

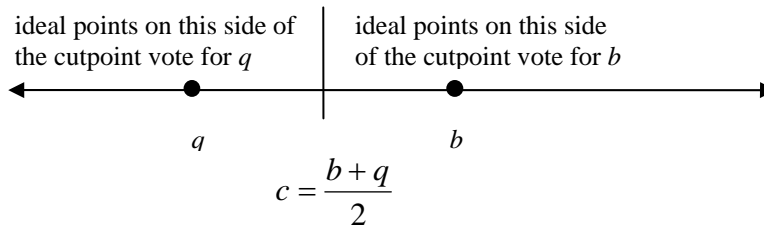
Presidential Vetoes and Veto Overrides PS 2703

In the veto override model, Congress first presents a bill to the president. The president either signs or vetoes the bill. If he signs the bill, it becomes law. If he vetoes the bill, Congress votes whether or not to override the veto. If $2/3$ of legislators vote to override the veto, the bill becomes law. If less than $2/3$ vote in favor of overriding the veto, it is “sustained” and the status quo policy remains in place.

Veto Pivots

Although we can analyze the voting stage of an extensive form game in which we consider the voting strategies of all legislators, it is much easier to simplify the analysis by identifying a small number of pivotal legislators. Pivotal legislators are those whose votes are *necessary* to enact new policies. For example, in the one dimensional spatial model in which preferences are single-peaked and symmetric and a collective choice is made by simple majority rule, we know that the median voter is pivotal.

We first identify the relevant pivots for overriding *any* veto of an arbitrary bill b given the status quo q . Recall that for any two alternatives b and q , there is a cutpoint $c = (b + q)/2$ which cleanly divides the set of agents who vote for b and q . If $b > q$, then all legislators with ideal points to the right of c vote for b and all legislators to the left of c vote for q . If b was vetoed, then in order for the veto override to be successful, at least $2/3$ of legislators’ ideal points must be to the right of c .

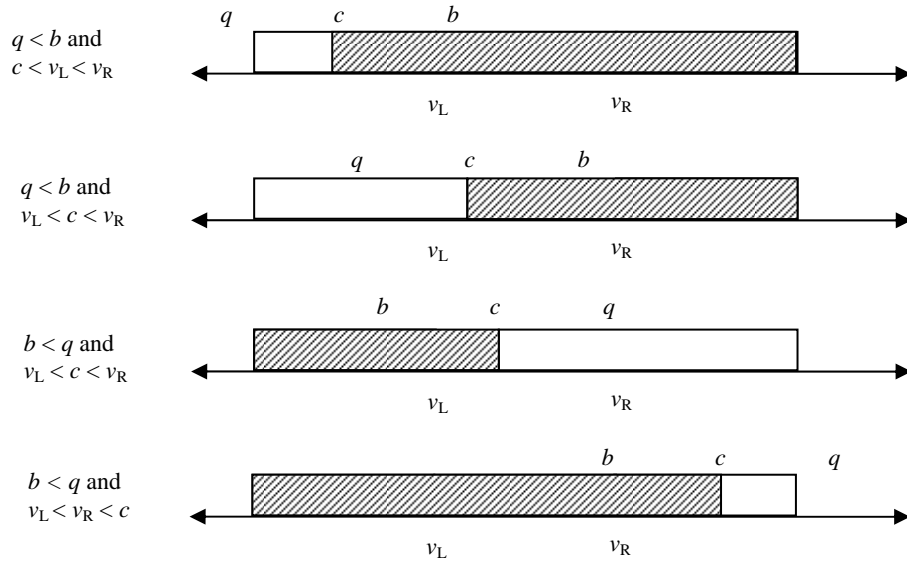


Let v_L be the ideal point of the legislator such that v_L and every legislator with an ideal point on his *right* constitutes a bare $2/3$ majority in favor of b . Given $b > q$, b passes if and only if $v_L \geq c$ because v_L and all legislators to his right vote for it. If $v_L < c$, then v_L supports the status quo which implies that less than $2/3$ vote in favor of b , so veto override fails.

In the case where $b < q$, the relevant veto pivot is v_R , who is the legislator such that v_R and all legislators to his *left* constitute a bare $2/3$ majority in favor of b . The logic is the same but with the inequalities reversed. If $v_R \leq c$, then b passes because v_R and all legislators to his left vote for it. If $v_R > c$, then v_R supports the status quo which implies that less than $2/3$ vote in favor of b , so the veto override fails.

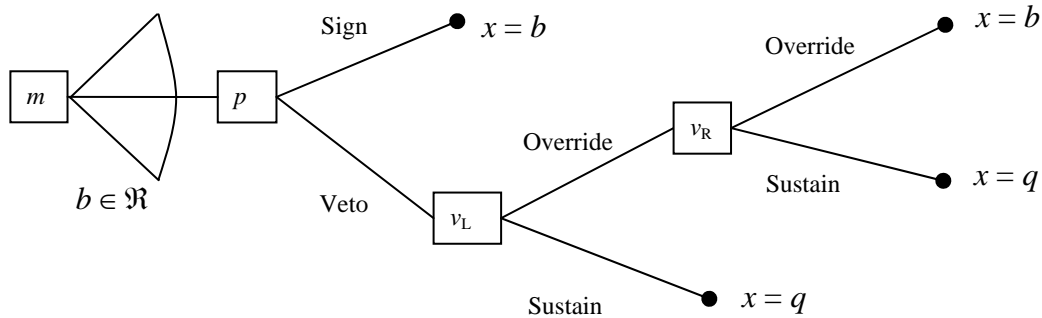
The figure below illustrates four possible configurations of bill and status quo pairs relative to the pivots. The shaded regions represent the proportion of legislators who vote in favor of b

(overriding the veto) while the unshaded regions represent the proportion of legislators voting for the status quo (sustaining the veto).



The Veto Override Model as an Extensive Form Game

The last decision we must make to simplify the game in terms of a small number of players is to choose the agenda setter. A common assumption is that the agenda setter is the median legislator, which is justified if an open rule voting process is a reasonable approximation of the congressional collective choice process prior to presenting a bill to the president. The veto override can now be modeled with a small number of players: the congressional median m , the president p , and the two veto pivots v_L and v_R . Assume that each player has single-peaked and symmetric preferences over final policies and that their ideal points are m , p , v_L and v_R , respectively. The sequence of events and final outcomes are illustrated below (the order in which the veto pivots choose is inconsequential).



Veto Override Subgames

We will analyze the case where $p < v_L$ by backward induction.¹ Technically, each of the veto pivots' strategies are functions of histories, $s_{v_L}(b, \text{veto})$ and $s_{v_L}(b, \text{veto}, \text{override})$, but the only strategically relevant portion of the history is the bill proposal b . These strategies, in their general form, are

$$s_{v_L}(b) = \begin{cases} \text{Override if } (b \in [q, 2v_L - q] \text{ and } q \leq v_L) \text{ or } (b \in [2v_L - q, q] \text{ and } q > v_L) \\ \text{Sustain otherwise} \end{cases}$$

$$s_{v_R}(b) = \begin{cases} \text{Override if } (b \in [q, 2v_R - q] \text{ and } q \leq v_R) \text{ or } (b \in [2v_R - q, q] \text{ and } q > v_R) \\ \text{Sustain otherwise} \end{cases}$$

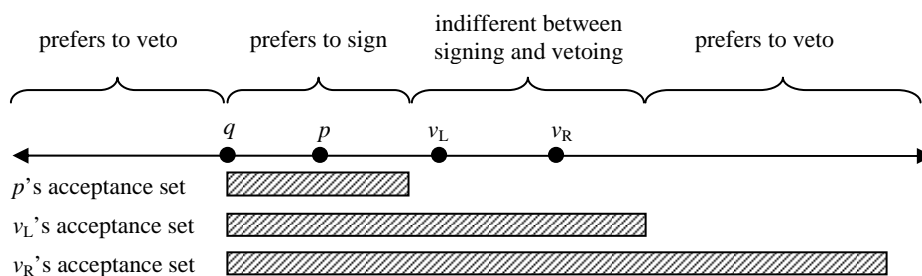
Given these strategies, we can find the set of bills for which a veto can be overridden for each q :

- If $q \leq v_L$ then this set is $[q, 2v_L - q] \cap [q, 2v_R - q] = [q, 2v_L - q]$.
- If $v_L < q < v_R$, then the set is $[q, 2v_L - q] \cap [2v_R - q, q] = q$.
- If $v_R \leq q$, then the set is $[2v_L - q, q] \cap [2v_R - q, q] = [2v_R - q, q]$

Presidential Subgames

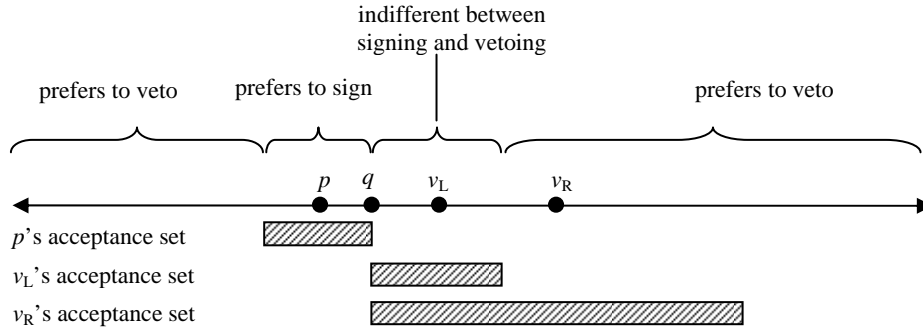
Next, we analyze the president's decision given that he rationally anticipates the veto pivots' responses. We can partition the set of status quo values into four cases.

Case 1. If $q \leq p$ then the president will accept a bill if $b \in [q, 2p - q]$. Note that in this case, the president's acceptance set is always a subset of bills that can be overridden. Thus, the president will be indifferent between signing and vetoing any bill $b \in [q, 2v_L - q] \setminus [q, 2p - q] = [2p - q, 2v_L - q]$. Any bill not in one of these two sets will definitely be vetoed (which will be sustained). This case is illustrated in the next figure.

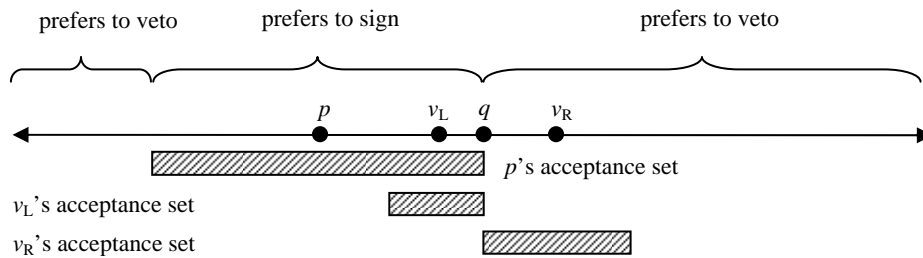


¹ For the purposes of exposition, we will proceed generally rather than first fixing q . An alternative way to do the analysis is to follow the steps we used in class: first consider different values of q , then analyze the entire game for each fixed value of q .

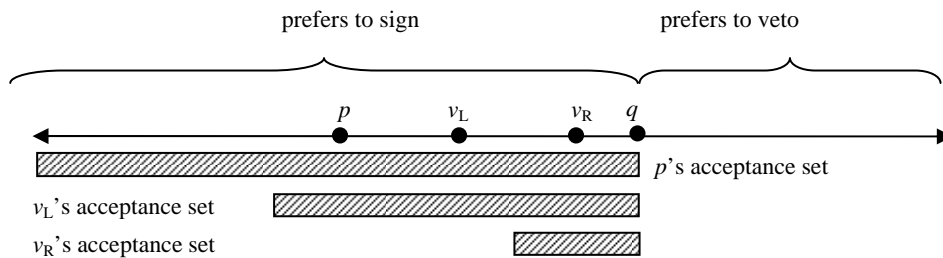
Case 2. If $p < q < v_L$ then there is no overlap between the set of bills the president signs and the set of bills where a veto can be overridden. The president will strictly prefer to sign the bill if $b \in [2p - q, q]$. He will be indifferent if $b \in [q, 2v_L - q]$, and he will strictly prefer to veto anything else.



Case 3. If $v_L \leq q \leq v_R$ then the only bill for which a veto can be overridden is located at the status quo. The president therefore signs any $b \in [2p - q, q]$ and vetoes any other bill.



Case 4. If $v_R < q$ then the set of bills for which a veto would be overridden is a subset of the bills the president will sign and no override vote will ever be observed in a SPNE.



Median's Proposal Behavior

As in the agenda setting and veto without override games, the median's objective is to propose a bill b as close as possible to his ideal point m subject to the requirement that the bill pass. Notice that in cases 1 and 2 of the analysis of the president's decision, the relevant constraint is whether the left veto pivot v_L will override the veto if one occurs (rather than what the president will sign). In case 3, the relevant constraint is the location of q relative to m . In case 4, the median

can always propose m and the president will sign. There are four relevant cases for considering the median's optimal behavior.

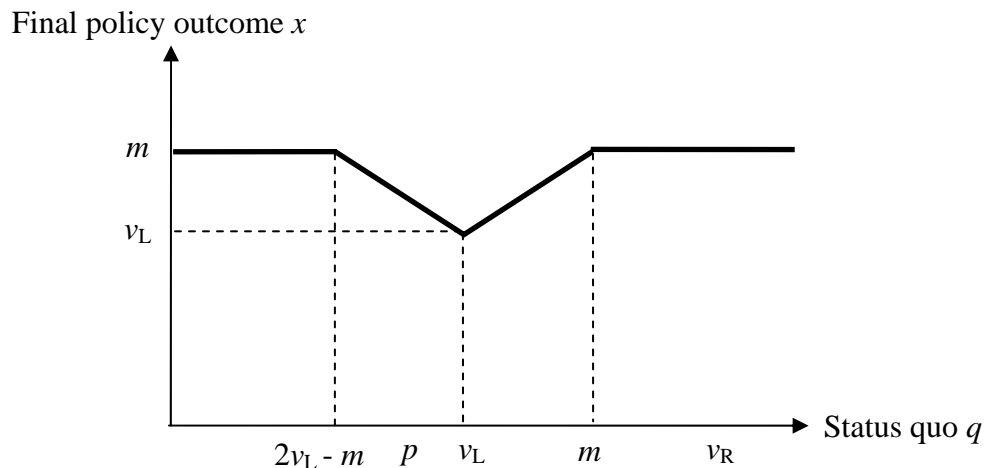
Case i. If $q < 2v_L - m$, then $m < 2v_L - q$ so that the median will be able to propose $b = m$ which will become the final policy. (If $q < 2p - m$, then the president will sign it, while if $2p - m < q < 2v_L - m$ the president will be indifferent between signing and vetoing since a veto will be overridden.)

Case ii. If $2v_L - m \leq q \leq v_L$ then the best that the median can do is to propose $b = 2v_L - q$, which the president will either sign or veto. If he vetoes, then the override will be successful. Thus the optimal bill is the one that makes the left veto pivot indifferent.

Case iii. If $v_L < q < m$ then the median cannot successfully propose a bill that will move policy toward his ideal point. Any such bill will be vetoed and the override attempt will fail. The optimal proposal is either $b = q$ or a bill that the president will not sign.

Case iv. If $m \leq q$, then the optimal proposal is $b = m$, which the president signs (since $p < m < q$).

The next figure illustrates the SPNE policy outcomes (indicated by the thick line) as a function of the status quo q .



Conclusions

Even though we model the extensive form game with four players, we find that when $p < v_L$, the SPNE policy outcomes are equivalent to the outcomes of an agenda setting game in which the median proposes and the left veto pivot accepts or rejects the proposal. In other words, the veto pivot nearest the president is the relevant constraint on the median's ability to move policy to his ideal point m . We also find that the veto pivot whose ideal point is furthest from the president's is irrelevant to the final outcome because the only time in which he would be pivotal ($q \geq v_R$), the president prefers to sign the bill and the possibility of an override vote is moot.