating its demands, but it does not offer any utility gain to the governor.

The final two columns are the most important. They show each player's average gain from bundling any n issues into a single multidimensional bill rather than considering those exact same issues sequentially. If the governor would have gained 50 utils through sequential bargaining over two unrelated issues, but she gains only 30 utils when those same issues are handled together, then bundling has cost the governor 20 utils. Because these utils are based on an arbitrary scale, it may be more intuitive to think of this 20 util loss as a 40% decrease from the 50 utils she could have obtained under unidimensionality. The final two columns show how much utility each player gained (or lost) as a result of multidimensionality, on average, as a percent of the utility he or she could have obtained under unidimensionality.

¹² The minor fall from 91.7 to 86.1 as the simulation shifts into two dimensions is no cause for concern. It seems to arise as an artifact of the increased occurrence of this outcome (from 16.5% to 50.1%); in those many new situations where compromise had not been possible under unidimensionality, only modest compromise was possible under two dimensions. Once the frequency of the compromise outcome levels off (beginning with three-dimensional bargaining), the legislature's utility gains under this outcome rise at a more consistent rate.

Because an item veto's purpose is to unbundle multidimensional bills into a series of unidimensional bills, these columns show the how the lack of an item veto influences each player's utility. When the legislature bundles any two randomly chosen issues together into a single bill, the governor's utility is (on average) 27.8% lower than if the governor had been able to use an item veto to force those two issues apart. Meanwhile, the legislature's utility is 27.6% higher. These are large, meaningful effects even in two dimensions. They grow even larger with higher dimensionality.

Of course, the averages in the two rightmost columns include a number of bargaining situations where the item veto's effect did not differ from the full veto's, which surely depresses the averages. Figure 3 explores the item veto's potential effect from a different angle by plotting how frequently the governor gained lost (or gained) utility as a result of bundling in these simulations. In other words, Figure 3 shows exactly how often Conditions 1 and 2 obtained in these simulations. When only two randomly chosen issues are bundled together rather than handled separately, the governor loses utility 50.5% of the time. Stated differently, an item veto would have benefited the governor 50.5% of the time in two-dimensional bargaining. When three randomly-chosen issues are bundled together, an item veto would benefit the governor 75.3% of the time. These frequencies are very high—far higher than Carter and Schap expected. As Figure 3 shows, the item veto frequently has the potential to influence legislative outcomes. And as the rightmost columns of Table 1 show, this influence is frequently large.

[Figure 3 about here]

The bottom half of Table 1 presents similar simulations, but with slightly different input parameters. In these latter simulations, the governor vetoes any proposal that does not grant her

at least a 1.0 unit increase in utility. In addition, the legislature incurs a 10 util transaction cost for each issue dimension that it bundles into a single bill, reflecting the internal transaction costs that rise with bill complexity.¹³ Although these conditions differ somewhat from those used in the model above, I present this variation to demonstrate the simulation's robustness to reasonable adjustments. Likewise, other reasonable modifications of this simulation's parameters do not change the general pattern in the results.¹⁴

Simulations, of course, do not use real data, nor do they allow players to try strategies other than those they are programmed to use. Nevertheless, these simulations are valuable inasmuch as they illustrate the aggregate outcomes that we might expect the model given above to produce if the legislature and governor play this game repeatedly. My multidimensional model, like Carter and Schap's (1990) two-dimensional model, showed that item vetoes would only matter under special circumstances. These simulations show, however, that those "special" circumstances actually occur very frequently, especially as dimensionality rises, but also in only two or three dimensions. My simulations return this result even when issues are randomly paired together by nature into a single bill. If a legislature were strategically choosing which issues to bundle, we might expect these "special" circumstances to arise even more often.

Discussion

Kiewiet and McCubbins (1985, 1988) showed that the veto power gives executives only a limited influence over legislative outcomes: Executives can limit legislative action, but they

¹³ For example, if a bill touches on a larger number of issues, then more committees and credit-seeking legislators (Mayhew 1974) will want to have a hand in its creation, raising the transaction costs of passing it.

¹⁴ Readers may adjust the simulation's parameters to any value they choose and view the results by using an online simulation tool at the author's website (<http://adambrown.info/p/research/veto>).

cannot prod it. I have not challenged that basic finding. By extending the Kiewiet-McCubbins model into a multidimensional context, however, I have shown that legislatures can significantly reduce whatever influence executives might hope to gain from their veto power. By bundling unrelated issues into a single bill, shrewd legislators can lead an executive to accept policy proposals that might otherwise receive a veto.

In effect, then, an item veto's role is to force legislative-executive bargaining into a unidimensional space. The difference between a full veto and an item veto is the same as the difference between multidimensional bargaining and unidimensional bargaining. Because an item veto's main effect is to reduce the dimensionality of the bargaining space, the best way to understand an item veto's potential influence is to compare multidimensional bargaining over a set of issues to unidimensional bargaining over the exact same set of issues. In my formal model, I found that an item veto was likely to have a different effect from the full veto only in certain circumstances—however, my simulations suggest that those circumstances arise very frequently. I conclude, then, that the potential effect of the item veto is large.

These findings apply to any dimensionality-reducing institution, not just the item veto. For example, 40 state constitutions stipulate that legislative bills must contain only one subject (Martorano Miller, Hamm, and Hedlund 2010). These single-subject rules, if strictly enforced, would prevent a legislature from strategically bundling bills together (cf. Townsend 1985). In 2008, for example, Utah's legislature bundled several unpopular proposals together with essential appropriations measures into a single omnibus bill containing 14 distinct policy changes. Through this bundling, the legislative majority forced the governor's hand and prevented him from vetoing the least popular provisions. Such antics would hardly raise an eyebrow in Congress—but in Utah, they provoked a court challenge based on the violation of the

state constitution's single subject rule. Had each policy been addressed separately, few would have received the governor's signature.

Line item vetoes produce the same dimensionality-reducing effect. Forty-four states allow item vetoes, although 30 limit their use to appropriations bills (Wall 2008, 185-6). In states where item vetoes are restricted to certain types of bills (such as appropriations), their dimensionality-reducing effect would obviously be limited to those bills.¹⁵ But at least in those circumstances where item vetoes may be used, they would have the same effect as single subject rules when it comes to strengthening the governor relative to the legislature. No matter how many issues may be bundled into a single bill, the presence of an item veto forces the outcome to be the same as if each issue were handled separately.

These findings suggest that the anecdotes related above about Gerald Ford, George W. Bush, and Ronald Reagan may not have arisen by accident. Members of Congress have had many years to discover that they can avoid presidential vetoes by tucking irrelevant provisions that the president finds distasteful into larger bills that the president supports. What is striking about these anecdotes is not that Congress bundled unrelated issues, but that these presidents took the unusual step of issuing a veto as a result. More often, presidents routinely sign bills filled with hundreds or thousands of pork projects and other riders even after complaining about the total level of pork. Almost all states have constitutional provisions that limit the legislature's ability to bundle unrelated issues, such as a single subject rule or an item veto. There are no similar dimensionality-reducing institutions in the U.S. Congress. Other things being equal, then,

¹⁵ Appropriations bills are unique in that failure to agree on a new budget may lead to government shutdown. For discussion of item vetoes in budget negotiations, see Kousser and Phillips (2008).

we might expect the American president to have less influence over legislative outcomes than most American governors.

References

- Cameron, Charles M. 2001. *Veto bargaining: Presidents and the politics of negative power*. Cambridge: Cambridge University Press.
- Carter, John R., and David Schap. 1990. Line-item veto, where is thy sting? *Journal of Economic Perspectives* 4(2): 103-118.
- 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. 2005. *Setting the agenda: Responsible party government in the U.S. House of Representatives*. Cambridge: Cambridge University Press.
- De Figueiredo, Rui J.P., Jr. 2003. Budget institutions and political insulation: Why states adopt the item veto. *Journal of Public Economics* 87 (December): 2677-2701.
- Dearden, James A., and Thomas A. Husted. 1993. Do governors get what they want? An alternative examination of the line-item veto. *Public Choice* 77 (4): 707-723.
- Groseclose, Tim, and Nolan McCarty. 2001. The politics of blame: Bargaining before an audience. *American Journal of Political Science* 45 (January): 100-119.
- Indridason, Indridi H. 2011. Executive veto power and credit claiming: Comparing the effects of the line-item veto and the package veto. *Public Choice* 146 (March): 375-394.
- Ingberman, Daniel E., and Dennis A. Yao. 1991. Presidential commitment and the veto. *American Journal of Political Science* 35 (May): 357-389.
- Kiewiet, D. Roderick, and Mathew D. McCubbins. 1985. Appropriations decisions as a bilateral bargaining game between president and Congress. *Legislative Studies Quarterly* 10 (May): 181-201.
- Kiewiet, D. Roderick, and Mathew D. McCubbins. 1988. Presidential influence on Congressional appropriations decisions. *American Journal of Political Science* 32 (August): 713-736.
- Kousser, Thad, and Justin H. Phillips. 2008. Reevaluating the item veto. Paper presented at the 8th annual State Policy and Politics Conference, held in Philadelphia, Pennsylvania, May 30-31.
- Krehbiel, Keith. 1998. *Pivotal politics: A theory of U.S. lawmaking*. Chicago: University of Chicago Press.
- Martorano Miller, Nancy, Keith E. Hamm, and Ronald D. Hedlund. 2010. State legislative evolution: Path dependency, organization theory, and bounded rational choice. Presented at the 10th annual State Policy and Politics Conference, held in Springfield, Illinois, June 3-5.

- Matthews, Steven A. 1989. Veto threats: Rhetoric in a bargaining game. *Quarterly Journal of Economics* 104 (May): 347-369.
- Mayhew, David R. 1974. *Congress: The electoral connection*. New Haven: Yale University Press.
- Roemer, John E., Woojin Lee, and Karine van der Straeten. 2007. *Racism, xenophobia, and distribution: Multi-issue politics in advanced democracies*. Cambridge: Harvard University Press.
- Romer, Thomas, and Howard Rosenthal. 1978. Political resource allocation, controlled agendas, and the status quo. *Public Choice* 33 (4): 27-43.
- Schap, David. 1988. In search of efficacious veto authority. *Public Choice* 58 (3): 247-257.
- Townsend, Nancy J. 1985. Single subject restrictions as an alternative to the line-item veto. *Notre Dame Journal of Law, Ethics, and Public Policy* 1 (2): 227-258.
- Wall, Audrey S. 2008. *The book of the states: 2008*. Volume 40. Lexington, KY: Council of State Governments.

Table 1: Simulated Executive-Legislative Bargaining Results

Dims.	Trials	Stalemate Frequency	Legislative dominance			Compromise			Effects of bundling	
			Frequency	Gov's utility	Leg's utility	Frequency	Gov's utility	Leg's utility	Gov's mean gain	Leg's mean gain
A. Basic simulation										
1	100,000	33.8%	49.7%	83.3	113.9	16.5%	0.0	91.7	--	--
2	100,000	0.0%	49.9%	90.8	177.4	50.1%	0.0	86.1	-27.8%	+27.6%
3	100,000	0.0%	49.8%	93.5	225.7	50.2%	0.0	131.9	-40.8%	+43.7%
4	100,000	0.0%	50.2%	94.4	265.4	49.8%	0.0	171.9	-48.6%	+54.3%
5	100,000	0.0%	49.6%	95.7	301.4	50.4%	0.0	205.1	-53.9%	+61.5%
6	100,000	0.0%	50.3%	95.8	332.4	49.7%	0.0	236.7	-57.7%	+66.9%
7	100,000	0.0%	49.9%	96.1	361.1	50.1%	0.0	265.5	-61.0%	+71.3%
8	100,000	0.0%	50.1%	95.5	387.0	49.9%	0.0	291.9	-63.6%	+74.9%
9	100,000	0.0%	50.0%	96.2	413.1	50.0%	0.0	315.5	-65.5%	+77.4%
10	100,000	0.0%	49.8%	97.0	436.3	50.2%	0.0	339.9	-67.2%	+79.8%
B. Governor vetoes when indifferent; Bundling incurs a 10 unit transaction cost per issue dimension										
1	100,000	34.4%	49.2%	84.1	114.7	16.4%	1.0	92.4	--	--
2	100,000	9.9%	49.4%	91.8	168.3	40.7%	1.0	95.2	-27.3%	+18.4%
3	100,000	4.4%	49.5%	94.2	206.2	46.1%	1.0	122.8	-40.3%	+27.9%
4	100,000	2.3%	49.8%	95.2	235.7	47.8%	1.0	148.8	-48.2%	+33.4%
5	100,000	1.4%	49.3%	96.4	261.6	49.3%	1.0	169.5	-53.5%	+36.1%
6	100,000	0.8%	49.9%	96.4	282.6	49.2%	1.0	189.6	-57.3%	+37.8%
7	100,000	0.5%	49.6%	96.7	301.2	49.9%	1.0	207.4	-60.7%	+38.6%
8	100,000	0.4%	49.7%	96.2	317.2	49.9%	1.0	223.2	-63.3%	+39.0%
9	100,000	0.3%	49.6%	96.9	333.2	50.1%	1.0	236.4	-65.2%	+38.6%
10	100,000	0.2%	49.5%	97.6	346.4	50.3%	1.0	250.5	-66.9%	+38.2%

Note: The governor's and legislature's ideal points and the location of the status quo are n -dimensional points defined by a vector of integer coordinates drawn from a normal distribution $N(0,100)$.

Figure 1: Three Unidimensional Bargaining Contexts

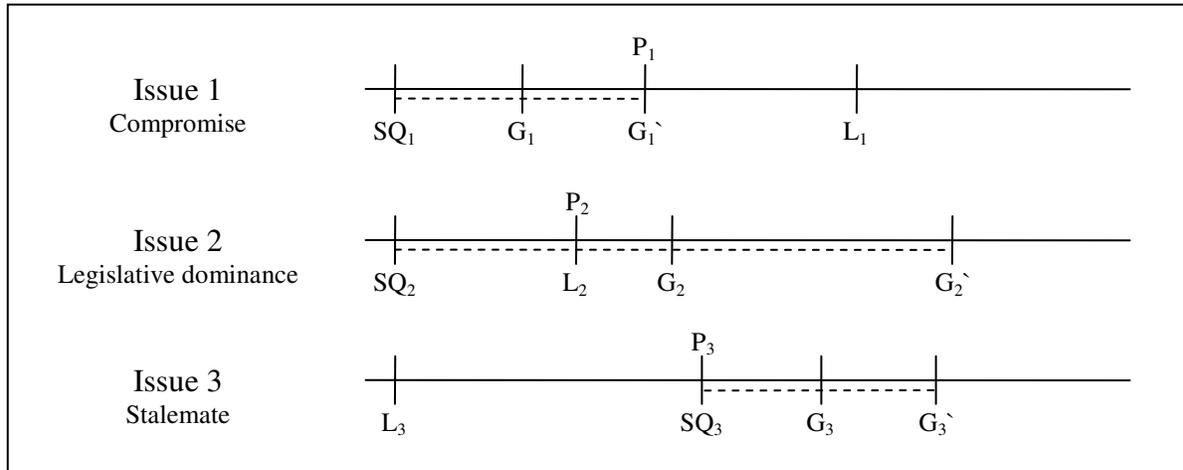


Figure 2: Three Multidimensional Bargaining Contexts

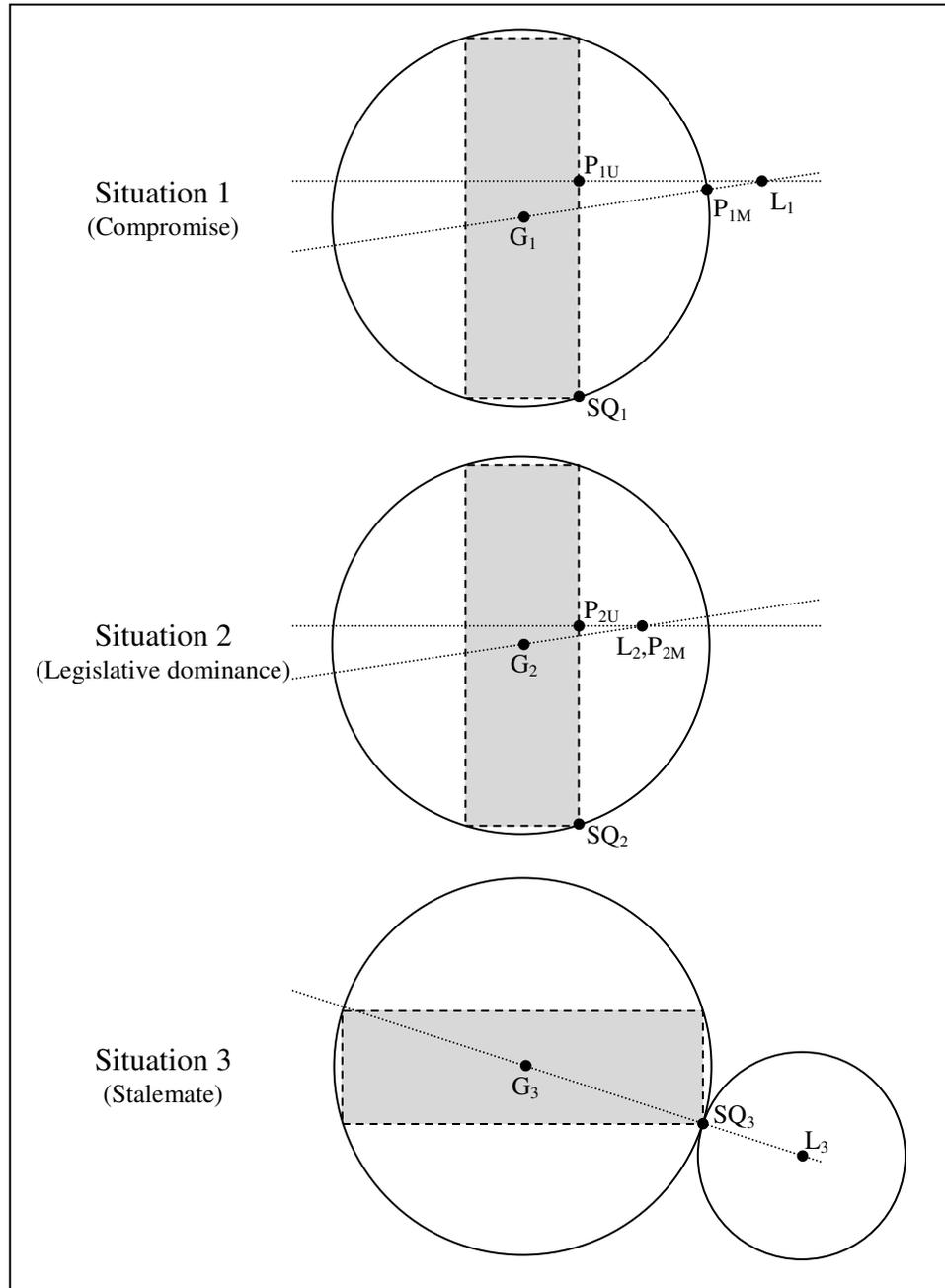


Figure 3: How Frequently the Governor Loses From Bundling

